



ANVIL DELIVERABLE 2.1:

COMPILATION OF COUNTRY STUDIES

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1. Introduction

This report constitutes Deliverable 2.1 of the FP7 Security Program Coordination and Support Action 'Analysis of Civil Security Systems in Europe' (ANVIL, Grant Agreement no. 284678). The purpose of Deliverable 2.1 is to provide a compilation of country studies produced under Work Package (WP) 2.

The country study presents key features of civil security systems in 22 countries in Europe. The studies look into issues of historical/cultural aspects, legal/political/operational frameworks, statecitizens relations and private actor involvement as well as into the quality of civil security systems with particular reference to effectiveness, efficiency and legitimacy.

Together, these case studies represent the first generalisable description of EU country level civil security architectures based on a systematic and meta-level analytical framework. The case studies provide a comprehensive source of data and analysis for the comparative analytical work to be carried out under ANVIL WP4 as well as input to the EU added value analysis under ANVIL WP5.

2. Compilation of Country Studies

This document presents the achievements of ANVIL Work Package 2.

2.1 Background and objective

The ANVIL project set out to map varieties and similarities among Europe's civil security policies, rules and practices. In this context, WP1 established the analytic framework identifying key study features and indicators of civil security systems.

The overall objective of WP2 was to map civil security systems in a representative group of European countries. Based on the work carried out under WP1, this work package entailed the supervision and compilation of case studies for a representative group of 22 European countries. The countries were: Austria, Croatia, Czech Republic, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Sweden, Switzerland and the United Kingdom.

2.2 Working method

To accomplish this objective, we have carried out the following tasks:

- 1. Development of a mapping protocol for civil security systems at the country level
 - a. Draft mapping protocol was developed by the WP2 leaders (UI) and distributed to all consortium partners for feedback
 - b. The draft mapping protocol was discussed during the consortium meeting organized in Utrecht in September 2012
 - c. Pre-final versions of the mapping protocol were further discussed with other work package leaders, especially WP1 (UU), WP4 (IFSH) and WP5 (UEssex)
 - d. Based on the input received, the final version of the mapping protocol was developed

- 2. Supervision of the identification of key informants for each case study
- 3. Progress reports from the case study drafting process was collected in December 2012
- 4. Draft country case study reports were collected on the 1st February 2013
- 5. A peer review of country studies was carried out in February 2013
 - a. A peer review process was established whereby all case study drafters commented on and received comments from other case study drafters with the overall objective of ensuring the comparative perspective (i.e. vis-à-vis the mapping protocol) and other suggestions for improvements
 - b. Key challenges to the drafting process were identified and discussed during the consortium meeting organized in Hamburg in February 2013
 - c. An annex to the mapping protocol was developed to further support the country case study drafting process in March 2013
- 6. Revision of coded data sheet that would provide for comparable scoring data was carried out in March and data available from centralized sources were inserted in each of the country coded data sheet that were distributed to country case study drafters
- 7. Final quality control of country studies was carried out in May 2013
 - a. Detailed feedback was provided to country study researchers by UI
 - b. Revisions were conducted by country study researchers
- 8. Final country case study reports were collected in June 2013
- 9. Country studies were collated in July 2013

2.3 Outline of this document

In the following two sections, we provide an overview over two key milestones, namely the development of the mapping protocol (completed in month 6) and the compilation of the final case studies (completed in month 16) that also includes the draft case study submission/intermediate milestone (month 12).

3. Mapping Protocol for the Country Case Studies

This section overviews the mapping protocol as a key product produced under WP2.

3.1 Generic guidelines

The goal of the case studies is to generate empirical data broadly comparable across countries. Towards that end, and to assist with the production of the case studies, this section offers a set of guidelines.

The country mapping procedure for each case study will follow a two-track strategy. For each category of variables, country mapping researchers will be asked to record descriptive as well as coded data. The *descriptive data* will feed into the case study papers. We have identified a list of questions that are relevant for the topics that the paper will cover (i.e. the analytic dimensions and quality criteria, see section D). The identification of key questions should be considered a part of our efforts in streamlining the case study production, to ensure that the case studies are similar in structure and content and thus to form a integral part of the final ANVIL report. At the same time, we

recognise that available and accessible information differs from country to country and also that researchers may have important stories to tell that are not directly linked to the key questions identified but that are nevertheless crucial in the context of the overall topics discussed.

The *coded data* will be gathered in Annex 1 of the case study and will primarily be used for the purpose of comparative analysis to be conducted under WP4. Here, researchers will be asked to provide quantitative figures and/or scores related to the country's civil security system. For specific questions where a baseline year is applicable, the year 2011 should be used as far as data is available.

Finally, each case study will provide a *mini-study* of the H1N1 swine flu epidemic in Annex 2 of the paper. The case studies will allow researchers to identify the specificities of the civil security systems in the respective countries while at the same time facilitate cross-country comparison of the handling of a crisis that affected all countries in the study although in different degrees.

Interview-based case study versus desk-based case study

The case studies can be divided into two groups: interview-based and non-interview based case studies (see Table 1).

Interview-based case studies apply in all ANVIL beneficiary countries where ethics approvals have been secured. It is expected that these case studies will provide a comprehensive and detailed picture of the features of the civil security architectures, experiences and practices. More specifically, we believe that information on the variables identified under the four analytic dimensions as well as the three quality measures will be largely accessible for these countries. Where "hard" and welldocumented facts and figures are not available, opinions and perceptions among key informants working in the civil security field will in many circumstances provide insights into the issues and questions at hand.

Interview-based case studies should be of a maximum of 11,500 words besides annexes and resource lists.

Each interview-based case study has been allotted 6 working months.

Non-interview/desk-based case studies apply in the project's non-beneficiary countries given the difficulty in obtaining ethics approvals. As researchers carrying out these studies do not have the same kind of access to key informants as interview-based case studies, it is expected that they will be "lighter" in terms of information, facts and figures. Because access to information on the different variables will differ extensively from country to country, it is somewhat difficult to pre-determine which exact variables should be possible to answer by researchers that relies on secondary resources – for example, the kind of information that is publicly accessible in Norway may be very different in kind and amount than the information available in Romania. Generally, we believe that non-interview based case studies should cover most questions and issues under the four analytic dimensions section. As for the variables identified under the quality measures, information is likely to be harder to get.

Non-interview based case studies should be of a maximum of 8,000 words besides annexes and resource lists.

Each interview-based case study has been allotted 3 working months.

Table 1: Case study overview.

Case studies with ethics approval	Case studies without ethics approval
(interview based)	(non-interview based)
Croatia	Austria
Finland	Czech Republic
France	Estonia
Germany	Hungary
Ireland	Latvia
Italy	Lithuania
Netherlands	Malta
Poland	Norway
Serbia	Romania
Sweden	Slovakia
United Kingdom	Switzerland

Drafting guidelines

Executive summary: Provide an executive summary for each case study. The following text should be inserted as footnote number 1:

This case study represents one of 22 country studies compiled in the context of the Analysis of Civil Security Systems in Europe (ANVIL) Project. The ANVIL Project aims to map the variety and similarities in Europe's regional civil security structures, practices and cultures and investigate how variety affects the safety of Europe's citizens. The results give policy stakeholders a clear overview over civil security architectures and EU-added value to the debate concerning "not one security fits all". Read more at <u>www.anvil-project.net</u>.

Introduction: Provide 1) an overall picture of the civil security system in place, 2) a short description over types of disasters and key "signature crisis" that the country has experienced, and 3) the government/constitutional definition of crisis. To avoid repetition, please refrain from any descriptions of the ANVIL project in general.

Body text: See section D for the questions to be answered under each sub-section. There should be no introductory section for the two parts which means that there should be no text between the heading "2. Analytical dimensions" and the first sub-section "2.1 Cultural and historical aspects" (this is to avoid repetitive justifications of the analytic dimensions to be addressed amongst the case studies). Researchers may use the "brief analysis" sections to provide their own analysis. All other sections should be dedicated to descriptive information based on key informants and/or secondary resources.

Conclusion: The conclusion should provide a summary of key features, issues and concerns.

Annex I – Comparative data: Insert the results of your research in the coded data sheet (CDS) provided. Do not make any changes to the CDS itself. The CDS will be provided in an excel format for researchers to enter the relevant data. Information on variables and measurement are also available under each section and subsection in this mapping protocol to remind researchers of the information required for analytic dimensions and quality measures in the coding scheme.

Annex II – H1N1 in <country>: This section will provide a mini-study of the H1N1 ("swine flu") incident and experience in your country. To allow for cross-country comparison, please stick to the questions laid out in Section D.

Annex III – Resources: All case studies are required to provide a reference list that overviews all secondary documents and literature used in alphabetic order. The Harvard system of reference is to be used for all references – see i.e. <u>http://libweb.anglia.ac.uk/referencing/harvard.htm</u>. Interview-based case studies are in addition requested to provide a list of all interviews conducted in alphabetic order according to the interviewees' last names.

Footnotes/endnotes: All in-text referencing, additional information, comments etc. shall be put in footnotes. Endnotes are not to be used for any purpose in the ANVIL case studies. It is very important that you include precise references for all the information recorded (per question). The reference in the footnote should contain author, year and page number (or interview + date).

Table 2 provides an overview over the case studies, including section titles and approximate page numbers pr section in interview-based as well as non-interview based case studies.

CS sections and subsections	Max word nun	nbers pr section
	Interview-based CS	Non-interview based CS
Executive summary	500	400
1. Introduction	500	300
2. Analytical dimensions		
2.1 Cultural and historical aspects	1,200	1,000
2.2 Legal & constitutional aspects	2,400	2,000
2.3 Relations between the state and its citizens	1,200	1,000
2.4 Role of the private sector	1,200	1,000
2.5 External cooperation	1,000	800
3. Quality measures		
3.1 Effectiveness	1,000	500
3.2 Efficiency	1,000	500
3.3 Legitimacy	1,000	500
4. Conclusion	1,000	500
Word numbers pr case study (annexes excluded)	12,000	8,500
Annex I: Comparative data	n/a	n/a
Annex II: H1N1 in <country></country>	1,000	500
Annex III: Resources	max 4 pages	max 3 pages

Table 2: Country study sections and indicative page numbers

3.2 Sources of information

Primary data collection

Each interview-based case study will be featured by the conducting of a series of semi-structured expert interviews. As mentioned in section B, because of difficulties in obtaining national ethics approvals in non-beneficiary countries, studies in these countries will be confined to desk studies and thus will not include interviews with key informants.

The identification of key informants and/or interview partners follows several overlapping considerations. Each of the interview-based case studies will require interviews with practitioners and experts to access information related to:

- 1. The five analytical dimensions
 - a. Historical and cultural aspects
 - b. Legal/constitutional aspects
 - c. State-citizens relations
 - d. Role of the private sector
 - e. External cooperation
- 2. The three quality measures
 - a. Effectiveness
 - b. Efficiency
 - c. Legitimacy

Key informants have been identified on the basis of their current job position, or established professional or academic record. All researchers that are involved in the conduct of interview-based case studies have already identified key informants on the basis of desk research. Subsequent rounds of interviews are likely to take place through personal referrals and recommendations as the case studies progress.

The informed consent form should be brought along to every interview and explained, though people will not be required to sign it if they absolutely refuse to do so. The form has also been sent out to informants engaged in cross-cutting WPs and/or taking part in ANVIL workshops and events and that are thus contributing as 'healthy volunteers' to the project. The informed consent form is available in section E of this document. In case you are sending the form electronically to the interviewees, remember to make sure to pdf the document in beforehand.

While it cannot be ruled out that the consortium will not be granted access to all relevant actors (particularly if the military plays a role in civil security provision), we expect robust participation to cover each national system in sufficient depth to allow structured and valid comparisons. In case you have difficulties with accessing persons and institutions required to cover the main issues and concerns as laid out in the "Section D: Civil Security System Variables", make sure to contact the WP2 leaders as early as possible to discuss the situation.

In order to map the legal and constitutional aspects of a civil security system, researchers will conduct interviews with civil servants in national ministries as well as senior planners or advisors (or advisory boards) that shape national security strategies and contingency plans. The number of

principal institutions and committees that will be contacted depends on the coordination system in each country. In the area of citizen-state relations, interviews would be conducted with political representatives at various levels (e.g. from a responsible national parliamentary committee but also from regional or local government). Furthermore, we will approach civil servants or professionals in charge of citizen outreach activities. Identified "signature crises" for each country or region under investigation are likely to highlight which communities and interest groups are especially pertinent for wider questions of social trust in civil security systems. Analysing the role of the private sector requires contacts and representatives from the leading professional associations, business actors and civil servant that deal with public private partnerships at the national level. To measure quality of civil security systems, researchers will carry out interviews with senior advisors and evaluators that have been involved in assessing activities undertaken during the prevention and response phases.

Relevant interviewees include:

- Representative(s) from the central/regional/local government, i.e. from
 - o PM Office
 - Ministry of the Interior (or equivalent)
 - Ministry of Defence (or equivalent)
 - Ministry of Infrastructure (or equivalent)
 - Ministry of Health/Social Affairs (or equivalent)
 - Representatives from regional governments
 - Representatives from local governments
 - o Other...
- Representatives from the Parliament
 - Responsible parliamentary committee
- Representatives of State agencies/offices responsible for crisis preparedness and response at
 - o Central levels
 - Regional levels
 - Municipal (or city) levels
- Representatives from private companies
- Representatives from non-government organisations (faith-based organisations, community organisations, special civil protection (Red Cross) etc.)
- Representatives of think-tanks and policy institutes
- Representatives from the academic community

Box 1: Ethics and conduct of interviews

Proposed activities will be carried out in compliance with fundamental ethical principles. In the event that ethical issues, including privacy are raised, they will be addressed before the proposed activity is carried out. The potential impact of the resulting activities on Fundamental Rights, ethical principles and societal values will be addressed as necessary. Informed consent and data protection procedures will be respected; all partners in the consortium will comply with relevant EU Directives on data protection and will provide the EU with copies of the appropriate authorisations from data protection authorities. This will be included as a deliverable in the project prior to the start of any work involving data that need to be protected. An independent ethics expert (Dr. May Thorseth, Professor of Applied Ethics at the Norwegian University of Science and Technology, see section 2.1 above) has been recruited to serve on the End User Advisory Board of the ANVIL project in order to give advice about possible ethical issues. We will include an ethics report as a deliverable in the project. In addition, detailed information will be provided to the competent local/national ethical boards/bodies/administration regarding the privacy/confidentiality and the procedures that will be implemented for data collection, storage, access, and sharing policies especially when third countries are concerned; protection, retention and destruction and confirmation that they comply with national and international/EU legislation. Interviews with healthy volunteers will occur only in countries with ANVIL beneficiaries. Copies of ethical approvals/opinion/notification by the competent legal local/national

Ethics Boards/Bodies/administrations will be submitted to the European Commission prior to commencement of the research. Data collection in third (non-beneficiary) countries will not involve interviews with healthy volunteers and therefore will not require national level ethics reviews. Information with regard to compliance with international/EU legal framework for non EU MS Croatia and Serbia will be provided.

Secondary data collection

Secondary data will be the sole basis for the development of non-interview based case studies. Notably, such data also forms the back bone of interview-based studies. The amount of secondary data available will differ from country to country, but for many of the cases included in the ANVIL project a large amount of documents and reports are ready available either online or in archives and libraries.

Relevant documents include:

- Legal/regulatory documents
- Official policy documents
- Reports produced by think-tanks
- Documents/reports produced by private sector
- Documents/reports produced by the NGO sector
- Academic/research papers and reports
- Surveys/opinion polls

Precise referencing for all information used is crucial. Make sure to keep a copy and back up of all digital files (legal documents, articles, reports, website information in (HTML or pdf) etc.) you refer to in the study. Country study researchers will be requested to burn all materials used in the study on a DVD to accompany the case study upon submission in June 2013. For tracking copy-right protected materials, such as journal articles etc., make sure to list all of these documents in a separate word file. The storing of all materials used in a separate file throughout the drafting process, including the word file overview over copy-right protected materials, will thus be extremely helpful.

Box 2: Online resources

The Commission's Vademecum gives a general overview of the measures taken by EU Member States as well as at EU level to deal with disasters. Disasters may be due to natural causes, such as earthquakes, landslides, forest fires, floods, snowstorms, tidal waves and/or human activity, such as in the case of accidents involving chemicals, etc. The vademecum covers all ANVIL countries except Switzerland and Serbia. Go to: http://ec.europa.eu/echo/civil/vademecum/index.html

Informed. Prepared. Together. is a gateway to resources, information and practical tools for developing the ability of individuals, communities and organisations to be better prepared to cope with emergencies and disasters. It contains an online resource library through which communities share resources, good practice and comments in the area of resilience and disaster preparedness. See in particular the national profiles' section. Go to: <u>http://www.informedprepared.eu/</u>

PreventionWeb serves information needs related to disaster risk reduction, including development of tools to facilitate collaboration. It aims to provide a common platform for institutions to connect, exchange experiences and share information. The site contain news, DRR initiatives, event calendars, online discussions, contact directories, policy documents, reference documents, training events, terminology, country profiles, factsheets as well as audio and video content. Go to: <u>http://preventionweb.net</u>

The *Foresec* Project (Europe's evolving security: drivers, trends and scenarios) ended in 2009 and all project reports are available on their website, including the following country studies: Austria, Bulgaria, Estonia,

Finland, France, Germany, Italy, Poland, Slovenia, Spain, Sweden and UK. Go to: <u>http://www.foresec.eu/</u>

Acrimas – the Aftermath Crisis Management Project and especially the D2.1 Report on Current CM Framework which provides political and legal framework overviews for the following countries: Germany, Italy, Sweden and Greece. Go to: <u>http://www.acrimas.eu/</u>

Compendium of National Crisis Management Approaches in OECD Member Countries – Part 1 on Europe (edited by Stefanie Frey, forthcoming) covers the following case studies: Austria, Denmark, France, Germany, Netherlands, Norway, Switzerland and UK

The Europarometer of the European Commission surveys periodically the opinion of EU citizens on a great variety of topics including civil protection, but also food safety, protection from disease, global threats, cyber security etc. Please check out the special surveys on civil protection for EU-wide, including your country, conducted 2012 (survey 383) and 2009 in no. (survey no. 328) at http://ec.europa.eu/public opinion/archives/eb special en.htm. These surveys provide some of the required information for section D, 2.3.2 of your study.

Other relevant projects, reports and results:

- CAPHAZ (Social Capacity Building for Natural Hazards: Towards More Resilient Societies): http://caphaz-net.org/outcomes-results
- CONHAZ (Costs of Natural Hazard): http://conhaz.org/CONHAZ WP09 1 Synthesis Report final.pdf
- *KULTRisk* (Knowledge-based approach to develop a cULTUre of Risk prevention): This project is focused on the development of a culture of risk prevention by means of a comprehensive demonstration of the benefits of prevention measures. <u>http://www.kulturisk.eu/results</u>
- *Catalyst* (Capacity Development for Hazard Risk Reduction and Adaptation Project): <u>http://www.catalyst-project.eu/</u>
- emBRACE (Building Resilience Amongst Communities in Europe): <u>http://embrace-eu.org/</u>

3.3 Civil security system variables

What is a crisis according to ANVIL?

Our focus is on mapping variation amongst civil security systems across Europe, towards the goal of understanding system diversity and illuminating different approaches to questions of efficiency, effectiveness, and democratic legitimacy. Civil security systems are defined broadly as the national apparatus (policies, bodies, and mechanisms) designed to protect against new and urgent threats to the security of people and/or the functioning of critical infrastructures.

This broad approach requires an open definition of threats and crises (the manifestations of threats), since we are interested in different kinds of threats which a civil security system may be responsible for. Crises are serious (materializing) threats to the well-being of citizens and the integrity and functioning of critical infrastructures. We have provided the examples of natural disasters, diseases, industrial/transportation accidents, critical infrastructure failures, and terrorist attacks as indicators of the type of events we are interested in. In some cases, you may be asked to examine signature crisis and typical crisis or emergencies (see definitions below) which correspond to one or more of these.

But the nature of the civil security system and the kinds of threats it addresses is an empirical question. As such, the actual type of crisis examined is important only in so far as it illuminates the key dimensions, functions, and quality of a civil security system. A singular focus on terrorism response related issues, for instance, would be inadequate if your country's civil security system also covers pandemics and natural disasters.

A "signature crisis" is defined as a major crisis that is kept as a central feature of the collective memory of the state's citizens. Typical examples of signature crises are the Utoeya/Norway bombings of 2011, the 1994 Estonia ferry accident, the 2004 Indian Ocean earthquake and tsunami.

A "typical crisis" is characterised by their frequency. Moreover, whilst having major repercussion (i.e. in the way that they can threaten peoples' lives) they usually have a more narrow scope than signature crises. Examples of these types of re-occurring crises – often termed "emergencies" – are flooding in the Netherlands, storms in Sweden, forest fires in Spain and Portugal, heat waves in France etc.

The ANVIL project and country case studies will cover both signature crisis and typical crisis. Notably, our main focus is on typical crisis, i.e. emergencies that are more frequently putting the civil security system to the test. That said, signature crises are important to understand the shaping of these systems as they represent "critical junctures" that often sparks nation-wide debates and whole-scale changes of existing institutions and processes.

The understanding of a crisis as such is to some extent subjective and considerably depending of the context within which it occurs. Two incidences similar in kind may thus be considered a crisis in one country and not in the other. What is important for comparison purposes in this study is that selected crisis cases or examples required national or state (or Bundesland) level involvement. In other words, they were more than local events or large incidents that emergency workers deal with on a routine basis. It is inevitable that countries differ in the types and scale of crises they experience, but we ask of each country study a list of main events that constitute a major threat or damage to infrastructures and citizen wellbeing, and involve participation or intervention of national or state level authorities.

Crisis types/categories

For clarity, the ANVIL project has identified four key categories – or types – of crisis that a civil security system may encounter:

- Natural disasters and infectious diseases
- Industrial/transportation accident
- Critical infrastructure failure
- Terrorist attack

Natural disasters and infectious diseases are the effects of natural and man-made disasters such as floods, tornados, wild fires, volcanic eruptions, earthquakes, tsunamis, heat waves, droughts, landslide and epidemics.

Examples include: the 2003 Southern European heat wave, the Emilia earthquakes in Italy (2012), H1N1 swine flu etc.

Industrial disasters and transportation accidents are disasters linked to industrial processes and infrastructures and may be the result of accidents, negligence and/or incompetence. Transportation accidents and disturbances on transportation routes (road, rail, air, water) that causes great damage, injury and/or loss of human lives.

Examples: Seveso chemical plant disaster (1976), the AZF fertilizer factory explosion in Toulouse (2000), the alumina plant accident in Hungary (2010), the Air France flight 4590/Concorde crash in Paris (2000), the Belgian coach crash in Switzerland (2012) etc.

Critical infrastructure failure refers to the failure or functional impairment of vital systems required for the functioning of a society. Such failures may lead to critical supply problems, , and may occur as a consequence of other disasters, i.e. natural disasters and terrorist attacks.

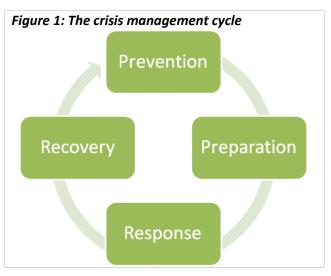
Examples: Y2K/Millennium bug, Austria/Germany/Italy electricity grid overload (2006)

Terrorist attacks refer to acts intended to cause death or serious bodily harm to civilians or noncombatants with the purpose of intimidating a population or compelling a government or an international organization to do or abstain from doing any act (UN definition).

Examples include: The Madrid train (2004) and London transport (2005) bombings, the Oslo bombing and shooting on Utoya, Norway (2011).

Crisis cycle phases

Generally speaking, the process of crisis management can be divided into four phases: prevention, preparedness, response and recovery. **Prevention** aims to prevent crisis from developing into a crisis and/or reduce the effects of disasters. Prevention is achieved through thorough risk and vulnerability analysis and identification/evaluation of hazards which produce information that can reduce potential threats and risks. Prevention involves a long-term and wide-ranging set of



activities, ranging from intelligence gathering to seismic retrofitting and from the construction of dikes to development of new laws and regulations. **Preparedness** refers to efforts to change behaviour to reduce the impact of large-scale crises on a society. During this phase, civil security system agencies engage in planning, installation of surveillance and early warning systems, purchase of required equipments/materials required, and capacity development at central and local levels. **Response** has to do with the mobilisation of organisations and first responders in the aftermath of an actual incident, in an attempt to address the immediate effects of an event. First response efforts may differ according to the type of crisis at hand – i.e. natural disaster, diseases, industrial/transportation accidents, infrastructure failures and terrorist attacks. Examples of certain procedures, communication with the public, coordination efforts across and between governments, executive decision making moments, etc. **Recovery** starts when immediate needs have been addressed and focuses on restoration. Closely linked to the prevention phase, efforts are usually made to "build back better" to ensure that inherent risks are reduced. Activities undertaken in this phase includes temporary housing, longer-term medical care, social counselling etc.

The ANVIL project focuses on two of the above mentioned four phases, namely on <u>preparedness</u> and <u>response</u>. These two phases represents the most critical stages of the crisis management cycle and

are in-line with ANVIL's goals to assess the operation of civil security systems. Compared to the prevention and recovery phases, which span almost all government activities and can take place over long periods of time, prevention and response focus on the present and immediate future. Limiting our study in this way allows for greater analytical precision and is more consistent with the Commission's request for this FP7 project.

3.4 The country mapping protocol

A short version of the country study mapping protocol is provided below as well as the coded data sheet used to gather scoring data for each country on key civil security dimensions.

Section 1: Introduction

- **Experience:** Provide a brief overview over the country's earlier (including pre-2000) experiences with signature crisis and typical crisis/emergencies. What is the most frequent type of crisis that the country faces on a regular basis? If a specific crisis event has been exceptionally important to the development of the CM system, please specify.
- List: Provide a list of crisis covering the period 2000-2012 alongside the following crisis categories: i) natural disasters and infectious diseases, ii) industrial/transportation accidents, iii) infrastructure failures, and iv) terrorism. Use the table structure below. The list can be used as a reference tool when you will be providing examples etc. in the coming sections of the case study.

Year/			Damage			
month	Crisis description	Crisis category	# of persons killed	# of persons injured	# of persons affected	

- **Definition:** How is crisis defined in formal policy documents? Is there an official (formal) definition? If yes, provide definition and legal basis as well as interpretation/short explanation. If not, what defines a crisis and how is the concept understood in general terms?
- Dominant CM approach:
 - Military vs. civilian: To what extent and/or under what circumstances is civil crisis management considered a military versus civilian operation? What is the role of the military in the civil crisis architecture in the country?
 - All hazards vs. specific threats: Does the country take an all hazards or a specific threats approach to crisis and disasters? In other words, is the country's civil crisis management response system subdivided and specialized to cope with specific threat types (with specialized agencies cooperating and coordinating their activities for cross-sectoral incidents) or does a single basic structure provide an all hazard response and adjust its operations to each specific situation? For which threat types have specific agencies and systems been created?

Section 2: Analytical dimensions

Section 2.1: Cultural and historical aspects of the civil security system

Administrative tradition

- **Central level** governance and administrative structure:
 - What is the form of central government (please briefly describe and score on code scheme):
 - Monarchy vs. republic;
 - Parliamentary vs. presidential system;
 - Federal vs. unitary state
 - consociational (=coalition cabinets, proportional representation, mutual vetoes, rigid constitution, equality among cabinet ministers and PM) vs. majoritarian democracy (single party government, winner takes all, constitutional review, strong PM or presidential position)
- **Regional-level** governance and administrative structure:
 - o Number and approximate size of regions/counties/provinces
 - Elected versus non-elected government per level (also elected governor y/n)
- Local-level governance and administrative structure:
 - Name and average size and number of municipals/townships/cities/communes
 - Elected versus non-elected government per level (also elected mayor y/n)
- CM structure and the administrative levels:
 - What is the overall role and responsibility of the different governance/administrative levels (central, regional, local) when it comes to crisis management <u>preparation</u>.
 - What is the overall role and responsibility of the different governance/administrative levels (central, regional, local) when it comes to crisis management <u>response</u>. At which level must/can a disaster declaration be given? Does this require consent of the legislator (parliament/council/congress)?
 - To what extent and/or under what conditions is civil security authority centralised and/or decentralised?
 - Include an organisational chart of the organisation of the civil security system. Use <u>Vademecum</u> as the point of departure but ensure to update features that may have been undergoing recent change. For Serbia and Switzerland, that are not covered by the Vademecum, please identify and use other sources.

- Delegation and up-scaling:

- What kind of delegation mechanisms and procedures are in place between the administrative levels?
- Does authority and responsibility for crisis preparation and response rest at the central level with delegation of tasks/mandates to local/regional authorities when local/customized implementation is required? Or, vice versa, does authority and responsibility for crisis preparation and response rest at local level with an up-scaling of authority when a crisis cuts across local communities and/or when the crisis overwhelms local capacity?

Government/social culture

- **National culture analysis:** Interpret/provide an explanation for the Geert Hofstede's index score for your country¹ and the provided explanation for your country.
- World Value Survey: The World Values Surveys were designed to measure all major areas of human concern, from religion to politics to economic and social life. It turns out that two dimensions dominate the picture: (1) Traditional vs. Secular-rational values and (2) Survival vs. Self-expression values. These two dimensions explain more than 70 percent of the cross-cultural variance on scores of more specific values."² Register the World Value Survey score and the provided explanation for your country.
- Impact of culture on CM system: What is the impact of culture language, religion, historical trajectory and deep-rooted crisis experience on the country's CM system? One example would be the impact of Irelands experience with terrorism which has made the citizens highly tolerant of anti-terrorism laws. We note that tracking the effect of culture on civil security systems is difficult for interview-based case studies asking key informants on their perceptions could provide some tangible information)

Section 2.2: Legal/constitutional aspects of the civil security system

Statutory basis

- **Legal framework:** Outline the key legal and provisional framework (including year of establishment) regulating the civil crisis management system.
 - Are crisis responsibilities legally institutionalised (as opposed to ad hoc)?
 - Does the degree of institutionalisation differ across the administrative levels (central, regional, local-level) and if yes, how?
- **Reforms 2000-2012:** Have there been any major changes in the legal framework regulating crisis management? If yes, describe the change(s) and explain how it/they have influenced the civil security system in the country. Are any major reforms foreseen in the near future (currently under discussion)?

Political dimension

- Executive responsibility:
 - On what level of government does executive responsibility for crisis preparedness and response initially and primarily rest?
 - To whom are civil security agencies initially and primarily responsible? (i.e. government; minister of a specific department; mayor, department chief?)
- Policy formulation: Who formulates civil security policy in your case (e.g. which cabinet departments or special agencies)? If specialised agencies, how close are such agencies to government and susceptible to political intervention?
- Accountability: Are specific arrangements in place for crisis management response (for instance, a state of emergency system that enables special authority to be executed outside of legislative control)

¹<u>http://geert-hofstede.com/countries.html</u>

² <u>http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_111</u>

Operational dimension

- Implementation agency/ies: Who implements civil security policy?
 - Is the implementation of civil security policies divided over several lead agencies or organised in a single lead agency? Which ones?
- **Accountability:** Which administrative executive(s) is (are) accountable for the performance of the agency in the civil security system?
- **Operational tasks and responsibilities:** Based on on formal legal and policy documents, <u>how</u> are the following key tasks dealt with and by <u>whom</u> (which institution/agency). In brief:
 - **Planning:** What kinds of plans are in place for dealing with a national emergency? Are plans generic (i.e. cover all types of crisis) or specific (i.e. cover specific crisis types (natural disaster, diseases, industrial/transportation accidents, critical infrastructure, terrorist attacks etc.)? Who is responsible for planning?
 - **Risk assessment:** Does risk assessment take place at the national level? Are risk assessments generic (i.e. cover all types of crisis) or specific (i.e. cover specific crisis types (natural disaster, diseases, industrial/transportation accidents, critical infrastructure, terrorist attacks etc.)? Who is responsible for planning?
 - Communication: Are means for communications between actors at national, regional and local levels in place? What does the communication system look like? Who is responsible for maintaining the system?
 - **Logistics:** Are channels for the distribution of equipment/human resources in place? Who is responsible for coordination and logistics in case of a crisis?
 - **Monitoring:** What are the mechanisms for monitoring of an unfolding of ongoing crises and responses? Who is responsible for monitoring?
- **Illustration of the civil security system:** Describe a typical crisis case of the past ten years that is representative of the threats your country faces on a regular basis and exemplifies the way the country's civil security system works.³

External dimension

- Bilateral cooperation:
 - What kind of bilateral provisions (agreements, partnerships, programmes, etc., with neighbouring states) on civil security coordination exist? Does your country have bilateral agreements in the civil security area with all neighbours? Are they similar in kind or are there significant deviations with regards to the different bilateral agreements?
 - Are procedures for activating bilateral agreements for assistance or cooperation (requesting and offering assistance) during a crisis in place? Have such bilateral mechanisms been activated as part of national aid efforts? If yes, under what types of crisis?
 - Are structures for regular cross-border cooperation in place?
 - What are the main reasons for the bilateral collaboration (crossing borders, similar hazard or other)?
- Regional and/or multilateral provisions:
 - What kind of regional and/or multilateral provisions (agreements, partnerships, programmes etc.) with a civil security dimension exist? Is your country participating

³ Avoid here the "swine flu" pandemic as this will be treated in Annex 2 of the case study.

in all relevant regional/multilateral agreements or has it opted out of specific cooperation forums?

- Are procedures for activating regional and/or multilateral agreements for assistance or cooperation (requesting and offering assistance) due to crisis? If yes, have they been activated and thus put in motion regional aid efforts? In what types of crisis?
- What are the reasons for the collaboration (crossing borders, similar hazard or other)?

Section 2.3: The relations between the civil security system and citizens

Expectations

- **State-to-citizens expectations (/citizens' obligations):** What is the formal responsibility of the citizen in protecting his/her life and property? Where is this codified?
- **Citizens-to-state expectations:** What are the citizens' expectations toward government responsibility for civil security versus citizens' responsibility? Use opinion poll results if such are available.
 - What types of threats does the public perceive are most likely to hit the country? (natural disasters; diseases, industrial/transportation accidents; terrorist attacks; infrastructure failures) – "probable incidences". Use data from the <u>Special</u> <u>Eurobarometer 383 report</u>.⁴
 - Does the public believe that the state has sufficient crisis management capacities to tackle different types of crisis – "crisis preparedness"
 - Are citizens willing to actively assist in the case of a crisis/emergency? Are citizens directly engaged in CM preparation and response through volunteerism? If yes, what types of activities are they involved in? Fire brigades, search and rescue operations etc.? Number of persons volunteering and their role vis-a-vis professional staff.

Information

- Information on preparedness: How does the state inform citizens about impending crises?
 - How do government agencies inform the public on increased threat levels in the country?
 - Who is responsible for crisis communication (political actors vs. bureaucratic actors; established crisis centre vs. no such centre)
 - What information channels do citizens prefer?
 - Do citizens feel informed on crisis preparedness in your country? (See Section 2.2 on "information on disaster preparedness" in <u>Special Eurobarometer Report 328</u>)
- **Information on response:** How does the state inform citizens about an unfolding crisis what is the main method?
 - How do government agencies issue an alarm on a severe crisis?
 - How do government agencies inform the public on the sequence of events and operations by the government or other actors?
 - How do government agencies publish inspections and evaluations?
 - Do citizens feel informed on crisis response in your country? (See Section 2.3 on "information on disaster preparedness" in <u>Special Eurobarometer Report 328</u>)

⁴ <u>http://ec.europa.eu/echo/files/eurobarometer/reports/CP.pdf</u>

Education

- **Education and awareness:** To what extent do the government agencies responsible for civil security design raise awareness among the citizens?
 - Does the government produce awareness raising materials (brochures, leaflets etc)? How is the material distributed (i.e. online, printed and available, printed and mailed to citizens etc.). Is distribution considered adequate (i.e. is distribution passive or proactive?)
 - Do the government, key government agencies and/or the NGOs sector offer basic/advanced trainings in for citizens (including volunteers) in relevant areas (i.e. first aid, search and rescue services etc.)? Are any basic trainings obligatory? How many persons are trained per year?
 - Do the government, key government agencies and/or the NGO sector offer education programmes for professionals (i.e. government employees) through central training centres (if existing) and/or universities? How many professionals are trained per year?
 - Does the government sponsor research/technological developments? Provide examples if possible.
- Education and activation: Does government stimulate citizen preparation and activation, resilience and self-help among citizens and communities? Which agencies are involved in this work?

Section 2.4: The role of the private sector in maintaining civil security

Role of societal/non-profit organisations/NGO's

- Overview: Does government have formal partnerships with societal/non-profit organisations responsible for civil security? Provide an overview over non-government organisations (NGO's, faith-and/or community-based organisations) that are formally involved in civil security.
- Formal role:
 - What is the formal role of societal/non-profit oriented organisations when it comes to crisis management preparedness? Which tasks are dealt with by which organisations?
 - What is the formal role of societal/non-profit oriented organisations when it comes to crisis management response? Which tasks are dealt with by which organisations?
- **Financing:** To what extent is the involvement of non-profit organisations financed by the state in relation to the activities they undertake in the crisis management field?
- **Inclusion:** To what extent are societal/non-profit organisations included in government activities related to civil security preparedness (innovation projects; trainings; exercise programmes etc.) and response (provision of human resources, materials, logistics support etc.)?
- **Example:** Focus on the Red Cross: Is the Red Cross an important non-government organisation actor in crisis management in your country? How many offices does it have and at what administrative levels? How many workers/volunteers are engaged? What tasks does this organisation undertake (formally/informally) in relation to in-country civil security?

Role of profit-oriented organisations

- Overview: Do public agencies outsource civil security/crisis responsibilities to profit-oriented organisations/companies? If yes, provide an overview over profit-oriented organisations and companies that are formally involved in civil security. Is there any variation in private sector involvement across the different types of crisis?
- Formal role of profit-oriented organisations/companies:
 - What is the formal role of profit oriented organisations/companies when it comes to crisis management preparedness? Which tasks are dealt with by which organisations/companies?
 - What is the formal role of profit oriented organisations/companies when it comes to crisis management response? Which tasks are dealt with by which organisations/ companies?
- **Financing:** To what extent is the involvement of profit organisations/companies financed by the state in relation to the activities they undertake in the crisis management field?
- **Inclusion:** To what extent are profit organisations/companies included in government activities related to civil security preparedness (innovation projects; trainings; exercise programmes etc.) and response (provision of human resources, materials, logistics support etc.)?
- **Example:** Provide an example of a major profit-oriented organisation/company involvement: At which administrative level is cooperation initiated, what kind of agreement is in place etc.

Section 3: Quality measures

A crucial question is how we can measure the quality – defined in terms of effectiveness, efficiency and legitimacy – of these civil security systems. In defining quality, we should keep in mind that different systems can be equally effective. What risks a nation should prepare for differ per country or region. In recent years, we have seen forest fires in Southern Europe, massive earthquakes in Italy, flooding in Eastern Europe, terrorist attacks in the UK, Spain and Norway, and infrastructure failures in Scandinavia (to name but a few recent events). In response to different crises, and shaped by different administrative traditions, risk cultures and legal constraints, different systems have evolved. We aim to assess these systems in an impartial, feasible and acceptable manner.

The ANVIL project takes an inductive approach towards the understanding of quality. Therefore, civil security systems will be gauged as effective, efficient and legitimate as far as politicians, professionals and citizens in the countries studied deem them as such.

Section 3.1: Effectiveness

Effectiveness is understood as the extent to which civil security systems are capable of producing reasonable results.

Assessments through professional and political inquiries

- **Overview:** Provide an overview over professional and political inquiries that have been carried out in the aftermath of major crises. At the general level, how do these reports approach the effectiveness concept?

- Assessment of effectiveness: Select a number of cases as you see fit (around five reports could be used as a ball park figure) to gauge the degree to which inquiries express high, moderate or low effectiveness of the crisis response operations in the context of the crisis context in question.
 - **Causes:** Do the investigations point at causes of crisis or crisis escalation that were preventable if the civil security system would have performed better?
 - **Response:** Do the investigations evaluate the crisis response in general as timely and effective?
 - **Culprits:** If investigators judge that prevention or response has failed, do they name any culprits? Whom: Persons or organizations?
 - On which parts of the civil security system or emergency response operations does praise or criticism concentrate? On which organizations? Which processes?
 - **Reforms:** Do investigations lead to recommendations and subsequent reforms to improve system and response effectiveness?

Limits to national capacities

- **Call for external assistance:** Linked to section 2.2.4 and section 4, has the country considered and/or called for/requested external assistance (neighbouring country, regional/international organisation? What types of crisis have required such assistance (signature vs. typical crisis and according to the four crisis categories)? What were the main reasons for calling for such assistance? Insufficient capacities nationally, financial reasons, other...? What were the results, i.e. did assistance increase the effectiveness of the response operations?
- Declaration of state of emergency: Has the government declared a state of emergency in the context of a crisis? If yes, during what types of crisis (signature vs. typical crisis and according to the four crisis categories)? What were the reasons for the emergency declaration? Did the state of emergency declaration signal that the civil security system was not able to sufficiently cope with the crisis situation at hand? Did it contribute to decrease or increase the overall effectiveness of the management of the crisis (i.e. did the suspension of functions/laws impact on effectiveness)?

Section 3.2: Efficiency

Efficiency is understood in terms of value-for-money or cost-benefit analysis, i.e. the extent to which there is a reasonable balance between capacities at hand and their costs. In a comparative context, efficiency is ideally measured in terms of expenditures. However, civil security sector costs are often highly fragmented, being allocated to a variety of functional areas (i.e. transportation, health care, infrastructure, police/intelligence, environment etc.) across different administrative or geographical levels (local, regional, national) and to different actors (ministries, special agencies, NGO's, private companies etc). In this context, the ANVIL project will gather budget/expenditure data, but we acknowledge that their use for comparative purposes must be treated with care (see "cost of the civil security sector" item in the below descriptive data list). Moreover, in an attempt to analyze efficiency, the project will look into the issue of efficiency in terms of the degree to which the countries have initiated reform plans from a cost-saving perspective.

In addition to quantitative data, keep in mind that interviewees can provide insights through their perceptions. However, make sure to clearly state the type of sources used for your analysis.

- **Overall:** Have efforts been made to promote efficiency? Did government initiate plans aimed at cost-saving across functional and administrative levels within the system?
- Assessments/monitoring: Does the government have a clear view over how much the state spends on CM preparedness and response? Did costs rise or decline in the past decade? Are there monitoring systems in place to track CM costs across functions and administrative levels?
- Costs of the civil security system sector (preferably use 2011 as the baseline year):
 - **General budget:** What is the overall state budget and how much is spent on CM sector? Do expenditures overrun the budget? What are the main reasons/explanations for this?
- **Restructuring/reforms:** Has restructuring of the CM system taken place on the basis of financial considerations?
- Privatization: Linked to section 2.4, has privatisation of CM responsibilities to private parties been undertaken to promote value-for-money? Has privatization successfully contributed to enhance efficiency?
- **Major investments:** Has the country undertaken major investments (i.e. equipment and technology) in the CM sector? To what extent has cost-benefit analysis been used in investment processes.
- Public perception: Has there been any public debates regards budgets/expenditures in the CM sector? If debates over government expenditures in the CM sector have emerged following a crisis, provide a brief overview over this debate and the citizens perceptions of adequate use of state resources for CM purposes.

Section 3.3: Legitimacy

Political support

- Major criticism on the system, or existing controversies regarding elements of the system
- Political reactions to tests to the system (linked to section 2.1.2)
 - Have there been any major political interventions, debates, questions, inquiries and/or legislative amendments that can be related to specific crisis?
 - Has a major crisis led to the collapse of governments and/or resignation of responsible ministers due to political pressure?
 - Resignations after inquiry or without inquiry? (forced or not)
- Major reforms (linked to Section 1.2.1)
 - Have any major reforms and or reform debates taken place?
 - What where the main starting point (sources) of these reforms/debates?
 - Who/what initiated the reforms/debates? Government? Opposition? International pressure? Ombudsman, court or other rulings/resolutions?

Legal support

- **Ombudsman cases:** Has any crisis preparation/response laws and/or actions been brought in to the ombudsman. If yes, what were the content of the complaint?
- Legal cases: Has crisis preparation/response laws and/or actions been legally challenged in national courts? If yes, what were the content of the law case?
- **Human rights and civil liberties:** To what extent are basic human rights and civil liberties built into the civil security system? Have there been any debates over the states

responsibilities to protect human rights and civil liberties on the one hand and its role in providing security on the other?

Popular trust and support

- Popular perceptions general: Do citizens feel safe/secure? (On the basis of opinion polls or, if not accessible, key informants may provide information on this); Do citizens believe that the country is doing enough to manage different types of crisis? (See <u>Special Eurobarometer</u> <u>371 on internal Security</u>⁵)
- Popular perceptions signature crisis: Using a signature crisis as a starting point, to what extent have public trust/support changed? What was the general perception before the crisis and what was the general perception after the crisis? Positive or negative change? (If your country has not experiences a signature crisis in the period 2000-2012, use a typical crisis to describe popular perceptions.)
- **Electoral results:** Have elections following major crisis signalled decreasing and/or increasing popular support to governments responsible for crisis preparation and response?
- Voluntary engagement: What is the extent of voluntary engagement in crisis management in government agencies as well as private sector (i.e. NGO's)? Number of registered volunteers per capita. Use a specific typical crisis to explain how the use of volunteers affected crisis management legitimacy.

Section 4: <Country> civil security in the EU context

- **EU-state:** To what extent and how does the EU level have relevance for the civil security system in your country? Has your country activated the MIC or reacted to MIC requests? If yes, how many times and under what circumstances? What are the main reasons for the activation of the MIC (insufficient capacities at state level, financial resources, other)?
- State-EU: How active is your country when it comes to contributing to civil protection initiatives and activities through the EU? Participation in the EU exchange of experts programme, participation in the EU civil protection mechanisms training programme and EUled civil protection simulations.
- Citizens' level: What is the attitude and general level of awareness and attitudes of citizens when it comes EU coordination of civil protection? Use the <u>Eurobarometer Special Report</u> <u>383</u> report to respond to this question (see sections 2 on attitudes and 3 on knowledge/information).

Section 5: Conclusion

- What works what doesn't: Based on the case study findings above, what are the key strengths and weaknesses of your country's civil security system? The analysis should make the link between the four analytic dimensions and the quality measures and in particular point towards how the former impacts on the latter.
 - How have historical and cultural aspects affected the quality of the civil security system in your country?
 - How is the constitutional and legal framework setting the stage for effective, efficient and legitimate crisis preparation and response?

⁵ Sections 2.2.1 and 2.2.3

- How are citizens-state relations, with particular reference to expectations, information and education, contributing to or the quality of the civil security systems?
- To what extent and how are the inclusion of private parties in the civil security system making the system better (or worse)?
- **EU value added:** Based on the "what works what doesn't" analysis above, provide some insights into the potential added value of the EU level in your country. I.e. what types of initiatives from the EU level could contribute to raise the quality of the system in your case?

Annex I: Comparative data sheet



ANVIL PROJECT MAPPING PROTOCOL - WP2 <Country>

1	Introduction	Scoring instruction	Score	Source	Comments
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1			
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2			
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2			
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2		-	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2			
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2			
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2			
2.1.1.d	Is the political system a	Consociational democracy =			

2.1.1.e	Is delegation constructed in a	Top-down = 1	I	I	
2.1.1.6	top-down or bottom-up	Bottom-up = 2			
	fashion?	Both = 3			
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country				
	national cultural score - DPI				
2.1.2.a.ii	Geert Hofstede country				
	national cultural score - IDV				
2.1.2.a.iii	Geert Hofstede country				
	national cultural score - MAS				
2.1.2.a.iv	Geert Hofstede country national cultural score - UAI				
2.1.2.a.v	Geert Hofstede country national cultural score - LTO				
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular				
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression				
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3			
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform			
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2			
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1			
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	No = 0 Yes = 1			
2.2.2	Political dimension				

			 1	1
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	-	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	-	
2.2.3	Operational dimension			
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1		
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1		
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2		
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	-	
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008- 2012	Register the number		
2.2.4	External dimension			
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	-	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	-	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	-	
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3		

2.3.1	Expectations			
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2		
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1		
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		
2.3.2.c	Does the government have a central website with updated information on crisis events?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	-	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		
2.3.3	Education			
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1		
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To member ands wide- spread training programmes for general population = 3		
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2		

2.3.3.d	Does the government provide	No = 0			I
2.5.5.4	for a budget for sponsoring	Yes = 1			
	research/technological				
	developments on civil				
	security/crisis management?				
2.3.3.e	If yes, please provide the	Register the number			
	overall volume of research				
	funding for civil security				
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non-profit actors	No = 0			
	play an official/legally	Yes = 1			
	mandated role in EXCEPTIONAL crises?				
2.4.1.b	Do societal/non-profit actors	No = 0, In parts of civil			
	play an official/legally	security (e.g. emergency			
	mandated role in the	medicine) =1			
	REGULAR provision of civil	In (almost) all aspects of civil			
	security?	security = 2			
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors	No = 0			
2.4.2.0	play an official/legally	Yes = 1			
	mandated role in				
	EXCEPTIONAL crises?				
2.4.2.b	Do for-profit/private actors	No = 0			
	play an official/legally mandated role in the	In parts of civil security (e.g. emergency medicine) = 1			
	REGULAR provision of civil	In (almost) all aspects of civil			
	security?	security = 2			
3	Quality measures	Scoring instruction	Score	Source	Comments
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external	Register the number for			
	assistance been received	2000-2012.			
2176	during a crisis?	Degister the number for			
3.1.2.b	How many times have a state of emergency or disaster been	Register the number for 2000-2012. If there are no			
	declared AT THE NATIONAL	legal provisions for state of			
	LEVEL as a consequence of a	emergency/disaster, note			
	crisis?	NA			
			1		
	How many times have a state	Register the number for			
	of emergency or disaster been	2000-2012. If there are no			
	of emergency or disaster been declared AT THE REGIONAL	2000-2012. If there are no legal provisions for state of			
	of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a	2000-2012. If there are no legal provisions for state of emergency/disaster or data			
	of emergency or disaster been declared AT THE REGIONAL	2000-2012. If there are no legal provisions for state of			
3.3	of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a	2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this			
3.3 3.3.1	of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this			
	of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this			

3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.		
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.		
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3		
3.3.2	Legal support			
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.		
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.		
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None = 0 Partial (legally defined leeway for operational crisis management) = 1 Extensive (e.g. no civilian jurisdiction over military actors in crisis management) = 2		
3.3.3	Popular trust and support			
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man- made disasters?	Record the sum percentage for "Agree" and "Tend to agree"		
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"		
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1		
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011		

3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.			
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011			
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011			
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1			
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009-2010 training cycle			
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002- 12?	Register the number for 2002-2012			
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012			
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012		-	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage			

4.i Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage			
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Annex II: H1N1 in <Country>

- Q1: Outline the H1N1 crisis in terms of timeline, number of persons dead or infected as well as Government actions implemented. Timeline, from 1st alarm (initiator, place, date), 1st registered person infected, etc to final accountability procedures
- Q2: Where did the executive responsibility rest? Which operational agencies were involved? List actors involved (central, decentral, private)
- Q3: How did the government relate with the public and private sector when it came to informing and engaging these actors?
- Q4: List key decisions: What actions were taken by political and/or operational authorities to manage the H1N1 crisis?
- Q5: Were there any professional/political inquiries undertaken? If yes, what were the general assessments/judgements regards the performance of the Government and/or other agencies involved? Did the crisis produce any political crisis and/or major changes (legal, policy, institutions?). What was the general public perception of the Government's way of handling the crisis?

Annex III: Resources

References

<Reference list to be inserted by country case study drafters>

Interviews

<Interview list to be inserted by country case study drafters>

4. Country Case Studies – June 2013

Altogether 22 country case study – covering Austria, Croatia, Czech Republic, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Sweden, Switzerland and the United Kingdom – are now available and annexed to this report.

The case studies provide an abundance of facts and analysis on aspects related to and qualities of civil security systems in Europe. Notably, interview-based case studies (Croatia, Finland, France,

Germany, Italy, the Netherlands, Poland, Serbia, Sweden and the UK) are more comprehensive due to the access to conducting in-depth interviews with policy stakeholders and organizations and institutions working directly with civil security matters on the ground in each country. As expected, desk-based case studies (Austria, Czech Republic, Estonia, Hungary, Ireland, Latvia, Lithuania, Malta, Norway, Romania, Slovakia and Switzerland) cover most issues as foreseen in the mapping protocol, whilst some information – especially related to the quality measures – were not possible to obtain given limited access to resources in these countries.

The reports have been internally reviewed within the consortium, especially through the implementation of the peer review exercise (February 2013) and a UI quality control exercise (May 2013). Through these two processes, as well as the continuous exchange between case study drafters and WP2 leaders throughout the drafting period, feedback and comments on all 22 case studies have been provided to country case study researchers. Based on this, previous drafts have been revised and improved. Drafts have been shared widely among consortium members throughout the period as draft versions have been uploaded on an online file sharing and collaboration cloud, namely on www.box.com.

Due to the collaborative fashion in which the mapping protocol was developed and the way in which consortium partner researchers have utilized this document as the basis for constructing the case studies, the final case studies offer an ample ground for comparing the variety of civil security structures across countries. How does the civil security system relate with the administrative structure in each country? At which level is civil security responsibilities first and foremost located at municipal, regional or national levels? How does culture affect the civil security system in place? What does the legal framework look like across the 22 cases? How often do major reforms take place? Which are the most relevant professional bodies dealing with crisis management operations? Is there a lead agency or are tasks split across many agencies? Do countries have bilateral agreement with all of their neighbours? What about the countries' involvement in regional and international agreements and organizations that operates in the civil security field? What does the relationship between state and citizens look like? Do citizens have formal responsibilities in the civil security domain? What are the public perceptions when it comes to state obligations? Who is undertaking information and education campaigns to prepare citizens for natural and manmade disasters? What about civil society, do they play a role in the civil security system? If yes, what do they do and how many people do they mobilize? Does the state finance involvement of civil society in this sector? What about private sector - companies, firms etc.? And when it comes to the quality measures, is the civil security system in the countries overall regarded as effective, efficient and legitimate? Do inquiries tell stories of successful operations during major crises? Or do they testify to significant gaps to tackle disasters? Are there conscious thinking around value-for-money issues or is spending on civil protection a non-existing issue? Is there political consensus around the civil security system? What about the people, do they perceive that the state is capable of protecting them in times of disaster? These are among the issues to be studied in a comparative fashion under WP4 that set out to compare and assess civil security system across the 22 countries.

By including separate analysis of country relations to EU civil protection initiatives, the case studies will also provide an ample ground from further discussions on the "not one security fits all" debate and input to the EU added value dimension – both of which will be further elaborated on under WP5 that deals with ensuring EU added-value for policy stakeholders.

5. Conclusion

In this Deliverable report (D2.1) we have provided an overview over tasks undertaken in ANVIL Work Package 2 and a compilation, based on these tasks carried out, of the final country studies of civil security systems in European countries (see Annex).

ANNEX: COUNTRY CASE STUDIES

Countries and authors

- 1. Austria: Raphael Bossong and Hendrik Hegemann, Institute for Peace Research and Security Policy at the University of Hamburg.
- 2. Croatia: Visnja Samardzija, Sandro Knezovic, Sanja Tisma and Ivana Skazlic, Institute for Development and International Relations, Zagreb.
- 3. Czech Republic: Vera-Karin Brazova and Piotr Matczak, Adam Mickiewicz University, Poznan.
- 4. Estonia: Timo Hellenberg and Pekka Visuri, Hellenberg International Oy, Helsinki.
- 5. Finland: Timo Hellenberg and Pekka Visuri, Hellenberg International Oy, Helsinki.
- 6. France: Frédéric Coste, Elisande Nexon, Jean-François Daguzan, Fondation pour la Recherche Stratégique, Paris.
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- 9. Ireland: Evangelos Fanoulis, Emil Kirchner and Han Dorussen, University of Essex.
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- 11. Latvia: Timo Hellenberg and Pekka Visuri, Hellenberg International Oy, Helsinki.
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- 19. Slovakia: Vera-Karin Brazova and Piotr Matczak, Adam Mickiewicz University, Poznan.
- 20. Sweden: Mette Bakken and Mark Rhinard, Swedish Institute of International Affairs.
- 21. Switzerland: Raphael Bossong and Hendrik Hegemann, Institute for Peace Research and Security Policy at the University of Hamburg.
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Austria

Authors: Raphael Bossong and Hendrik Hegemann, Institute for Peace Research and Security Policy at the University of Hamburg.

Executive Summary

Civil security in Austria features a fragmented network of competences, a preference for localised solutions and a strong esteem for formalised voluntary involvement. Civil security is a primary legislative and administrative task of the states, districts and municipalities. Crisis management during most scenarios relies on local administrations, fire brigades and the police. Coordination authority can be upscaled to the district and state level during regional or cross-regional crises. Voluntary relief organisations are a quintessential feature of Austria's civil security system and are formally incorporated in the public crisis management structure at all levels. However, the federal level bears responsibility for various special areas and tasks such as epidemics and forest fires, especially when it comes to preparedness. The federal armed forces provide important assistance services during large crises, most notably through their heavy equipment. There are no specialised independent agencies with an overall mandate for civil security at the federal and regional level. Though private companies are required to observe a number of formal obligations and increasingly participate in some coordination and consultation structures, privatisation and outsourcing do not play a significant role in Austrian civil security.

Austria boasts a system that features advanced capacities and a high degree of professionalism that allows it to handle most crises rather well. Civil security policy in Austria is characterised by a low degree of politicisation and Austrian citizens generally express a sense of perceived security and trust in public institutions. Together with the local focus of civil security agencies, the still comparatively high level of voluntarism ensures a certain level of societal legitimacy. However, although there is a strong need for coordination across levels of government and functional issue-areas, cooperation mechanisms and standardized procedures are often missing. Despite some discussion over the last decade, efforts to reform the distribution of competences and strengthen central coordination have not made much headway in Austria's consociational multi-level system. Voluntarism also faces serious challenges from societal trends like demographic change and domestic migration. Austria is an active provider of international assistance and has entered into bilateral agreements with its neighbours. Its role in EU civil protection has focused on participation in training exercises and the provision of external assistance whereas it is rather sceptical towards further formal integration leaps.

Key Findings

1. Volunteerism and 'Team Austria'

The arguably most noteworthy feature of Austria's civil security system is the particularly strong emphasis on volunteerism. Voluntary relief organisations are a quintessential feature of Austria's civil security system and are formally incorporated in the public crisis management structure at all levels (see sections 2.3.1 and 3.3.3 in the country report for details). According to official estimates, Austria can draw on the service of approximately 413,000 volunteers, or approximately 49 per 1,000 capita. Fire brigades rely almost exclusively on volunteers and there are a number of voluntary relief organisations with formal legal status, including broad organisations like the Red Cross or the Workers-Samaritans-Association as well as more specialised ones, such as the Mountain Rescue Service or the Cave Rescue Service. Indeed, Austria prides itself of one of the world's densest net of emergency organisations. Voluntary relief organisations form the operational backbone of Austria's civil security system and are cited as an essential source of societal legitimacy as well as of effectiveness through localised resources and know-how. However, voluntary engagement in Austria, like elsewhere currently faces a number of challenges due to larger societal trends, such as growing social inequality, increasing demands placed upon employees and domestic migration. But Austria not only serves as an emblematic example to illustrate the benefits and challenges of strong voluntary engagement; Austrian civil security agencies have also come up with an innovative solution that has already generated some interest in other countries. In 2007, the Red Cross and the radio station Ö3 founded the "Team Austria" initiative, which seeks to motivate people to volunteer for disaster assistance work without having to become a formal member of a voluntary organisation and having to commit to the resulting duties. Up to now, more than 30,000 people have registered with the initiative. Germany, Poland and the United Kingdom expressed an interest to transfer the concept and adopt similar measures.

2. The persisting importance of sirens

Whereas other countries have deconstructed their systems of civil security alarm sirens following the end of the Cold War, Austria continues to rely on this instrument as its main mechanism for the warning of the population and remains convinced of its utility. During an unfolding crisis, civil security authorities can activate a nationwide system of more than 8,200 alarm sirens. The system of sirens is seen as particularly crisis-proof because it does not erect any technological barriers for the population and has a clear wake-up effect for the whole population in a specific crisis-affected area. Hence, it is regarded as superior to TV and radio warning or the use of new technologies and mobile applications, which are increasingly popular in other countries (see section 2.3.2).

3. The strong, but contested domestic role of the military

A central as well as highly contested feature of the Austrian civil security system is the strong role of the armed forces in domestic crisis management. According to the Federal Constitutional Act, the federal armed forces can provide disaster assistance during "essential events and accidents of unusual magnitude" at the request of the legally responsible civilian agencies. Units of the armed forces providing disaster assistance operate under the control of the requesting civilian agency and cannot exercise domestic powers beyond those of the respective agency. Though the domestic use of the military is an "ultima ratio" that comes into play as a last resort following the subsidiarity principle, the armed forces have frequently provided disaster assistance, especially using their heavy equipment for evacuations, logistics or search and rescue missions (see section 1). The political debate about the military's role in Austria is particularly interesting because it has been one of the few instances that led to contentious discussions in Austria's civil security system and thereby illustrates the intricate political challenges of military reform, especially in relation to the role of conscription that is under discussion in other European countries as well. The introduction of a professional army was the subject of a popular referendum in January 2013 that was eventually rejected by the populace. Advocates of mandatory military or civilian service made the case that an end to conscription and the militia system would not just affect the contested area of military defence, but also impinge upon the ability of the armed forces to provide disaster assistance or protect critical infrastructures and mass events, which were regarded as consensual tasks. To the surprise of many observers, a former "side issue" eventually turned out to play a decisive role in a major political contest. Some observers interpreted the result as a sign of popular support for domestic crisis management while sceptics argued that the issue was unnecessarily emotionalised.

4. Pioneers in national security research

Austria was the first country in Europe to start a national security research programme. The programme KIRAS is modelled after the example of the European Commission security research programme. It is not explicitly and exclusively catered towards civil security in the sense of the ANVIL definition but most projects somehow relate to civil security in a multiple hazards context. It is administered by the Federal Ministry for Traffic, Innovation and Technology. For the period between 2005 and 2013, the programme has a research budget of 60 million Euros.

List of Abbreviations

AGES	Agentur für Gesundheit und Ernährungssicherheit (Federal Agency for Health and Food Security)
ASBÖ	Arbeiter-Samariter-Bund Österreich (Workers Samaritan Association Austria)
APCIP	Österreichisches Programm zum Schutz Kritischer Infrastruktur (Austrian Programme for Critical Infrastructure Protection)
ASFINAG	Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft (Autobahn and Highway Financing Stock Corporation)
BASG	Bundesamt für Sicherheit im Gesundheitswesen (Federal Office for Safety in Health Care)
BAV	Bundesanstalt für Verkehr (Federal Agency for Traffic)
BMASK	Bundesministerium für Arbeit, Soziales und Konsumentenschutz (Federal Ministry of Labor, Social Affairs and Consumer Protection)
BMG	Bundesministerium für Gesundheit (Federal Ministry of Health)
BMI	Bundesministerium für Inneres (Federal Ministry of the Interior)
BMLFUW	Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft (Federal Ministry for Agriculture, Forestry, Environment and Water Engineering)
BMVIT	Bundesministerium für Verkehr, Innovation und Technologie (Federal Ministry for Traffic, Innovation and Technology)
B-VG	Bundes-Verfassungsgesetz (Federal Constitutional Act)
BWZ	Bundeswarnzentrale (National Warning Center)
JUH	Johanniter-Unfall-Hilfe (St. John's Accident Assistance)
MIC	EU Monitoring and Information Center
ÖAMTC	Österreichischer Automobil, Motorrad und Touring Club (Austrian Automobile, Motorcycle and Touring Association)
ÖHR	Österreichische Höhlenrettung (Austrian Cave Rescue Association)
ÖRK	Österreichisches Rotes Kreuz (Austrian Red Cross)
ÖVP	Österreichische Volkspartei
ÖWR	Österreichische Wasserrettung (Austrian Lifeguard Association)
SKKM	Staatliches Krisen- und Katastrophenschutzmanagement (Federal Crisis and Disaster Protection Management)
SPÖ	Sozialdemokratische Partei Österreichs
ZAMG	Zentralanstalt für Meteorologie und Geodynamik (Central Institution for Meteorology SPÖ and Geodynamics)

1. Introduction

Austria's mountainous topography and high precipitation make it vulnerable to floods, avalanches and landslides, especially in Alpine valleys. In addition, there have been a number of major industrial and transportation accidents. Important recent events include the Lassing mining disaster of 1998, the 1999 Galtür avalanche and the fire in the Tauern road tunnel in 1999, which fuelled debates about the need for enhanced civil security coordination and cooperation (Jachs 2011a, p. 15). During the period between 2000 and 2012, natural disasters continued to be the most important type of crisis (Table 1). Crises have been largely handled at the local and regional levels and have not put the nationwide system to a fundamental test.

			Damage			
Year/ Month	Crisis description	Crisis category	# of persons killed	# of persons injured	# persons affected	of
2000/03	Landslide	Natural disaster	13			
2000/10	(Kitzsteinhorn) Funicular train	Transportation	155		12	
	(Kaprun)	accident				
2002/08	Flood	Natural disaster	9		60,000	
2005/08	Flood	Natural disaster	4			
2008/02	Storm (Emma)	Natural disaster	4			
2009	H1N1	Infectious disease	24			
2009/06	Flood	Natural disaster	1			

Table 1: List of Crises 2000-2012

Source: Authors^o

There is no formal overall crisis definition in Austria. "Disaster" (*Katastrophe*) is the central term for legal and administrative purposes. However, each of the nine state disaster management laws offers its own definition and there are related legal concepts, such as "large-scale accident" (*Großunfall*) or "essential event" (*Elementareignis*). Despite this ambiguity, there is a widely accepted but unofficial definition worked out by the Federal Ministry of the Interior (BMI) and representatives of the Austrian states. It cites the unusual magnitude of threats and damages and the need for a coordinated regional response as defining criteria (Bußjäger 2002, pp. 1-2, Adam 2006, pp. 62-64).

Civil security in Austria is a largely civilian task but the federal armed forces can assist civilian agencies. According to the Federal Constitutional Act (B-VG), the armed forces can provide disaster assistance during "essential events and accidents of unusual magnitude" at the request of the legally

⁶ The EMDAT database (CRED n.d.) served as a starting point for the identification of crises, but the authors included only crises that required some kind of national or regional intervention and extended beyond routine emergencies handled by local emergency workers (see ANVIL definition of crisis).

responsible civilian agencies (Art. 79-II B-VG). Units of the armed forces providing disaster assistance operate under the control of the requesting civilian agency and cannot exercise domestic powers beyond those of the respective agency (Bußjäger 2003, p. 16). The army can intervene on its own initiative only if the responsible civilian agency is unable to do so and non-intervention might cause an irreparable damage for the society (Art. 79-IV B-VG). In any event, the use of the military is an *"ultima ratio"* (Jachs 2011, p. 128). However, the armed forces have frequently provided disaster assistance, especially using their heavy equipment for evacuations or search and rescue missions (Bundesheer 2011). The military's domestic functions have been a contentious feature of the ongoing debate about the need for and role of the armed forces in a post-Cold War neutral country (section 3.3.1).

Civil security in Austria tends towards a multiple hazards approach, but also shows elements of a specific threats approach. Austria's concept of "comprehensive national defence", which is enshrined in Article 9a of the B-VG and dates back to preparations for interstate nuclear war during the Cold War, has been gradually superseded by the concept of "comprehensive security provision" that explicitly acknowledge a broader range of natural and man-made risks (Bundesregierung 2001, 2011). Yet, this terminological innovation as such does not overcome the constitutionally mandated division of responsibilities in the Austria's multi-level federalism (see section 2.2.1). Moreover, specialised agencies and strategies come into play for some tasks and issues, such as epidemics or radiological accidents (see sections 2.2.2 and 2.2.3).

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Austria is a federal republic consisting of nine states, or *Länder*, with important independent rights and competences. States have their own democratically elected legislatures and executives, headed by a governor. Following the subsidiarity principle, the states retain full authority and responsibility for legislation and implementation in all matters not specifically assigned to the federal level (Art. 15 B-VG). Below the state level, there are 95 administrative districts and 2,354 municipalities (Statistik Austria 2013).⁷ Municipalities, most of which are of rather small size, exercise administrative tasks delegated to them based on the principle of communal autonomy. They have elected municipal

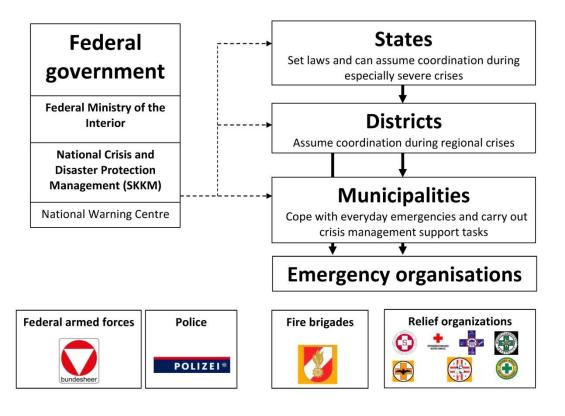
⁷ Note that the capital Vienna is a state, district and municipality in one. The 95 districts also include 15 so-called statutory cities.

councils and mayors. The districts are administrative subunits of the states without elected authorities.

In general, the federal level bears the prime legislative responsibility in most areas while the states mainly implement decisions. At the same time, the states also participate in the federal legislative decisions through informal coordination and consultations and the federal level funds and supports state-level implementation of federal laws. Hence, despite the formal division of powers the different levels are entangled in an interwoven and multi-level "cooperative federalism", though there are increasing centralist tendencies (Erk 2004). Civil security is one of the most decentralised areas as the states also hold most legislative competences in this field (see section 2.2.1).

Austria is a consociational democracy with a semi-presidential system. Austria's Second Republic has traditionally been considered an archetypical consensus-based and continuity-oriented political system with a neocorporatist system of interest representation and strong veto players (Lehmbruch 1967). Due to the strong emphasis on broad consultations and formal incorporation it has been called the "the country of corporatism" (Draxler 1998). However, elements of partisan competition and public protest have become more nuanced (Dolezal and Hutter 2007). Austria is commonly regarded as a semi-presidential system since it has a directly elected federal president with potentially influential powers while the federal government is responsible to the federal parliament. Due to the ability of the federal parliament to recall the government, Austria nevertheless can be considered a "de facto parliamentary system" (Elgie 2011, p. 159).

Civil security is a primary task of the states, districts and municipalities with a rather limited assistance role for the federal level (see Figure 1). The municipalities cope with everyday emergencies, relying primarily on fire brigades and voluntary relief organisations. During regional disasters that require a higher level of coordination responsibility moves to the districts, which mainly draw on the available local emergency organisations that provide "disaster assistance services" (*Katastrophenhilfsdienste*). The states adopt their own disaster protection laws and can coordinate crisis management during severe cross-regional crises. The federal level offers a platform for political consultations and coordination through the Federal Crisis and Disaster Protection Management (SKKM) and provides assistance through the armed forces and the National Warning Centre (BWZ). Hence, the federal level is largely limited to the role of a "service provider" (Potyka 2008, p. 11). However, crisis management in a comprehensive sense includes different responsibilities for different levels, depending on the concrete task and issue at hand (see sections 2.2.1-2.2.3).



Source: Authors⁸

Figure 1: Civil Security in Austria (Organisation Chart)

Crisis response in Austria relies on bottom-up 'upscaling' mechanisms. Operational responsibility can move up from the municipalities to the districts and states if local capacities are exhausted based on provisions in the respective state-level laws. The system relies on the basic principles of local self-help and subsidiary intervention by higher levels to the degree needed (Jachs 2011a, p. 22). The federal level cannot provide central coordination with a view to the existing separation of powers. Hence, top-down delegation is limited to the few areas where the federal level has a genuine functional competence. In the case of an unfolding crisis, state-level agencies can call upon federal resources, most notably the federal police, if there are respective rules in the state disaster protection laws that have gained the formal approval of the federal government. Due to the absence of formal agreements and procedures cooperation across levels as well as between states largely takes place through informal and voluntary ad hoc channels (Bußjäger 2003, p. 64, 71-72).

2.1.2 Government/societal culture

The Austrian society displays a strong esteem for performance and competition as well as traditional values. Following Hofstede et al.'s (2010) grid-group analysis, Austria's culture has been described as

⁸ The organisation chart builds upon the European Commission's Vademecum for Civil Protection (European Commission 2012b).

egalitarian and participative, individualistic, competitive and success-oriented, uncertainty avoidant and short-term oriented. The World Value Survey reveals that the Austrian society values selfexpression but also attaches high importance to traditions. It shares the appreciation of independence and self-expression with Northern Protestant countries, but also shows a stronger sense of traditionalism and thereby resembles other predominantly Catholic countries (World Value Survey 2010). Studies have typically referred to a comparatively subservient, passive and statist political culture, but have also pointed to growing signs for a more activist civic democracy (Plasser and Seeber 2012). Despite recent reforms, Weberian administrative traditions in Austria tend to privilege centralism, strong hierarchies, and legality (Hammerschmid and Meyer 2006).

The Austrian civil security system reflects some of these cultural traditions. Statism and a rather passive political culture are visible in the central role of state administrations, the reluctance to outsource public tasks and the relatively low degree of active civic engagement outside formally incorporated organisations (see section 2.4). There is also a high level of trust in civil security authorities (see section 3.3). Furthermore, the importance of stability and compromise are manifest in the incremental process of extensive and inconclusive debates about a reform of federalism and the division of civil security competences (see section 2.2.1). However, growing problems for volunteerism (see section 3.3.3) and new contentious debates, such as the one surrounding the recent referendum on conscription and the militia system (see section 3.3.1), signal a certain trend towards convergence with other countries.

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The legislative competence for civil security is spread across several levels. Civil security is a "fragmented horizontal competence" with different legislative responsibilities and laws depending on the issue and task at hand, but states clearly bear the bulk of legislative competences (Weber 2007, p. 32, Jachs 2011b, p. 199).

At the outset, it is crucial to distinguish crisis prevention (*Katastrophenschutz*) from crisis response (*Katastrophenhilfe*). According to the prevailing legal doctrine, the competence for disaster prevention, including preparedness, rests with the level that has the general legislative competence for a functional issue. As a consequence, the federal level bears responsibility for preparedness in most areas, including for instance avalanches. At the same time, the legislative competence for crisis response, including rules for basic organizational setups and emergency organisations, is mainly

awarded to the states. The federal level is responsible for crisis response only in the few areas where it has the primary competence, such as epidemics, forest fires and mining disasters (Bußjäger 2003, pp. 14-58, Hörtenhuber 2007, pp. 156-159).⁹

Although there is no federal civil security law, many functional laws contain provisions on disaster prevention and response due to the explicit legislative competence of the federal level for forestry, mining, and public health. There are also provisions on prevention and preparedness entailed in more remote laws on issues like industrial safety (Bußjäger 2007, pp. 9-22). The states have made use of their primary legislative competence through the adoption of distinct disaster management laws as well as additional laws on fire brigades and emergency services.¹⁰ Hence, there is a plethora of formal laws in a highly fragmented legal system.

The current division of legislative competences has encountered some criticism and challenges, but, so far, this has not culminated in a fundamental legal reform. Observers have criticised that civil security law is "confusing and barely harmonised" and lacks a coherent and transparent systematization (Weber 2007, p. 33). Legal scholars have noted that it is often hard to determine where prevention ends and response begins, especially in the case of an acutely unfolding event. As a rule of thumb, one can say that efforts related to the management of an "immediately impending disaster" can already be considered part of crisis response as long as they are carried out with the assistance of the usual emergency organisations (Hörtenhuber 2007, p. 155). Another problem pertains to the civil security tasks performed by the federal level, which originated from the federal competence for wartime civil defence. Their increasing usage for peacetime crisis management and disaster response is not grounded in an explicit constitutional norm (Bußjäger 2007, p. 20). There have been a number of proposals for a constitutional reform, such as concentrating the mandate for civil protection at the state level but strengthening the federal level's role during cross-regional crises (Widermann and Jachs 2004, p. 18, Hörtenhuber 2007, p. 162). In the absence of a substantial reform, crisis management faces the constant challenge to balance the simultaneous needs for "local action" and "central steering" (Rudolf-Miklau 2009, p. 57).

2.2.2 Political dimension

Executive responsibility for crisis management rests with the highest political officer of the responsible level of government (i.e. mayor, district commissioner or state governor). The state

⁹ "General first aid" (*erste allgemeine Hilfeleistung*), with the exception of local security police, is also a federal legislative and operational competence according to Article 10-I-7 B-VG. Yet, this is an is an "emergency competence" that applies only as long as the primary responsible agencies, i.e. fire brigades and emergency services, are unable to intervene (Hörtenhuber 2007, p. 160-161).

¹⁰ See for example the summary of laws for Styria (Land Steiermark n.d.).

disaster protection laws and crisis management plans stipulate the specific details. In those areas falling under the special competence of the federal level, executive responsibility rests with the federal government and the responsible federal minister. Preparedness and response in these areas are carried out directly through federal agencies or indirectly through states and districts acting on behalf of the federal level. In the case of indirect administration, the state governor is primarily responsible but subject to directives from the responsible federal minister (Hörtenhuber 2007, p. 161).

The formulation of civil security policy is incumbent upon the level of government that is responsible for the respective task. At the state level where most operational and legislative responsibilities reside, civil security policy is formulated by the state government. State governments are not organised in the form of independent cabinet departments. Rather, the administrative office of the state government has subunits that oversee specific issue-areas under the supervision of a member of the state government. In many states, crisis management is a direct task of the state governor.¹¹ At the federal level, the BMI bears primary responsibility. However, individual cabinet departments cover crisis management as far as this falls within the scope of their functional mandate.¹²

There are special constitutional rules for the case of an emergency. As mentioned in the introduction, the federal armed forces can be deployed domestically as a last resort and under the control of civilian agencies. Moreover, the federal president can put in place provisional legal acts at the suggestion of the federal government for the prevention of an "obvious, irreparable damage for the society" if the national parliament is not able to convene (Art. 18-II B-VG). State-level constitutions entail similar provisions for emergency orders by state governments.¹³ The provisions on emergency laws have not applied to civil security so far because most crises covered by the ANVIL definition do not prevent the parliament from convening. There are no rules for a general state of emergency including derogations from civil liberties and democratic oversight. Emergency laws are to be differentiated from a local or regional state of disaster that allows for the upscaling of competences.¹⁴

¹¹ In Burgenland and Tyrol, responsibility rests with the deputy governors (Burgenländische Landesregierung 2010, Land Tirol 2012a) and in Lower Austria with the member of the government responsible for the environment, agriculture and energy (Land Niederösterreich 2012).

¹² For example, the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) is responsible for nuclear accidents and natural disasters, the Federal Ministry of Traffic, Innovation and Technology (BMVIT) deals with transport accidents, the Federal Ministry of Health (BMG) handles epidemics and the Federal Ministry of Economy, Family and Youth (BMWFJ) covers mining disasters (Unterweger 2007, p. 53).

¹³ An example is Art. 41-II of the Constitution of the state of Salzburg.

¹⁴ Not all states require an explicit declaration of a state of disaster (Widermann and Jachs 2004, p. 14)

2.2.3 Operational dimension

As the federal government does not dispose of many operational responsibilities, there is no specialised federal agency for civil security. Since 2003, the SKKM serves as new federal crisis management mechanism in the BMI that coordinates cooperation between the federal level and the states during a crisis and with regard to general planning (BMI 2003). The SKKM also houses the BWZ and the federal Operations and Crisis Coordination Centre. Some federal cabinet departments and specialised agencies have a more advanced operational role in crisis management based on special federal competences. This includes the Federal Ministry of Health (BMG) for pandemics and the Federal Ministry for Agriculture, Forestry, Environment and Water Engineering (BMLFUW) for forest fires. There are also specialised agencies that come into play during specific types of crisis, including for example the Federal Agency for Traffic (BAV), the Austrian Agency for Health and Food Safety (AGES), the Environment Agency Austria (*Umweltbundesamt*) and the Central Agency for Meteorology and Geodynamics (ZAMG).

In the states, the implementation of civil security policy is incumbent upon general administrations rather than specialised independent agencies. State-level crisis management is coordinated by the administrative office of the state government, the district administrations and municipal administrations, depending on the scope and severity of the crisis (Jachs 2011a, pp. 27-28). They usually operate under the direct administrative authority of the state governor, district commissioner or mayor. The response to regional crises can rely on special offices and resources, which include a crisis management officer with special training in the district administrations as well as warning centres, training facilities and emergency operations centres at the state-level.¹⁵

Operational response actions heavily depend on emergency organisations. Local civil security agencies can call upon the assistance of fire brigades, federal police and armed forces. They operate as functional subsidiary bodies of the responsible crisis management agency but remain independent organisations (Jachs 2011a, pp. 28-29). Ambulance and emergency services are a municipal competence whereas the states are responsible for specialised emergency services, such as cave rescue. Emergency services and fire brigades are strictly separated organisationally. Private non-profit organisations usually provide the bulk of emergency and ambulance services (Jachs 2011b, pp. 112-115).

The *flood of August 2002* can serve as an emblematic example of how the Austrian civil security system actually works during a typical crisis. During August 2002, an unusual amount of rainfall led to rising water levels in the Danube and its feeder rivers, which killed nine people and caused severe

¹⁵ On Styria for example see Kalcher 2007, p. 64.

damage, such as dam breaks and collapses of bridges. The response to the floods was organised according to the rules and structures of the affected states. Local authorities declared a state of disaster for a certain city or district as the situation became critical and formed crisis management task forces in municipal, district and state administrations. The operational response was carried out by fire brigades and voluntary emergency organisations. The armed forces provided disaster assistance through 12,000 soldiers.¹⁶

There are some specialised tasks and capacities that demand particular attention. Civil security *planning* takes place at the responsible level of government. State disaster laws require municipalities, districts and states as well as operators of special infrastructures, such as hospitals, to adopt general crisis management plans based on guidelines defined by the state laws.¹⁷ Furthermore, some federal ministries and agencies have developed nationwide plans for their area of responsibility. This refers especially to the Austrian pandemics plan (BMG 2006) and the federal plan for interventions during radiological emergencies (BMLFUW 2011).

Austria focuses on sector-specific, bottom-up *risk assessment* rather than comprehensive national analyses. Austria's recent security strategy includes a brief overview of Austria's security environment and key security challenges (Bundesregierung 2011). Beyond that, the BMI has argued that a central risk assessment is of only limited utility due to the scattered resources and responsibilities. Rather, it has recommended more narrow risk assessments in and for specific areas based on common standards, better data and improved training and research (BMI 2009). Such sector-specific assessments exist in some areas. For example, the BMLFUW runs the *eHORA* online platform that provides access to risk maps and forecasts for floods, earthquakes, storms, lightning flashes, hail, snow and industrial accidents.¹⁸

Austria has a system for *communication* between actors at different levels, but it does not have universal reach and its introduction has been beset with problems. In 2001, the federal government decided to replace its analogue radio system with a new digital radio system that was scheduled to become operational by 2005. Yet, the project has suffered from delays, skyrocketing costs and accusations of fraud and mismanagement that led to investigations by a committee of enquiry of the federal parliament (Der Standard 2012). Some states have distinct communication systems for disaster protection agencies and organisations. For Example, Tyrol has set up the online platform ESIS (Land Tirol 2012b).

¹⁶ For a detailed chronology see Habersack 2003, pp. 151-171.

¹⁷ See for example § 7-11 of the disaster management law for the state of Tyrol.

¹⁸ http://www.hochwasserrisiko.at/ [Accessed 15 January 2013].

In Austria's decentralised civil security system, local crisis management agencies and emergency organisation provide the bulk of the necessary *logistics*. In particular, the dense net of voluntary fire brigades ensures the countrywide availability of basic capacities within reach of the actual loci of crisis. Consequentially, local emergency officials remain sceptical when it comes to the development of centralised crisis management capacities or the expansion of relevant military resources (Seidl 2004, pp. 34-37). However, some mechanisms are in place to provide for more specialised resources. For example, the federal armed forces dispose of heavy equipment, such as helicopters, that has been used as part of domestic disaster assistance operations (Österreichisches Bundesheer n.d.). Furthermore, operators of critical infrastructures can be required to provide special equipment, such as emergency operation trains (see section 2.4.2).

The Operations and Crisis Coordination Centre in the BMI is responsible for the *monitoring* of unfolding and ongoing crises at the federal level and serves as central information and communication platform in the federal government. It covers not only all crises according to the ANVIL definition as part of the SKKM but also criminal investigations and threats to Austrian citizens in foreign countries (Jachs 2011a, p. 40).

2.2.4 External dimension

Austria has signed bilateral agreements on civil security with all of its neighbours except for Italy plus Albania Croatia, Jordan and Morocco. Moreover, there are ongoing discussions with another eight countries (BMI 2010). The agreements are formal international treaties and include provisions on the responsible agencies, the modalities of border crossing, coordination and command as well as costs and compensation. The basic provisions of the agreements are largely similar and follow the first agreement signed with Germany. Furthermore, the non-nuclear country Austria has entered into bilateral agreements on nuclear safety with eight countries in Eastern and Central Europe (European Commission 2012b). Local cross-border assistance during everyday emergencies has been a regular phenomenon, especially with German-speaking neighbours Germany and Switzerland, although there are no official numbers. Yet, Austria has not requested major external assistance during largescale crises (see also section 3.1.2).

Furthermore, Austria has signed a number of regional and multilateral agreements. Austria is a member of the United Nations and the European Union (EU) and participates in the respective civil security efforts. Due to the constitutionally mandated principle of "perpetual neutrality" (Art. 9-II B-VG), Austria is not a member of NATO. Austria also is a member of the Central European Initiative and its civil security group. In addition, Austria has signed functional regional agreements, such as the Danube River Protection Convention (International Commission for the Protection of the Danube

River n.d.) and the Alpine Convention (Alpine Convention n.d.), that touch upon civil security issues like flood protection and avalanches alongside other core tasks.

The BMI and the BWZ serve as the central contact points for incoming and outgoing requests. The BWZ forwards all requests for assistance to those departments and agencies that might be capable of providing assistance. The BMI then gathers the responses, prepares a decision and forwards it to the cabinet for political approval (Jachs 2011a, pp. 55-57). Austria has been an active provider of disaster assistance in the past. Between May 2003 and March 2010, Austria offered international assistance of some kind in 59 cases, not all of which actually led to operational action (Jachs 2011a, pp. 58-62). Due to the fragmented civil security system, assistance is usually provided by various local and state-level actors. There are also some special units that are frequently used for international assistance, such as the Medium Urban Search and Rescue Unit of the Workers Samaritan Association (ASBÖ 2010) and the International Response Team of the Austrian Red Cross (ÖRK n.d.a).

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

Austrian civil security laws formulate a set of formal expectations for citizens' behavior during crises. Formal obligations concentrate on temporary support during crisis operations through obligations to report disasters, accept evacuation orders or tolerate the usage of one's property. Moreover, emergency organisations can enlist citizens that are present in an affected area for disaster assistance services. In Vienna there is also an obligation for self-protection and neighbourly help (Hörtenhuber 2007, pp. 159-160). Furthermore, there are more special requirements for crisis prevention and preparedness with regard to building law provisions or mandatory insurances. These duties notwithstanding, crisis management measures remain subject to normal routes of judicial review (Jachs 2011b, pp. 219-220, 263-268).

Civil security is a serious but not major concern of Austrian citizens. According to a Eurobarometer poll from June 2012, less than one quarter of the population is very concerned about man-made disasters (24 percent) and natural disasters (23 percent) while terrorism is regarded as very concerning by only 13 percent of Austrian citizens (European Commission, 2012a, pp. 6-9). In general, security threats are not among the major concerns of Austrian citizens and the population generally feels relatively safe. According to polls from 2007, 84 percent feel safe or very safe (Siedschlag et al. 2007, pp. 16-17). In security matters, Austria has hence been described as "a

country best characterized by continuity and stability where no urgent security matters are on the agenda" (FORESEC 2008, p. 3).

Despite the still dominant role of the state in civil security, voluntarism is an especially important factor in Austrian civil security. Volunteers are primarily engaged in voluntary fire brigades and voluntary relief organisations (see section 2.4.1). However, there is increasing concern about the maintenance of voluntary engagement in view of demographic changes and related developments (see section 3.3.3). In general, the domination of state action and the provision of public services are believed to reduce incentives for voluntarism and active engagement outside established member organisations (Rudolf-Miklau 2009, p. 45).

2.3.2 Information

The main mechanism for alarming citizens during a crisis is the nationwide system of more than 8,200 alarm sirens and an additional 165 civil protection sirens in Vienna. They can be activated by federal, state and district alarm centres (BMI n.d.). The Austrian Broadcasting Association can send out information on warning and alarms via TV and radio as well. The system of sirens is seen as "particularly crisis-proof" because it does not erect any technological barriers for the population. There has been a debate about the use of new technologies, including mobile applications and social media, that apparently has not advanced very far (Jachs 2011b, pp. 39, 185-187). Furthermore, functional ministries and agencies operate a number of online warning tools for specific risks, such as radiological threats and current radiation levels¹⁹, natural disasters²⁰ and forest fires²¹. State-level agencies also offer online information on threats from floods²² and avalanches.²³ During the 2002 floods, forecasts by the ZAMG did not express the full extent of the projected rainfalls and floods and thereby impeded the timely warning of the population. This led to calls for improved forecasting and coordination mechanisms improve (Habersack 2003, pp. 123-129). According to a Eurobarometer poll from 2009 36 percent of Austrian citizens feel informed about crisis preparedness and 39 percent about crisis response. Both figures are above EU average (European Commission 2009, pp. 23-28).

¹⁹ http://www.lebensministerium.at/umwelt/strahlen-atom/strahlenschutz/strahlen-warnsystem/messwerte_aktuell.html [Accessed 16 January 2013].

²⁰ http://warnungen.zamg.at/html/de/heute/alle/at/ [Accessed 8 January 2013].

²¹ http://www.zamg.ac.at/cms/de/wetter/produkte-und-services/freizeitwetter/waldbrand [Accessed 8 January 2013].

²² See for example http://www.wasserwirtschaft.steiermark.at/cms/ziel/4651654/DE/ [Accessed 29 January 2013].

²³ See for example http://www.lawine-steiermark.at/ [Accessed 29 January 2013].

2.3.3 Education

Civil security agencies in Austria seek to raise awareness and stimulate self-help through a number of mechanisms. In particular, the Austrian Civil Protection Association (*Zivilschutzverband*) provides informational material for the interested public and runs Security Information Centres in the municipalities. The publications offer advice and guidelines for issues like warning, radiation protection, the provisioning of essential goods, flood protection and self-help. They include different formats ranging from brochures and leaflets to games for children (Zivilschutzverband 2013). Thus, material for awareness-raising and activation is made available in a rather passive way as well as through more active outreach. The demand for information materials usually peaks in the aftermath of major crises but decreases quickly once the imagery of the last event begins to fade. This reflects the general attitude among Austrian citizens that the state will take care and things eventually turn out well (Schuh 2011). However, this attitude does not necessarily signal a lack of awareness but can also be read as an indication for a high degree of trust and security that resists alarmist rhetoric and fear mongering (see section 3.3.3).

Furthermore, civil security agencies offer training and education for citizens and crisis management officials. The main providers of training courses for volunteers and citizens are voluntary relief organisations.²⁴ First aid courses are compulsory for the acquiring of a driver's license, but are not mandatory in school curricula. Federal agencies offer specialised training for crisis management officials in special academies, such as the Austrian Security Academy (BMI n.d.d) and the AGES Academy (AGES n.d.). In addition, there are state-level academies for civil protection and fire brigades that are run by the fire brigade associations.²⁵ There is no official data regarding the number of officials and citizens that have received training. The introduction of common training modules has been identified as an area requiring further improvement by the SKKM's "Strategy 2020" (Bundesregierung 2009).

Austria was the first country in Europe to start a national security research programme. The programme KIRAS is modelled after the example of the European Commission security research programme. It is not explicitly and exclusively catered towards civil security in the sense of the ANVIL definition but most projects somehow relate to civil security in a multiple hazards context. It is administered by the Federal Ministry for Traffic, Innovation and Technology (BMVIT). For the period between 2005 and 2013, the programme has a research budget of 60 million Euros (BMVIT n.d.).

²⁴ See for example ASBÖ n.d.

²⁵ See for example the Fire Brigades and Civil Protection School in Styria: http://www.lfv.steiermark.at/Home/Feuerwehrschule.aspx [Accessed 15 January 2013].

2.4.1 Role of societal/non-profit organisations/NGOs

The Austrian civil security system traditionally builds upon a particularly strong engagement of voluntary non-profit organisations. Fire brigades rely almost exclusively on volunteers but they are organised as public associations rather than private non-profit organisations. In addition to fire brigades, there are a number of voluntary relief organisations with formal legal status. They are an official part of public emergency response structures at all levels but retain their independent status. Non-profit organisations focus on emergency and ambulance services, disaster assistance and first aid courses as well as specialised services, such as maintain rescue or lifeguarding. Moreover, voluntary organisations also participate in political consultation and coordination forums, such as the SKKM. The most important organisations are the Workers-Samaritans-Association (ASBÖ), the Mountain Rescue Service (*Bergrettung*), the Green Cross, the St. John Accident Assistance (JUH), the Malteser Hospital Service, the air rescue of the Austrian Automobile, Motorcycle and Touring Association (ÖAMTC), the Austrian Cave Rescue Service (ÖHR), the Austrian Lifeguard Association (ÖWR) and the Austrian Red Cross (ÖRK). The associations fund their work through a combination of public subsidies, compensations by health insurances and individuals and private donations.

In the case of a disaster, civil security agencies at the district and state level can call upon voluntary organisations as disaster assistance services (Jachs 2011a, p. 31). Voluntary organisations also play a central role in education and training (see section 2.3.3). Maintaining a high level of voluntarism is regarded as a key task due to volunteers' importance as the "operational backbone" of crisis management (Bundesregierung 2009). Austria prides itself of one of the world's densest net of emergency organisations. However, voluntarism is facing a number of serious challenges (see section 3.3.3).

The ÖRK is the most important voluntary organisation in the Austrian civil security system. It can draw on the service of 8,300 professional staff members and 56,700 volunteers. The ÖRK is subdivided into 9 state associations as well as district and local branches. Thus, it provides a nationwide infrastructure at all levels of government. Its formal crisis management services include disaster assistance, emergency and ambulance services and first aid training (ÖRK, n.d.b). The ÖRK operates on the basis of the Red Cross Protection Act from 1962 as well as its own statutes. Moreover, it is subject to specific provisions in the disaster management laws of the states, which can differ significantly in specificity and content (Potyka 2008, pp. 18-19). It has distinct command structures and headquarters at all levels of government, which fundamentally depend on voluntary service and its maintenance in the future (Kerschbaum and Kaiser 2004).

2.4.2 Role of profit-oriented organisations

Following the state-centric and legalistic tradition of Austrian administration, Austrian civil security agencies have hesitated to outsource core crisis management responsibilities to profit-oriented organisations. The BMI considers crisis management and disaster assistance to be "an act of solidarity" that is to be protected from the forces of market competition (Bundesregierung 2009). Even the Federation of Austrian Industry came to the conclusion that disaster management is a core task of the state that should not be privatised (Semeniuk 2009, p. 107).

However, there has been an observable trend towards limited privatisation in some areas. For example, private security companies perform important tasks in areas beyond core sovereign functions, such as property protection and event security (Höferl, 2005, p. 30). Moreover, in Austria's neocorporatist system officially registered trade associations can assume self-governing tasks in their area of activity. For example, the Federal Mineral Resources Act requires the Austrian Economic Chambers to head the Main Institution for Mining Rescue and Gas Protection, which is organised as a private company (Hauptstelle 2013). Moreover, some public agencies, such as AGES, are officially organised as private companies but owned and controlled completely by the state.

Private businesses in Austria are incorporated into civil security tasks through plentiful regulations setting mandatory crisis preparedness and response standards. In addition to standards for building or traffic security, this includes, for example, rules for emergency plans in mining companies (BMWFI 2013). Moreover, state disaster management laws specify which companies require an emergency plan. This applies to enterprises working with dangerous materials, hospitals and other relevant facilities.²⁶

The inclusion of profit-oriented organisations in civil security policy is particularly marked in the area of critical infrastructures. The Austrian Programme for Critical Infrastructure Protection (APCIP) has put a strong emphasis on public-private dialogue and the inclusion of private stakeholders (Bundeskanzleramt 2008). Private operators of critical infrastructures – many of them former monopolists still fully or partially owned by the state – can come into play during crisis management to a certain degree. The Autobahn and Highway Financing Corporation (ASFINAG) is responsible for tunnel safety and other traffic-related questions (ASFINAG, n.d.). Austrian Federal Railways operates fire extinguisher and rescue trains (ORF 2012). The electricity provider Verbund AG has cooperated with civil security agencies to maintain energy supply during recent crises (Verbund 2012). The Oil Depot Association (ELG) bears responsibility for the piling of emergency reserves of oil, petroleum and biofuels (ELG n.d.).

²⁶ See for example § 10-12 of the disaster management law for the state of Tyrol.

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Due to the lack of a genuine federal competence for crisis management and the dominance of consensus-oriented and legalistic approaches, there are only a few incident-related professional and political inquiries. Most of them focus on the analysis of causes and damages rather than crisis preparedness and response measures. Moreover, there have been few large-scale crises during the period of examination. The most comprehensive assessments exist for the major floods of August 2002 and August 2005 (Habersack 2003, Habersack et al. 2005, Habersack and Krapesch 2006). These inquiries were conducted by academic and professional experts at the demand of federal agencies. They were part of post-crisis assessments in federal agencies and ministries rather than the result of political or public pressure and investigations. Apart from specific lessons for certain areas, such as forecasting and warning, the inquiries did not lead to major political reforms or turmoil. The inquiries were coordinated by the University of Natural Sciences and Life Sciences Vienna in cooperation with the BMLFUW. In general, the emphasis of the reports was on natural science and engineering aspects, such as meteorological forecasts, spatial planning and waterways engineering. The assessment of crisis preparedness and response measures received only minor attention and was based primarily on detailed event narratives without a specific discussion of the concept of effectiveness. One social science study analysed the effectiveness of Austrian municipalities in their response to the 2002 flood. Drawing on the concept of new public management from public administration, it developed a set of 49 indicators for the different phases and tasks of the crisis management cycle in a very broad understanding, including the acceptance of measures by citizens (Adam 2006).

These inquiries reached a number of conclusions about the functioning of crisis preparedness and response in relation to the crises under investigation. Many findings and recommendations dealt with technical issues like torrent control, construction and danger zones. In general, the reports acknowledged the exceptional character of the 2002 flood but also noted that further improvements were possible and necessary with regard to crisis management. In particular, experts identified problems in the insufficient cooperation between the ZAMG and warning centres, missing emergency plans and forecasting models, the lack of a common methodology for the monitoring of events and the various functional and geographic areas of responsibility that impeded a comprehensive management of river basins. One proposal was the introduction of protection against

natural hazards as a distinct functional area of cross-level coordination (Habersack 2003, pp. 143-149). According to one study, response measures at the local level benefited from the fact that administrators and emergency personnel disposed of sufficient resources, were familiar with the local situation, and had long-established networks and contacts. However, problems arose from a lack of strategic emergency planning and late and insufficient warnings (Adam 2006, pp. 223-225). Other conclusions suggested mandatory training for crisis management officials in districts and municipalities, a clarification of competences and responsibilities in the federal system and standardised procedures and plans for alarm and early warning (Habersack et al. 2005, p. 25).

3.1.2 Limits to national capacities

Apart from local cross-border assistance, Austria has not requested external assistance during a major crisis. Bilateral assistance with neighbouring countries is a frequent phenomenon during everyday emergencies. However, Austria has not asked for larger assistance missions and has not activated the MIC's civil protection mechanism (see section 4). As Austria does not have any rules for the declaration of a general state of emergency, such a declaration has not occurred in the past (see section 2.2.3). There are no numbers for the frequency of declarations of disaster at the regional and local level. The military has been deployed frequently during major cross-regional crises, for example during the major floods of August 2005 and 2002 (see section 1), within the limited remits of its domestic role, but this assistance as such does not signal a lack of capacities.

3.2 Efficiency

Efficiency has not been a central concern in recent reform debates. Considerations have been confined to debates about new technology and the value of voluntary engagement. The federal government's "Strategy 2020" stipulated that efficiency should be enhanced through technological innovations, especially in the areas of real-time information exchange, crisis communication, computer-based simulations and satellite-based remote sensing. One major long-term goal is the establishment of a central platform for information exchange across all levels and agencies involved in security-related issues. Many ideas are still at an early stage of research and development (Bundesregierung 2009). The search for advanced high-tech solutions may be part of an advanced federal involvement in the development and acquisition of specialised technology, but it is important to remind that the bulk of the necessary equipment resides with agencies at the regional and local level. Indeed, decentralisation and volunteerism have been praised as particularly cost-efficient means that guarantee the provision of tailor-made capacities within reach of the actual crisis

locations without having to maintain and fund professional forces, which is particularly appropriate in rural areas with few major emergency operations (Seidl 2004, pp. 29-31, 36).

Beyond this, there has been no major discussion of overall efficiency in the civil security system. As discussed above (section 2.4), privatization has not been considered a major tool to improve cost efficiency. The absence of a broader debate on cost efficiency becomes reasonable in view of the fragmented financial responsibilities in the decentralised civil security system. As a consequence, there is no central civil security budget and federal and state government apparently do not have a good overview of how much civil security agencies spend in the different areas. At the federal level, most civil security expenses probably fall within the budget of the BMI, which amounted to 2.35 billion euro for 2011. Yet, the only explicit number for civil security in the budget plan is the national disaster fund, which paid 91 million euro to states and municipalities (Bundesministerium für Finanzen 2010, p. 26). Of course, other issues like natural disaster or epidemics occasion costs for other departments, but there are no detailed figures on this. Due to the primary responsibility of states and municipalities, they are likely to bear the bulk of the civil security expenditures. States also have no overall civil security budget as crisis response is largely coordinated by general administrations. Yet, some states show expenditures for disaster assistance and fire brigades. For example, in 2011 Styria spent 9.7 million euro on fire brigades and 7.6 million euro on disaster assistance (Land Steiermark 2012, pp. 80-81) and Carinthia appropriated 6.6 million euro for fire brigades and 199,100 euro for disaster assistance for the year 2012 (Kärtner Landesregierung 2011, p. 24). These numbers are highly problematic because fire brigades have various tasks and numbers for disaster assistance depend on occurrences of disaster during a certain year. Hence, as such the data does not allow for normative judgements about the overall cost-efficiency of crisis management.

3.3 Legitimacy

3.3.1 Political support

In general, civil security has not been subject to major controversial debates in Austrian politics. There have been no resignations or collapses of government after crises. The number of interpellations in the national parliament concerning civil security has been small and limited to the aftermath of a few high-profile events. The major floods of 2002 and 2005 led to some questions that dealt with compensation and enhanced flood protection measures. Parliamentarians also raised

more special questions, such as incompatible radio system during the response to the 1999 Galtür avalanche and federal crisis management after the Lassing mining disaster.²⁷

Important reforms of the Austrian civil security system have been a response to crisis experiences, but have not been accompanied by major political controversies about specific elements of the system. Following events that revealed the need for a nationwide crisis management capacity, the federal government took the initiative to strengthen federal structures and procedures. The establishment of the national crisis management in 1986 was driven by the experience of the Chernobyl nuclear disaster and the creation of the national disaster protection management in 2000 occurred in reaction to the 1999 Galtür avalanche, the 1998 Lassing mining disaster and the 1999 fire in the Tauern road tunnel (Jachs 2011a, p. 15.). Other reform debates were spurred by developments outside the civil security system. The development of the SKKM "Strategy 2020" followed an instruction from the 2001 security and defence doctrine, which mandated the formulation of distinct functional strategies for the individual sub-issues (Bundesregierung 2001, BMI 2009). Following the Austria-Convent that discussed recommendations for a general reform of the constitution, the federal government and the states considered different ideas to simplify the system of civil security competences (Bußjäger 2003, pp. 86-89, Jachs 2011b, pp. 305-308). Hence, federal and state governments usually initiated reform debates that lead to incremental processes of cross-level consultation following Austria's consociational traditions, which ensured a high level of involvement from all levels but often impeded agreement and led to prolonged negotiations. Yet these debates usually did not generate sustained public and political attention beyond expert circles. Moreover, they did not culminate in a major reform of the system extending beyond the various specific adaptations (see also section 2.2.1).

Civil security became a political issue of national concern during the lead-up to a public referendum on the future of the conscription system and the introduction of a professional army in January 2013. The country's two major political parties – the conservative Austrian People's Party (ÖVP) and the centre-left Social Democratic Party of Austria (SPÖ) – that at the time formed a joint "grand coalition" held opposing views on the issue. Advocates of mandatory military or civilian service made the case that an end to conscription and the militia system would not just affect the contested area of military defence, but also impinge upon the ability of the armed forces to provide disaster assistance or protect critical infrastructures and mass events, which were regarded as consensual tasks (ÖVP 2012). To the surprise of many observers, a former "side issue" eventually turned out to play a decisive role in a major political contest (Fritzl and Bonavida 2013). In the end, almost 60

²⁷ The interpellations can be searched and accessed at: http://www.parlament.gv.at/PAKT/JMAB/ [Accessed 23 January 2013].

percent of the votes were cast in favour of the conscription system. Observers interpreted the result as a heavy defeat for the SPÖ but also criticised the ÖVP because it unnecessarily "emotionalised" the issue and spread unwarranted fears (Kahlweit 2013a). The referendum was seen as a retreat from the consensus principle that had traditionally guided Austria's security policy for the sake of partisan politics and without seriously engaging the question which tasks the army of a neutral country is supposed to perform in a changing environment (Personenkomitee Neutralität 2012, Kahlweit 2013b). This way, civil security became part of a highly politicized and controversial debate among political parties and the public, though it was generally used as a means to generate consensual support. It remains to be seen whether this leads to sustained political frictions.

3.3.2 Legal support

There have been a number of legal cases in Austria that sought to investigate major crisis response efforts. Austrian citizens generally have the ability to mount legal challenges to state action taken in preparation of or response to crises and public prosecutors can initiate legal processes based on evidence for criminally indictable offences without any specific restriction for judicial oversight. Following the Kaprun disaster, a court in Salzburg ruled that staff members of the funicular railway operator, the technical inspection association, responsible construction engineers and officials from the federal department of transport were not guilty on the basis of insufficient evidence for a personal liability (Süddeutsche Zeitung 2010). Furthermore, in the aftermath of the floods in August 2002 several persons sought compensations for damages resulting from the disaster. In the end, the constitutional court dismissed the charge and decided that the authority cannot be held responsible for a disaster of such an exceptional magnitude (Oberster Gerichtshof 2006). Shortly after the Galtür avalanche, critics alleged that civil security authorities - namely the local mayor, the district commissioner and the state governor - had reacted too late to warnings regarding the exceptionally heavy snowfall and had not issued the necessary evacuation orders. At the same time, other observers argued that media outlets – especially in Germany where many victims had come from – were only trying to capitalize on the disaster by pinpointing individual responsibilities and scapegoats (Frank 1999). Eventually, all investigations by public prosecutors were stopped based on the argument that such a massive avalanche could not have been anticipated (Rheinische Post Online 2001).

3.3.3 Popular trust and support

The Austrian population generally expresses a feeling of relative safety and does not demand a dramatic increase in crisis management activities. A clear majority of Austrian citizens believes that the country's efforts to manage crises are sufficient. According to Eurobarometer polls conducted in

June 2011, 63 percent of the population opine that Austria is doing enough to deal with terrorism and 69 percent share this view when it comes to natural and man-made disasters (European Commission 2011a, pp. 66, 71). In 2008, a study by the Institute for Empirical Social Research reported that 79 percent of Austrians felt "very safe" or "safe" while only 5 percent responded that they felt "unsafe". General crime was the main security concern, followed by personal sickness and accidents. Yet, natural disasters and radiological accidents in neighbouring countries were considered important as well (Austria Innovativ 2008). Moreover, there has been a comparatively high degree of trust in public institutions. In a Eurobarometer poll conducted in autumn 2010, the police, army, judicial system, Parliament and government received rankings above EU average (European Commission 2011). Thus, there is a generally high level of popular trust and perceived security despite discussions about new risks. The only evidence for the influence of a signature crisis on electoral results is the invocation of past imageries of the army's disaster assistance during the 2002 floods in the run-up to the referendum on the militia system in January 2003, as described in section 3.3.1 (see for example OVP 2012). This does not have to be detrimental to the legitimacy of the civil security system as it may also mean that contentious questions are subjected to open democratic debate and taken beyond closed expert circles.

Voluntary engagement through fire brigades and non-profit emergency organisations is a central component of Austria's civil security system (see section 2.4.1). In Austria's decentralised civil security system volunteers are not registered with any central agency. Hence, there are no official numbers about the overall number of volunteers. A report about voluntarism by the Federal Ministry of Labour, Social Affairs and Consumer Protection (BMASK) from 2009 estimated that there were 413,000 volunteers in disaster assistance and emergency organisations (BMASK 2009, p. 36). This means that there are about 49 crisis management volunteers per 1,000 capita.²⁸ Through the fire brigades and emergency organisations, volunteers bear central responsibility for operational responses to crisis and emergency of all kinds, including signature crisis such as the floods of August 2002. According to formal declarations, voluntarism is a "mainstay" of the civil security system (Jachs 2011a, p. 31). Thus, there seems to be a political and public assumption that voluntary engagement enhances effectiveness and legitimacy.

Voluntary engagement currently faces a number of challenges. Overall, the extent of voluntarism in Austria has decreased over recent years due to larger societal trends, such as increasing demands placed upon employees and domestic migration (BMASK 2009, pp. 176-177). The federal government has defined the maintenance of a high-level of voluntarism as "a key strategic question"

²⁸ However, it is well possible that many volunteers are active in more than one organisation or work for organisations that are not officially registered.

and demanded new supporting measures like tax incentives (Bundesregierung 2009). The BMI annually spends 300,000 Euros in order to foster voluntary engagement (Jachs 2011a, p. 32). In 2007, the ÖRK and the radio station Ö3 founded the "Team Austria" initiative, which seeks to motivate people to volunteer for disaster assistance work without having to become a formal member of a voluntary organisation and having to commit to the resulting duties. By now, more than 30,000 people have registered with the initiative. Germany, Poland and the United Kingdom expressed an interest to transfer the concept and adopt similar measures (Ö3 n.d.). However, it remains to be seen in how far this alternative might further erode the inclination to join non-profit relief organisations as full member.

4. Austrian Civil Security in the EU Context

So far, Austria has been an assistance-granting rather than an assistant-receiving country. Austria has not sought external assistance during internal crises and has not activated the Monitoring and Information Centre (MIC). At the same time, it has responded to requests from the MIC six times between 2007 and 2011 (European Commission 2011b). Until March 2011, Austria has registered five special civil security units with the European Commission (Jachs 2011a, p. 66). Division II/4 in the BMI is responsible for EU affairs and the BWZ serves as permanent contact point for assistance requests from the MIC (BMI n.d.c).

Furthermore, Austria has been interested in training efforts and other knowledge-oriented exchanges and projects. It sent 35 practitioners to the training programme of the EU Civil Protection Mechanism during the 2009-2010 training cycle (Hollis 2010). Austrian civil security organisations have also participated in exercises and EU-funded research projects. For example, the Salzburg branch of the ÖRK took part in the *EU TARANIS 2013* exercise (European Commission 2013) and the Austrian Red Cross led the *Teaming Up For Civil Protection* project (ÖRK n.d.c). This illustrates that in Austria's decentralised multi-level system participating actors often come from voluntary organisations and lower levels of government.

Overall, the discussion so far suggests that the EU's main relevance for Austrian civil security is in the area of knowledge exchange and technology development rather than in the operational support of crisis management efforts within Austria. There seems to be a belief that Austria has sufficient capacities to handle typical crises occurring on its territory. This attitude is visible in citizens' opinion as well. According to a Eurobarometer poll from 2010, 41 percent of the general public are aware of EU crisis management action, which is slightly above EU average. However, 17 percent did not agree that EU action is more effective than a national response and only 32 percent totally agreed. This is

the third lowest rank among member states (European Commission 2012a, pp. 13-19). This feeling relates back to the broader sense of trust and safety that Austrian citizens express towards their national system (see section 3.3.3). Austria's political stance on further EU integration reflects this attitude. Although Austria has been generally supportive of the EU's role in civil security and the establishment of the MIC, it has traditionally stressed that EU action should follow the principles of subsidiarity and efficiency and only complement national resources and competences rather than creating major new central EU capacities or operational common structures (Widermann and Jachs 2004, p. 20). Thus, in addition to participation in international disaster relief efforts the EU's main value-added for Austria appears to be in more informal areas, such as exercises, information exchange and research.

5. Conclusion

Austria boasts an advanced civil security system that has proven its ability to manage crises on its territory based on a clear commitment to subsidiarity and voluntarism. Austrian civil security agencies have accumulated much experience with natural hazard management, especially floods and avalanches. Austria's federal and consociational traditions induce a system that is oriented towards bottom-up action, local self-help, incremental reforms and broad societal support. The local anchorage of emergency organisations ensures first-hand knowledge of conditions "on the ground" and a certain sense of legitimacy. There is a dense net of fire brigades and voluntary relief organisations down to the level of villages. The Austrian population expresses a non-alarmist attitude towards civil security and shows a high degree of trust in public institutions. This lends support to the argument that a dramatic overhaul of the system is not warranted.

However, the discussion above suggests that there are some issues that have given rise to concerns, especially in relation to cross-regional and complex crises. The fragmented and non-systematic network of legal and political responsibilities in the federal system leads to inconsistencies and confusion, in particular with regard to the distinction of prevention and response tasks during an unfolding crisis. Moreover, strategic emergency planning for special types of disaster poses a challenge within the fragmented civil security system and there is a lack of coordination mechanisms, standardised procedures and common methodologies in some areas. Federal-state coordination in areas like risk assessment and technological development remains nascent as well. The reform proposals regarding a formal redistribution of competences and a clarification of responsibilities have not made much headway over the last decade and constitutional reforms are a difficult undertaking in a consensus democracy, especially with a view to the general sense of satisfaction. Hence, incremental refinements appear to be the likely way forward. The dependence on

voluntarism entails certain vulnerabilities with regard to societal changes that threaten to undercut the propensity for voluntary engagement and will need to be addressed. The recent controversy surrounding the referendum on the future of the military signalled a willingness to engage in political debate about the basic remits of civil security and the future orientation of a system that wavers between the defence of its traditional strengths and the adaptation to a changing environment. Hence, the absence of alarmism and open contention should not be misread as an indication that civil security is an apolitical exercise that could be left to mere expert circles.

Based on these findings, the main civil security-related value-added of the EU from an Austrian perspective is likely to be in the area of exchange, exercise and training rather than in the request of assistance. So far, Austria has not activated the MIC and apparently believes that it disposes of the necessary material and human resources. The exchange of experiences with other countries regarding common challenges like risk assessment, technological developments or the maintenance of volunteerism seems to promise more substantial gains from an Austrian perspective. In particular, Austria has advocated a strictly subsidiary role for the EU.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 AUSTRIA

1	Introduction	Scoring instruction	Score	Source	Comments
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	0	section 1	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	section 1	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1	section 1	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	section 1	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	2	section 2.1.1	
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1	Elgie 2011, p. 159	Semi- presidential but de facto parliamentary
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	Article 1 B-VG	
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	1	Dolezal and Hutter 2007.	
2.1.1.e	Is delegation constructed in a	Top-down = 1	2	section 2.1.1	

		Both = 3			
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		11	http://geert- hofstede.com/ countries.html	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		55	http://geert- hofstede.com/ countries.html	
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		79	http://geert- hofstede.com/ countries.html	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		70	http://geert- hofstede.com/ countries.html	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		31	http://geert- hofstede.com/ countries.html	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0,25	http://www.w orldvaluessurv ey.org/	Year 2000
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		1,43	http://www.w orldvaluessurv ey.org/	Year 2000
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?		3	section 2.2.1	Distinct laws at state/regional level.
2.2.1.b	When was the last major reform in the civil security field undertaken?	-	n.a.	section 2.2.1	

2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Executive order = 2		section 2.2.1	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		0	section 2.2.2	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		1	section 2.2.2	
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	3	section 2.2.2	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	2	section 2.2.2	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?		0	section 2.2.3	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?		0	section 2.2.3	
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No=0Bylaw=1By executive mandate = 2	0	section 2.3.3	
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number	0	section 2.3.3	
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	1	section 2.2.4	TERREX 12
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	0	BMI 2010	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	4	BMI 2010	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management		3	section 2.2.4	

	(i.e. not general conventions on environmental protection) is the country part of?			
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"		0	sections 2.2.4 and 3.3.1
2.3	State-citizens relations			
2.3.1	Expectations			
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	section 2.3.1
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	section 2.3.2
2.3.2.b	Does the government have a system for radio/TV warnings	No=0Yes, at the local/regionallevel=1Yes, at the national level=2Yes, at both local/regionaland national levels = 3	2	section 2.3.2
2.3.2.c	Does the government have a central website with updated information on crisis events?	No=0Yes, at the local/regionallevel=1Yes, at the national level=2Yes, at both local/regionaland national levels = 3	0	section 2.3.2
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No=0Yes, at the local/regionallevel=1Yes, at the national level=2Yes, at both local/regional	0	section 2.3.2

		and national levels = 3				
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No=0Yes, at the local/regionallevel=1Yes, at the national level=2Yes, at both local/regionaland national levels = 3	0	section 2.3.2		
2.3.3	Education					
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		0	section 2.3.3		
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No=0To members/professional=1To members and limitedpublic outreach =2To member ands wide-spreadtrainingprogrammes for generalpopulation =3	2	section 2.3.3		
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No=0Yes,moderately(onceperyear)=1Yes,extensively(morethan once per year)=2	0	section 2.3.3		
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?	Yes = 1	1			
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	60.000.0 00	http://www.b mvit.gv.at/inno vation/sicherhe itsforschung.ht ml	Budget 2005-2013	for
2.4	Role of private sector					
2.4.1	Role of societal/ non-profit					
2.4.1.a	organisations Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?		1	section 2.4.1		

2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	2	section 2.4.1	
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?		0	section 2.4.2	
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?		1	section 2.4.2	
3	Quality measures	Scoring instruction	Score	Source	Comments
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	0	section 3.1.2	
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA	0	section 3.1.2	
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA	n.a.	section 3.1.2	
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	0	section 3.3.1 and 2.2.1	
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.	1	section 3.3.1	

4	Civil security in the EU context	Scoring instruction	Score	Source	Comments
A	are estimated to be in the non- profit sector?	Cooving instruction	Coorte	p. 36	Commente
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers	Register the number per 1000 capita for 2011.	49	BMASK 2009,	
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011			
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?		0	section 3.3.1	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	63	Special Eurobarometer 371 (2011)	
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?		69	Special Eurobarometer 371 (2011)	
3.3.3	Popular trust and support	management) = 2			
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?		0	section 3.3.1	
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0	section 3.3.1	
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	-	3	section 3.3.1	
3.3.2	Legal support				
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?		0	section 3.3.1	
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	2000-2012.		section 3.1.1	

4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	2007-2011	complet ed by UI/IFHS	http://ec.europ a.eu/echo/files /policies/disast er response/E UCPM_activati ons_since_010 12007.pdf http://ec.europ
4.b	How many times has your country contributed to a MIC request - 2007-2011?	-	To be complet ed by UI/IFHS	a.eu/echo/files /policies/disast er response/E UCPM_activati ons_since_010 12007.pdf
4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis 2010
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009- 2010 training cycle?	Register the number for the 2009-2010 training cycle	35	Hollis 2010
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	7	http://ec.europ a.eu/echo/poli cies/preventio n_preparedness s/preparedness
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	2	http://ec.europ a.eu/regional_ policy/thefund s/doc/intervent ions_since_200 2.doc
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	148,8	http://ec.europ a.eu/regional policy/thefund s/doc/intervent ions_since_200 2.doc
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	41	Special Eurobarometer 383 (2012)

4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and	78	Special Eurobarometer 383 (2012)	
	sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)			

Annex II: H1N1 in Austria

The management of the H1N1 pandemic in 2009 can serve to illustrate how the Austrian civil security system works "in action". However, some caveats are in order because pandemics are a somewhat special case insofar as the federal level, especially the Federal Ministry of Health (BMG), bears the primary legislative and administrative responsibility for preparedness and response due to its genuine competence for public health. However, various other departments and agencies at different levels participate in the implementation of public health policies to varying degrees and the episode therefore still mirrors the complexity of the Austrian case (BMG 2013).

In order to deal with the H1N1 pandemic during 2009 and 2010, federal and state public health administrations established pandemic task forces according to readymade influenza pandemic emergency plans. In 2005, the BMG had introduced a national plan for the case of a nationwide influenza pandemic (BMG 2006). Based on the national strategy, state-level public health agencies developed their own plans with guidelines for situation assessment, vaccination procedures and crisis management task forces.²⁹ Under the supervision of a national pandemic task force in the BMG, the vaccination campaigns were carried out by regional and local administrations. Experts from the medical and pharmaceutical sector played a special role during the crisis. Following the national pandemic emergency plan, surveillance of the pandemic was incumbent upon the AGES Institute for Medicinal Microbiology and Hygiene and the Institute for Virology at the Medical University Vienna in their capacity as national influenza reference centres. The Federal Office for Safety in Health Care (BASG) with its Medicines and Medical Devices Agency was responsible for the national admission of vaccines. The Scientific Advisory Committee for Pandemics in the BMG issued recommendations for vaccinations. Efforts at the state level were to be coordinated by state public health administrations and medical consultants (*Landessanitätsdirektion*) (BMGF 2006).

Drawing on advice from the WHO and national experts, Austrian agencies organised a national vaccination campaign during the fall of 2009. Following the licensing of the vaccine *Celvapan* by the European Commission, the BMG ordered 500,000 doses of vaccine. Starting 27 October 2009, vaccination first focused on employees in the health sector. The general public received vaccinations after 9 November 2009. The vaccinations were organized by district administrations, state public health agencies and health insurances according to the rules and structures of the respective states. On November 11, the national task force declared Mitigation Level 2 at which only confirmed diseases and fatalities had to be reported. Overall, there were 4,006 confirmed infections and 24 until the end of April 2010 (AGES 2010).

²⁹ See for example Landessanitätsdirektion für Tirol 2006.

In January 2010, it became evident that large portions of vaccine had to be destroyed or resold due to decreasing demand (Der Standard 2013). The handling of the H1N1 pandemic in Austria was not investigated in any major professional or political inquiry. However, Austria, like other countries, apparently overestimated the extent of the disease and the necessary response measures. This relates to global criticisms that pointed to the unnecessary "securitization" and dramatization by experts, media, industry and political decision-makers (Abraham 2011).

Annex III: Resources

Abraham, T., 2011. The chronicle of a disease foretold: pandemic H1N1 and the construction of a global health security threat. *Political Studies*, 59(4), pp. 797-812.

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Croatia

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Executive Summary

This country study of Croatia presents the findings of desk and empirical research carried out with the aim to provide comprehensive analyses of the civil security system, comparable to the other country studies within the ANVIL project. The study shows that several types of crisis events are most frequent in Croatia - floods, fires and droughts. Croatia also faces seismic risks of earthquakes and a threat from leftover mines. The crisis management system in Croatia inherited traditions of the former Yugoslav federation. The system functioned well during the war of independence (1991-1995) while the principles of civil security have been changed during its further development. The dominant crisis management approach became civilian-based rather than military-based. The legal and institutional structures have been reformed in 2005. The coordination of the civil security system has been established at national level and takes an all hazards approach in the case of disaster and major accidents. The authority and responsibility for crisis preparedness and response in Croatia rests on the local level but the delegation of responsibilities takes a combination of bottom up (primarily) and top-down approach, depending on the difficulty of a crisis situation. However, the existing system is facing legal inconsistencies and needs to be reorganised. The structures and actors are well functioning, but coordination is not adequately defined and results in problems in implementation. The system of crisis management is not well enough recognised. These problems are intended to be solved with the new legal act which is now under preparation. The best performing parts of Croatia's civil security system are well-trained and well-equipped forces, particularly in fire-fighting (both regular and voluntary forces) and flood protection. Croatia has highly professional and operational protection and rescue capacities at the central government level (healthcare, inspections, capacities of relevant public administration bodies and CM related services). Their skills and knowledge are one of the crucial assets of the system. Close cooperation has been established between state administration bodies, NGOs, and public and private companies taking part in crisis management. Croatia has developed humanitarian demining capacities after the recent war (physical demining, equipment, know-how, and rehabilitation of mine victims) which represent its comparative advantages in Europe and worldwide. The system was positively influenced by the EU during the accession process. On the other hand, the system is facing financial problems and there is a need for rationalisation and avoiding double capacities. The overall spending for civil security is decreasing due to the financial crisis. There is lack of unified analyses and transparency of total costs of the system and its services especially at regional and local level, monitoring, approving and reporting on financing of certain activities is not clearly defined, cost-benefit analyses are not undertaken. A new model of financing is envisaged to enhance transparency whereby, amongst others, the financing of local levels will be based on clear risk assessment for a certain area.

Key Findings

1. Rich experience in demining

Croatia has developed strong humanitarian demining capacities after the recent war (1991-1995) because of the remaining mine risk which was constantly present, threatening the civil security of the country. Croatia is one of 59 countries in the world facing a mine problem. In the period of 1991-2012 there were 1,964 affected people by mines in Croatia, out of which 508 people died (mostly individual cases). By the signing of the Ottawa Convention (1997), Croatia was recognised as one of the leading world humanitarian demining countries. The Croatian Mine Action Centre (CROMAC) was established by the government in 1998 as the national agency responsible for the coordination of mine action activities in Croatia. The Government Office for Demining functions until recently (established in 2012) as a political coordinating body that monitors CROMAC activities, contributes to mine awareness raising and further development of the mine action system etc. CROMAC develops proposals for the National Mine Action Plan and Humanitarian Demining Plans, coordinates mine risk education activities and activities related to mine victims assistance, gathers and processes mine suspected areas data and marks mine suspected areas, performs demine control inspection etc.

Croatia's demining capacities include physical demining, equipment, know-how, and assistance to rehabilitation of mine victims. Based on its experience Croatia is ranked among the best performing and the most admired world demining systems with good technical resources and highly educated human potentials. Mine clearance capacities in Croatia include complete equipment of 32 demining companies that are authorised by Mol to perform demining activities (Mungos, DOK-ING, others), equipped with over 600 deminers and the same number of metal detectors, a number of demining machines and mine detection dogs. Special attention is given to education and informing citizens about the risk of mines, where the Croatian Red Cross plays an important role in raising awareness and informing endangered populations. The experience gained in demining represents a comparative advantage of the country in Europe and worldwide. The demining activities are mostly financed through the state budget and Croatian public enterprises (on average some 60 percent of total costs) while the remaining sources are obtained from foreign and domestic donors, EU funds and World Bank loans. There are three EU funded IPA projects that are supporting the demining operations in Croatia. In order to fulfil the plan to remove the mine threat by 2019, it is necessary to obtain more funds (EU structural funds and other donor funds).

2. Strong involvement of volunteers

The Croatian civil security system strongly relies on volunteers which play an important role in all aspects of the civil security system. The volunteers have increased awareness and knowledge about civil security issues and significantly lowered the numbers of casualties. There is a wide range of non-profit organisations whose activities are based on volunteers, such as Croatian Red Cross (CRC), Croatian Mountain Rescue Service (CMRS), Croatian Fire fighting Association (CFA), Croatian cynological, speleological and other associations, scuba diving and amateur radio organizations, search and rescue dog organizations, organizations for psychological assistance and organizations of Croatian Homeland War veterans that are important in tackling mine-related threats. The Croatian Mountain Rescue Service (CMRS), being an association of citizens, includes 750 volunteers and 10 employed people. The members of CMRS are mostly highly educated people and professionals, having education and training licences, including international ones. CMRS is among the most

distinguished non-profit organizations dealing with crisis management preparedness, undertaking rescue and protection activities in the mountains, inaccessible areas and other emergency situations. Its volunteers are available 24 hours daily and they join protection and rescue activities upon request, covering 80% of the Croatian territory. They also take part in the activities of National Protection and Rescue Directorate (NPRD), Ministry of Interior and other relevant ministries. The professional and voluntary firefighting has been integrated in Croatia in 2000 and all of them are members of firefighting communities. Volunteer firefighting societies, being part of the firefighting communities play an indispensable role in raising crisis management preparedness through educating and training activities, organizing exercises and acquiring appropriate logistics and equipment for extinguishing fires. Due to their importance, it is necessary to increase awareness of citizens about voluntary involvement in civil security and the need for mutual assistance in crisis situation. CRC is another important non-governmental organization in crisis management with 130 associations/offices across the country and the single national office (National Headquarter) that embraces 8,852 volunteers. CRC acts in mitigating human suffering, previously caused by military conflicts and today resulting from great natural, ecological, technological and other accidents and epidemics. CRC volunteers contribute to the enhancement and protection of citizens' safety and health through organizing life rescue activities, educating and training rescuers and implementing first aid assistance programs. One of the most distinguished of CRC's activities is continuous informing and training of citizens about the mine threat.

3. Active regional cooperation in South-Eastern Europe

Regional cooperation on bilateral and multilateral levels is important for Croatia because of the fact that South Eastern Europe (SEE) is a region which is exposed to similar types of hazards, such as flood, drought, earthquake, fire or other threats. Cooperation with the countries in the region or through regional initiatives contributes to disaster prevention, disaster preparedness and mitigation. Croatia has signed cooperation agreements on protection and rescue with all neighbouring countries while an agreement with Serbia is being negotiated. The country is actively participating in regional initiatives and organizations such as the Disaster Preparedness and Prevention Initiative for South East Europe (DPPI-SEE) and Civil Military Emergency Preparedness South East Europe (CMEP SEE). Croatia is also taking part in initiatives of the European Union, Council of Europe, NATO and United Nations. Croatia participates in a number of civil protection projects aimed at cooperation between the SEE countries funded by the EU. One of them is financed through the EU Instrument for Pre-Accession Assistance – the IPA Programme entitled 'Civil protection cooperation for candidate countries and potential candidates', aiming to bring them closer to the EU Civil Protection Mechanism and to contribute to the development of their civil protection capacities. Another project was an IPA Civil protection exercise (2011-2012) through which Croatia organised the CRO-FLOODS 2012 Field Exercise which gathered civil protection intervention teams from seven countries of the region. Furthermore, Croatia takes part in cooperation supported by the EU and other sources on development of the 'Regional sustainable development and civil protection in Bosnia and Herzegovina, Croatia and Montenegro' project, with the aim to establish the first joint SEE Fire fighting Regional Centre (SEEFREC), as a mechanism for coordination of firefighting related activities and joint operational structure in line with the Hyogo Framework with increased participation of communities and businesses in risk reduction of forest fires.

List of Abbreviations

ВА	Bosnia and Herzegovina
СМ	Crisis Management
СМСМН	Crisis Management Committee of the Ministry of Health
CFA	Croatian Fire fighting Association
CROMAC	Croatian Mine Action Centre
CMRS	Croatian Mountain Rescue Service
CRC	Croatian Red Cross
DRR	Disaster Risk Reduction
GfK	Growth for Knowledge
NN	Narodne novine (Official Gazette (OG) of the Republic of Croatia)
NMHS	National Meteorological and Hydrological Service
NPRD	National Protection and Rescue Directorate
MoD	Ministry of Defence
Mol	Ministry of Interior
MIC	Monitoring Information Centre
RC	Republic of Croatia
SEE	South-Eastern Europe
SEEFREC	South East Europe Fire-Fighting Regional Centre
SEE RDRMP	South Eastern Europe Regional Disaster Risk Management Programme
SOP	Standard Operative Procedure
UNDP	United Nations Development Programme
UN-OCHA	UN Office for the Coordination of Humanitarian Affairs
UNISDR	UN Office for Disaster Risk Reduction

1. Introduction

Experience. The Republic of Croatia (hereinafter Croatia or RC) is highly exposed to natural hazards such as floods, earthquakes, forest fires, droughts and heat waves but also to industrial pollution. The most frequent types of crisis according to disaster statistics (PreventionWeb, 2013) in Croatia are floods, followed by wildfire and extreme temperatures.

The longer (including pre-2000) experience shows that the territory of Croatia was often exposed to river flooding. Around 15 percent of Croatia's territory is prone to flooding on major rivers (SEE RDRMP, UNDP Croatia and UNDP, 2011). In the last hundred years there were some 30 general floods of the rivers Sava, Drava and Danube and their tributaries (NPRD 2013- threat assessment), while in 2010 Croatia was affected by the highest flooding in the last fifty years recorded in the region. Croatia belongs to the group of countries with a high forest fire frequency. Among seismic events, the Biokovo Mountain earthquake of 1962 and the Ston-Slano earthquake of 1996 (which completely destroyed three villages) were the strongest in the last century.

One of the major crisis events in the recent history of the country was the war for independence, named the Homeland War (1991-1995), which had extensive civil security impacts through provision of civilian evacuations, care and shelter, humanitarian assistance, taking care of displaced persons and similar activities. Despite having a low risk for potential terrorist attacks, Croatia recorded a case of international terrorism in 1995, when a car-bomb hit the police station in Rijeka, killing one and injuring 26 persons.

Table 1: List of major crises in Croatia (2000-2012)

Year/ Month	Crisis description	Crisis category	Location	Damage		
				# of persons killed	# of persons injured	# of persons affected
2000/ June	Extreme temperature/ Heat wave	Natural disaster	Zagreb, Split, Osijek, Rijeka	40	-	200
2000/ Aug	Wildfire/Forest fire	Natural disaster	Split, Metkovic regions	1		
2000/ Dec	General flood	Natural disaster	Senj, Metkovic, Otocac regions			600
2001/ Sept	Flood	Natural disaster	Orahovica, Nasice, Zdenci	-	-	1,200
2001/ Oct	Baxter case	Public health accident		23	-	-
2002/ May	Water accident	Transport accident	Sava river	11	-	-
2003/ July	Extreme temperature/ Heat wave	Natural disaster		788	-	-
2005/ Aug	General flood	Natural disaster	Medjiumurje district		-	250
2005/ Dec	Extreme temperature/ Extreme winter conditions	Natural disaster		5	-	-
2007/ Aug	Wildfire/Forest fire	Natural disaster	Dubrovnik region	-	-	26
2007/ Aug	Wildfire/Forest fire	Natural disaster	Kornati Islands	12	-	-
2008/ Sept	Road accident	Transport accident	Near Zir	14	-	30
2009/2010	H1N1 pandemic	Infectious disease		57	2,510	58,234
2010/ June and September	General flood	Natural disaster	Eastern, Western, Southern Croatia	-	-	300
2010/ Dec	General flood	Natural disaster	Metkovic, Opuzen, Ploce	-	-	810
2012/ Feb	Extreme temperature	Natural disaster	Cakovec	-	-	3

Sources: (1) Prevention web, 2013

(2) EM-DAT The International Disaster Data Base, 2009.

(3) ANVIL interviews

Note: The recorded number of 788 persons killed by extreme temperature in 2003 by PreventionWeb is not in accordance with Croatian national statistics and should be considered as questionable.

Definition. Civil security systems are in the ANVIL project defined broadly as the national apparatus (policies, bodies, and mechanisms) designed to protect against new and urgent threats to the security of people and/or the functioning of critical infrastructures. In Croatian practice the term civil protection system is mostly in use for similar purposes.

Crises are in the project understood as serious (materializing) threats to the well-being of citizens and the integrity and functioning of critical infrastructures. In Croatia's official practice crisis is not used in terminology, but the following terms are in use (according to Protection and Rescue Act, NN³⁰ -

³⁰ *Narodne novine (NN)* refers to the Official Gazette (OG) of the Republic of Croatia. This abbreviation will be used further in the text.

Narodne novine - Official Gazette of the Republic of Croatia issue no. 174 of 26 November 2004, Article 3):

- "Disaster" (catastrophe) is any natural or man-made event in the territory of RC which, with its scope or intensity or suddenness, jeopardizes health, human lives or property of major value or the environment, whose occurrence cannot be prevented and consequences cannot be eliminated by the regular activities of the competent state administration and the existing operation and rescue forces.
- "Accident" is an event caused by sudden impact of natural forces, man-made or other factors.
- "Major accident" is an event which may develop to acquire characteristics of a disaster because, due to its intensity and extent the actors dealing with protection and rescue are not able to prevent its spreading or to eliminate its consequences.

The dominant crisis management (CM) approach is civilian-based rather than military-based. The National Protection and Rescue Directorate (NPRD) is responsible for activating operational units. The armed forces and the police also may take part in protection and rescue activities and their participation is coordinated between the Ministry of Defence (MoD), Ministry of Interior (MoI) and NPRD. According to the Croatian Constitution, in the event of major natural disaster, the armed forces may be deployed to assist the police and other state bodies. They could also be deployed to assist firefighting, rescue operations as well as surveillance and protection of the country's rights at sea (NN 85/10, Article 7, 17 and 101).

Croatian key legislation established coordination at the national level that takes an all hazards approach in the case of disaster and major accidents. The Protection and Rescue Act covers a wide range of threats, but it does not deal with specific threats while Croatia's civil crisis management response is subdivided and specialized to cope with specific threat types. In addition to the above-mentioned basic act, a specific legal framework that regulates firefighting, protection of human life in the mountains, protection and rescue measures in accidents and transportations related to dangerous substances has been developed. National protection plans relate to specific threats such as floods, large fires, ionizing radiation, etc.

The national coordinating body for the all hazards approach is the NPRD, while relevant services and institutions established by the government participate in preparation and implementation of protection and rescue activities and measures. The system is on the operational level subdivided into agencies that cope with specific threat types such as floods, wildfires, mountain rescue and protection, etc. In case of multidimensional incidents, cross-sector coordination is ensured by the NPRD (Protection and Rescue Act).

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

After the dissolution of the *Socialist Federal Republic of Yugoslavia* (*SFRY*), Croatia declared independence in late 1991 and was internationally recognized, becoming a UN member in 1992. During the first decade of its independence until 2000, Croatia had a semi-presidential political system with strong presidential powers and comparatively somewhat reduced powers of the Parliament. It was an example of clear majoritarian democracy with a single party government and a strong presidential position.

The constitutional changes in 2000 altered the semi-presidential political system into a parliamentary one, followed by a significant reduction of presidential powers and empowerment of the Parliament. Since 2000 the country has been led by three coalition governments, with four to six parties involved. So, consociational democracy, marked with relatively visible proportional representation, has dominated the political system of the country during the last 12 years.

In line with the Constitution (NN 43/01, Article 133), the country is divided on units of regional and local self-government. Their structure, rights and obligations are defined by the Act on Counties, Cities and Municipalities (NN 86/06) and the Act on Local and Regional Self-Governments (NN 33/01).

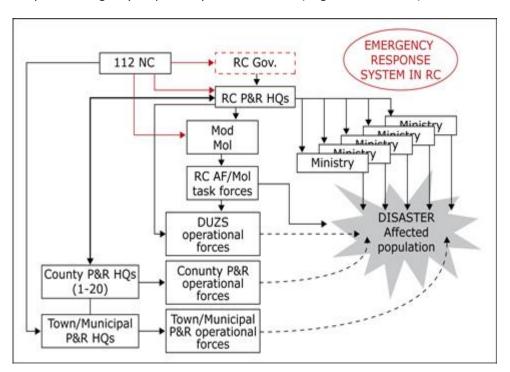
At the regional level, Croatia is divided into twenty counties and the City of Zagreb, being the unique unit having both city and county status (NN 33/01, Article 6). Each county has approximately two hundred thousand inhabitants, a territory of about 2,750 square kilometers and includes approximately six cities and twenty-one communes (Ivanisevic S., et al., n.d.). At the local level, Croatia has 122 cities and 416 municipalities (WWW-HR, n.d.). Elections to regional and local representative bodies take place every four years and are based on a secret ballot as well as direct, equal and universal suffrage (NN 85/10, Article 10). According to the principle of subsidiarity, the central government is not entitled to interfere in the responsibilities of local and regional authorities (WWW-HR, n.d.).

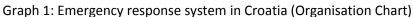
One of the main goals for all levels of governance is preservation and protection of the environment, health and well-being of their citizens. As it is described in the National Security Strategy (2002), possible results of natural and technological disasters in the country or a specific region pose a constant security threat for its citizens and material goods (NN 33/02). Therefore, cooperation on local, regional and state levels is an important factor for the achievement of above-mentioned interests.

On the state level, the Croatian government is responsible for management and effective functioning of protection and rescuing system. NPRD is the key coordinative agency during a time of disaster defined by the Protection and Rescue Act, but only the Croatian government has the authority to declare a disaster based on the recommendation of the NPRD director and it does not require consent of the Parliament (NN 174/04).

The obligation of local, regional and state governments is to participate in all actions relevant for the protection of people and material goods. Local and regional self-government units, within the framework of their rights and obligations, are responsible for the organization and planning, financing and enforcement of rescue and protection missions in the areas which are under their

jurisdiction (NN 174/04). Apart from that, they are entitled to contain operational forces which are under the command of local and regional headquarters.³¹





One of the tasks of local and regional authorities, according to the Constitution, is to maintain measures relevant for protection and rescue of its inhabitants. In the case of a disaster, when local government cannot respond to it properly, it can ask for additional help from the regional level. In the same way, the administration at the regional level which cannot respond to an existing disaster has a right to request help from the state level (NN 174/04).

To conclude, in Croatia the authority and responsibility for crisis preparedness and response first and initially rests on the local level. However, in the case when a crisis overwhelms local capacity, all necessary measures are taken by the NPRD which is in charge of crisis preparation and response at the state level.

2.1.2 Government/social culture

National culture analyses: Regarding the *Geert Hofstadter's index*, Croatia ranks relatively high on the power distance indicator (73), low on the individualism versus collectivism dimension (33), scoring moderate in the masculinity versus femininity field (40) and having high preference for avoiding uncertainty (80) (Hofstede n.d.). In other words, Croatia is depicted as a hierarchical and collectivistic society with a strong sense of group identities, strong preferences for mutual cooperation, caring for the weak and focusing on well-being and quality of life. The Croatian society's collectivistic nature has particularly been shaped during the self-managing socialism of the former

Source: European Commission, 2012a

³¹ There are twenty NPRD district offices which are located throughout the whole country. In Zagreb, Osijek, Rijeka and Split there are also departments for protection and rescue, while within district offices in Split, Zadar, Šibenik and Dubrovnik there are state intervention commands.

Yugoslavia and during the War of Independence (1991-1995), where parallel processes of nationbuilding and ethnic mobilization have galvanized collective identity.

According to the World Value Survey (n.d.), Croatia has progressed since the 1990s by diminishing traditional values in favor of more secular-rational values and increasing the scope of self-expression values at the expense of survival values.³² This has clearly mirrored Croatian democratization progress, marked with greater political participation, civil liberties, tolerance and respect for minorities (Kuntz, J., 2011, pp. 229-230, p.239).

Impact of culture on CM system: Croatia was previously part of the developed and organized civil security system in the former SFRY, which despite its ideological role and massive size, was functional. Historical legacies and administrative traditions provided the basis for developing civil security capabilities in Croatia (Interview, Mol, December 2012). After the dissolution of the SFRY, Croatia had to adapt its CM system to a democratic society (period of 1990s and 2000s). The first step of this process was the return of civil protection from the MoD to the MoI. Establishment of an integrated, sustainable and efficient CM system had to protect fundamental political values and subsequently underpin economic and social development (NN 33/02). The crisis management system in Croatia was well functioning during the war of independence when it had an important role in organizing civilian evacuations, refugee acceptance, taking care of displaced persons, humanitarian assistance and similar activities (Interview, MoI, December 2012). Finally, the building of the CM system has occurred simultaneously with the EU/NATO integration process and regional cooperation in South-Eastern Europe that have shown a necessity for greater civil security cooperation and positively impacted Croatian strategic culture. However, weaknesses of the current system indicate that experiences achieved during the recent war were not well-enough included into the later reforms of the Croatian system.

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

Legal framework: The major legal act regulating the civil crisis management (CM) system is the Protection and Rescue Act (adopted in 2004, amended in 2007, 2009 and 2010) which defines institutional structure, rights and responsibilities of all actors involved, procedures and management of the protection and rescue activities. It established the NPRD as a single administrative organization regulating norms and standards in protection and rescue area. There are also other relevant acts that regulate rights and obligations in areas such as firefighting, natural disasters protection, dangerous substances etc. The government has adopted generic and specific strategies addressing civil CM in the areas of security and defence, terrorism, chemical safety, water management and among others. Plans and programmes related to CM have been adopted at national and municipal levels (NN 96/10).

The legal framework and institutional setting has been developed regarding the mine issue after the recent war. The Croatian Mine Action Centre (CROMAC) was established (OG 24/98) by the government in 1998 as a leading organization regulating mine action in the country. Moreover, in 2012 the Government Office for Demining was established (NN 21/12) as a political coordinating

³² Croatia progressed from 0.72 points in 1995 to 0.08 points in 2000 on the traditional/secular-rational values dimension and moved from the -0.53 in 1995 to 0.31 in 2000 regarding the survival/self-expression values.

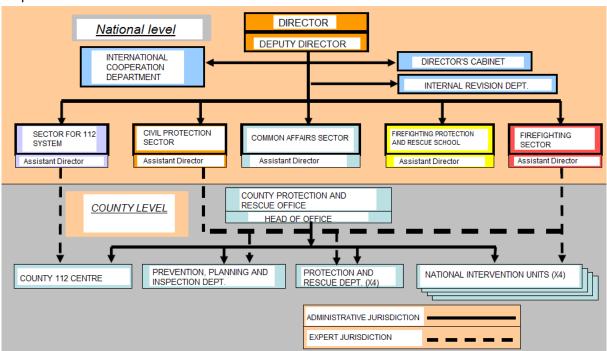
body that monitors CROMAC activities, contributes to mine awareness raising and further development of the mine action system etc.

Reforms 2000-2012: The major change in the legal framework regulating CM was the promulgation of the Protection and Rescue Act (in force from 1 January 2005) establishing a new model of the civil security system in the country. Thus civil protection, firefighting and the new 112 system became integral parts of the NPRD system.³³

The Croatian protection and rescue system is complex and has not achieved an adequate coordination level. The mentioned Act re-emphasized the subsidiarity issue and the need to strengthen the system at local self-government units. Establishment of the protection and rescue headquarters at all levels and their linkage by the single 112 system, followed by the development of Standard Operative Procedures (SOPs) intended to contribute to a better coordination of the system and efficiency of the operational forces (NPRD, 2012, p.6). However, introduction of the new system caused some legal inconsistencies due to the fact that the civil protection and firefighting systems were previously parts of the MoI and are still not fully adjusted to the new organization. The lack of their legal definition and organization represent a significant problem (Interview, MoI, December 2012).

To solve the existing problems, a draft of the new Protection and Rescue Act is under preparation, containing new regulations regarding rights and obligations of local self-governments (including new model of financing, based on clear risk assessment for a certain area) and highlighting the role of volunteers in CM activities. It is intended to improve coordination, strategic planning, information inflow and management and thus contribute to risk reduction.

³³ The NPRD consists of five sectors: the Civil Protection Sector; the Firefighting Sector; Sector for the 112 Emergency European Number; the Firefighting Protection and Rescue School; and the Personnel, Legal and Finance Sector. It also has the regional offices (i.e. the County Protection and Rescue Offices), linked to its Civil Protection and Firefighting Sector, as well as four National Intervention Units and four Protection and Rescue Departments (NN 43/12)



Graph 2: The structure of NPRD command and control chain

Source: See NPRD: <u>www.duzs.hr/download.aspx?f=dokumenti/Stranice/ustrojDUZS.pdf</u>. Last access 25 October 2013.

2.2.2 Political dimension

The executive responsibility for CM primarily rests at local and regional levels whose authorities, with the assistance of local and regional protection and rescue headquarters, manage and coordinate forces at their governmental tiers. In a case when a disaster is proclaimed the NPRD is the main coordinative body which manages and commands the operational forces and coordinates all other participants involved (NPRD, 2012). The local and county headquarters are accountable to the head of the NPRD, who responds directly to the prime minister. However, the NPRD is represented in the government by the minister of interior (Interview, NPRD, December 2012). Civil security agencies (such as the Croatian Mountain Rescue Service - CMRS, Croatian Red Cross - CRC, and the other associations and institutions established by the government) participate in CM activities, when requested by the NPRD (NN 174/04, Article 26). They are either responsible to NPRD or to the minister of the specific department.

Policy formulation. The NPRD is tasked with system development and improvement by preparing plans and proposals to the government. Along with the NPRD, the MoI (with the inspectorate for fires and explosions which is in its competence) and the MoD (due to potential engagement of its special firefighting forces and the anti-fire escadrille) also have important roles in their respective policy formulation (Interview, MoI, December 2012).

Accountability: In the event of emergency, there are several provisions defined by the Constitution, Protection and Rescue Act and the other legislative documents, enabling special authority to be executed outside legislative control. A NPRD civil servant with the special responsibilities may order mobilization of citizens, temporary detraction vehicles, temporary restriction of property rights, etc. (NN 174/04, Article 53). The armed forces may also be deployed to assist firefighting and rescue operations and surveillance and protection at sea (NN 85/10, Article 7). Some individual

constitutionally-guaranteed freedoms and rights may be curtailed in emergencies in accordance with the nature of the threat (NN 85/10, Article 17). Free enterprise and property rights may be exceptionally restricted by law (NN 85/10, Article 50).

2.2.3 Operational dimension

Implementation agency/ies: In general, the protection and rescue system consists of operational forces³⁴, local and regional self-government units, armed forces and police in case of major accident or disaster (NPRD, 2012, p.3). The Coastguard capacities are not sufficient. Due to lack of financial resources the improvement of this segment (i.e. provision of ships and helicopters, organization of personnel training) remains the priority for the future.

Accountability: In the case of emergency, civil protection units consisting of citizens are organized at local, regional and national level. They are usually accompanied by collectives such as CMRS, CRC, and volunteer firefighting associations etc., which are active members of the system. However, civil protection as an organization shall be activated only in cases of major accidents or disasters. In other emergencies regular police, emergency health care and fire brigade services operate (Interview, NPRD, December 2012).

The NPRD is in charge of coordination of the protection and rescue system, while participation of the armed forces (if necessary) and police is jointly coordinated between MoD, MoI and NPRD. Regarding the mine issue, CROMAC is responsible for the coordination of all mine action activities.

Operational tasks and responsibilities

Planning and risk assessment: The NPRD is in charge of developing and updating the National Protection and Rescue Plan, based upon risk assessment. Other ministries, agencies, local and regional self-government authorities etc. are required to develop risk assessments and plan for areas of their responsibility (NN 174/04). The government has adopted the last national threat assessment in 2009 and consequently the Protection and Rescue Plan in 2010 covering events of natural, technical, radiological and nuclear disasters. For the purpose of coordinated protection and rescue implementation, SOPs are being adopted, defining a joint action of operational forces in the event of disaster (NN 96/10).

Communication: The communication system is entirely led via the 112 system, which is run by the NPRD. Its sector for the 112 system is responsible for the information flow, regarding all possible threats and their consequences, to all participants involved in CM activities. The system functions as a CM centre (collecting, analysing and disseminating information) as well as an operations centre. It has a central unit plus 20 regional units. It reports on all risks and hazards and, if needed, alerts citizens, legal entities, rescue services, etc. (NN 174/04, NN 43/12).

Logistics: The NPRD's director passes legislation³⁵ concerning mobilization of operational forces, their management, command and coordination in the event of disasters. The protection and rescue headquarters manage and command operational forces at the local and regional levels, while the NPRD is responsible for management and coordination at the national level. Also, the NPRD's

³⁴ The operational forces consist of protection and rescue headquarters, services and units of legal entities and central state administration bodies, firefighting commands and units, NPRD's services and units, civil protection headquarters and units (NPRD, 2012, p.3)

³⁵ Rulebook on mobilization and action of the Operational Protection and Rescue Forces (NN 40/08, 44/08)

director approves legislation³⁶ regulating the recruitment and personnel and material organization of those units. The logistics and equipping relies on NPRD warehouses, resources of local and regional self-government units and civil organizations whose members are recruited, depending on the type of the engaged units (NN 174/04, NN 40/08, NN 111/07).

Monitoring: The NPRD is responsible for early warning, disaster prevention, preparedness and response. It can utilize all existing relevant governmental services, including Croatian Waters, National Meteorological and Hydrological Service (NMHS), Croatian Seismological Survey, State Service for Public Health, State Service for Nuclear and Radiological Safety etc. (World Bank, UNISDR Europe, SEE RDRMP, 2009, p. 86).

Illustration of the civil security system: Floods protection in Vukovar – Srijem County, June 2010

In May/June 2010, all counties in the region of Slavonia were hit by heavy rainfall. In Vukovar - Srijem County up to 125 l/m2 of precipitation was reported, causing a water saturation of the soil, relief canals overcapacity and sudden increase of the water level in rivers. The Croatian Waters branch office Bid – Bosut had timely warned of the possibility of flooding. The county prefect convened a county Protection and Rescue Headquarter emergency session in order to consider the situation in the flood-affected and flood-threatened areas. The heaviest situation was evaluated in the area of the municipality of Babina Greda, due to a sudden rise of the Berava River. Municipal Protection and Rescue Headquarter engaged all available forces, associations of citizens and local population in flood protection banks building, population and livestock evacuation. Additional assistance in water pumping-out techniques was received from the neighbouring municipalities.

Thanks to coordinated operation, Vodoprivreda's employees managed to reduce the water level by its releasing into the fields, and thus restraining the water onrush and preserving the houses and the locality of Babina Greda. Some 8000 hectares of agricultural fields were submerged, but no casualties were recorded. Thanks to the timely warning, communication and efficient reaction of the Croatian Waters and local authority which engaged additional forces, the damage was significantly reduced. The capacities at local/regional level have been sufficient to deal with the situation and there was no need for national level assistance (Lovric, Z., Milic, I., 2012 pp. 59-73).

2.2.4 External dimension

Bilateral cooperation: Croatia has signed cooperation agreements on protection and rescue in the case of natural and man-made disasters with Hungary, Slovenia, Bosnia and Herzegovina (BA), Montenegro and Italy between 1997 and 2012 (Interview, NPRD, December 2012). An agreement with Serbia was in the time of finishing this study in the phase of negotiations. All agreements have almost the same content and structure³⁷ while the agreement with Montenegro has minor differences. Eg. the period of cancellation in the agreement with Montenegro is six months after the other side receives notice (NN 07/08), while in the other agreements this period is three months.

According to Article 48 of the Protection and Rescue Act, the government decides whether to provide international assistance based on recommendation of the director of the NPRD who is

³⁶ Rulebook on organization, recruitment and equipping of the civil protection units and alerting units (NN 111/07)

³⁷ Therefore, they contain comprehensively defined articles, such as enforcement of protection measures, requesting and offering assistance, crossing state border for the purpose of protection and rescue, etc.

entitled to propose the provision of non-refundable financial assistance up to an amount which is determined by the government. Based on the bilateral agreement with BA, Croatia has helped the country in the summer of 2012 to fight fires by providing specialized airplanes and the service of pilots. Considering that the agreement with BA foresees entering its territory only in the range of 10 km from the state border, and this was insufficient to effectively fight the fires spreading further inland, the EU's Mechanism for Civil Protection enabled the NPRD to provide assistance to a neighbouring country (Interview, NPRD, December 2012).

According to all agreements the rescue teams or individuals participating in a mission do not need passports, visas or licenses when crossing the border at check points, but only the approval from the country that is requesting the help. The director of the NPRD establishes the SOP which defines the procedure of crossing borders in the case of the disaster.

Regional and/or multilateral provisions: Cooperation on the regional level is well developed in fields of mutual interest (NPRD, 2013a). Regional and multilateral collaboration within South Eastern Europe (SEE) is important for Croatia because the whole region is subjected to similar types of hazards (flood, drought, fire etc.). Thus, cooperation with the countries in the region, international organizations or within initiatives contributes to disaster prevention, preparedness and mitigation (World Bank, UNISDR Europe, SEE RDRMP, 2009).

Croatia is actively participating in regional initiatives and organizations such as the Disaster Preparedness and Prevention Initiative for South East Europe (DPPI-SEE) and Civil Military Emergency Preparedness South East Europe (CMEP SEE) (World Bank, UNISDR Europe, SEE RDRMP, 2009). Croatia is also taking part in initiatives of international organizations such as the UN Office for Disaster Risk Reduction (UNISDR), Open Partial Agreement on the Prevention of, Protection against and Organization of Relief in Major Natural and Technological Disaster (EUR-OPA Major Hazards Agreement) of the Council of Europe, Civil Emergency Planning Committee (CEPC), Euro-Atlantic Disaster Response Coordinate Centre (EADRCC) and the EU Civil Protection Mechanism and EU Civil Protection Financial Instrument (NPRD, 2013a, NPRD, 2013b, NPRD, 2013c, NPRD, 2013d). The Protection and Rescue Act (Article 48-50) defines decision-making process for providing international aid in the case of disaster, rights and obligations of the operation forces and cross-border rules.

2.3 The relations between the civil security system and the citizens

2.3.1 Expectations

State-to-citizens expectations: According to the Protection and Rescue Act, citizens are obliged to take care of their own safety; to implement measures of personal and mutual protection on the basis of the principle of solidarity and mutual help; to take part in protection and rescue; to notify the 112 centre when noticing a threat/ occurrence of an accident. Citizens also have the right to be fully and timely informed about threats of disasters and to be trained in protection and rescue activities (NN 174/04, Articles 13–17).

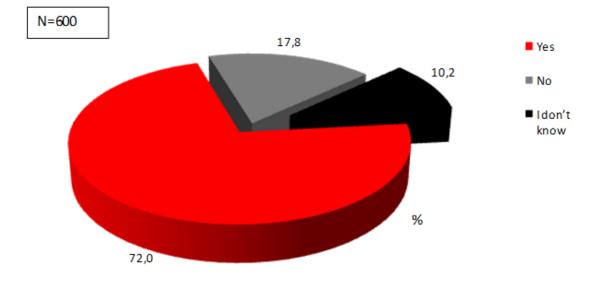
Citizens-to-state expectations: A comprehensive opinion poll on citizens' expectations towards government responsibility for civil security or their perceptions of threats has not been undertaken in Croatia so far. However, as earthquakes pose a strong threat to Croatia, the NPRD has participated in the EU project "SAFE QUAKE" (2009), within which research on citizen's awareness on earthquake

safety rules was conducted. The research showed a lack of knowledge of the institutions responsible for providing first aid (34.8 percent), eliminating the consequences of earthquake (46.7 percent), damage repair (63.5 percent) and reuniting with family members (58.2 percent) among respondents ³⁸.

Considering that the citizens have the highest trust in the firefighting service (86 percent) and the police (50 percent),³⁹ it could be concluded that they are relatively satisfied with the performance of protection and rescue forces in those areas. High trust in the firefighting service could be explained by Croatia's long experience with forest fires, high level of volunteers' involvement which remains the main pillar of the response system and quick and efficient actions of firefighters in activities which are within their own competences (Interview, CFA, December 2012). The research results of the mentioned EU "SAFE QUAKE" project have shown that most respondents (72 percent) would be willing to assist in a crisis situation.



Graph 3: Willingness of citizens to voluntarily participate in rescue mission



Source: SAFE QUAKE Project, <u>http://safequake.eu/index.php</u>

In general, citizens are directly engaged in rescue activities as volunteers in various organizations providing service in CM, in collaboration with the NPRD. This especially refers to the volunteer firefighting associations, CMRS, CRC, speleological associations and rescue dog organizations. The major organizations participating in CM response gather together about 49,259 volunteers. There are 1,835 volunteer firefighting units with 39,657 volunteer firefighters, 750 volunteers of the CMRS and

 ³⁸ European Commission funded project "Safe Quake for improvement of the population's post-disaster behaviour in urban areas with high seismic risk", <u>http://safequake.eu/index.php</u> [Accessed 31 January 2012]
 ³⁹ Reader's Digest Survey "Trust on professions",

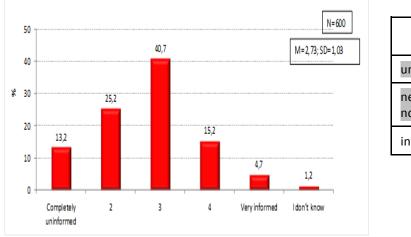
http://www.rdtrustedbrands.com/tables/Trust%2520in%2520professions.country.Croatia.shtml [Accessed 31 January 2012]

8,852 volunteers in the CRC (Interview, CFA, November 2012; Interview CMRS and CRC, December 2012).

2.3.2 Information

Information on preparedness and response: Alerting and informing citizens is conducted by unique operative – 112 communication centres, coordinating the actions of all parties involved in the alarm system of Croatia.⁴⁰ Along with alert signs, in the event of an upcoming and imminent threat, the competent 112 centre provides announcements informing the population of the threat type and the measures to be taken (NN 47/06, 110/11). The alerting signs are unique for the whole territory of Croatia and most of the procedures on alerting and communication are regulated by SOPs (NN 13/06).

Television and radio remain the most powerful media which the citizens trust the most (56 percent)⁴¹. The EU project "SAFE QUAKE" survey has shown that most respondents feel uninformed (79.1 percent) and unprepared (79.2 percent) regarding recommended behaviour during an earthquake, as presented below:



Source: SAFE QUAKE Project, http://safequake.eu/index.php

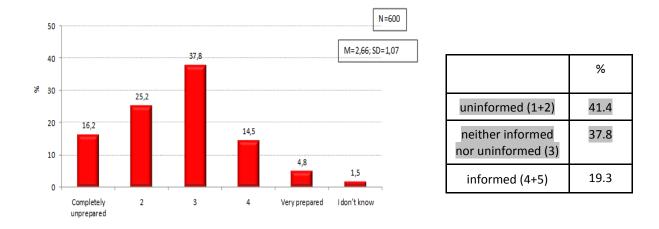
	%
uninformed (1+2)	38.4
neither informed nor uninformed (3)	40.7
informed (4+5)	19.9

Graph 4: Citizens' awareness on recommended behaviour during an earthquake

 ⁴⁰ Alerting is performed by prescribed alert signs including sirens, public address systems, electronic media (1st channel of the Croatian Radio and TV, local radio and television stations and NPRD's official website) and SMS (NN 47/06)

⁴¹*Rider's Digest* survey,

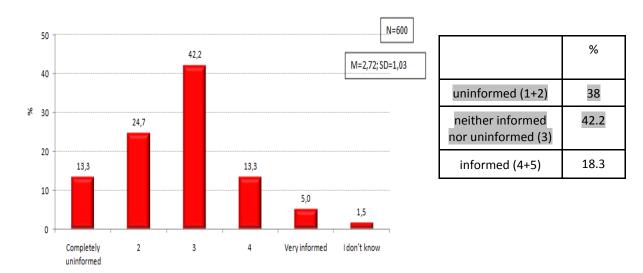
http://www.rdtrustedbrands.com/tables/Confidence%2520in%2520institutions.category.TV%2520and%2520r dio.shtml [Accessed 31 January 2012]



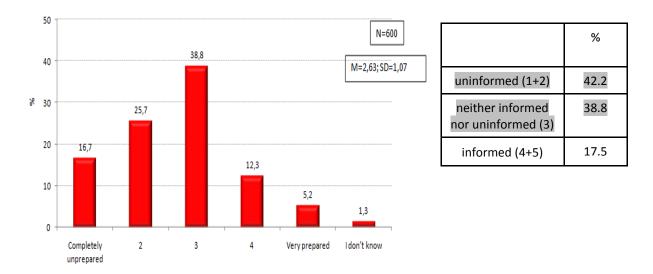
Graph 5: Preparedness in terms of recommended behaviour during an earthquake

Source: SAFE QUAKE Project, <u>http://safequake.eu/index.php</u>

Graph 6: Citizens' awareness on recommended behaviour after an earthquake



Source: SAFE QUAKE Project, http://safequake.eu/index.php



Graph 7: Awareness on preparedness in terms of recommended behaviour after an earthquake

Source: SAFE QUAKE Project, http://safequake.eu/index.php [Accessed 31 January 2012]

During the flood seasons citizens contact the Emergency Management Office in Zagreb very often, seeking information on landslides, the flood situation, shelters etc. (Interview, Emergency Management Office Zagreb, December 2012). It could be concluded that citizens need to be informed and educated effectively about civil security issues comprehensively both in their families, through the education system and at working places.

2.3.3 Education

Education and awareness/activation: The NPRD prepares various awareness raising materials, which are distributed mainly via Internet but also by radio and TV. Usually, the NPRD creates on its website guidance notes specifically related to crisis preparedness and response. Other similar activities are provided by the CRC, CMRS, CFA, CROMAC and Emergency Management Office Zagreb and they include: publishing and delivering of magazines to members and public libraries, creation and dissemination of educational leaflets, films, etc. Distribution of crisis preparedness and response information is considered to be active and adequate, so the low level of citizens' awareness could be attributed to the lack of their interest and the education system rather than to a lack of available information.

Teaching on disasters is partially included in the school curricula, but disaster risk reduction (DRR) education is poor. The NPRD has developed the National Action Programme to Educate Children in Protection and Rescue, and its representatives have been providing informative lectures to the children and training sessions for school employees (UNICEF, UNISDR, 2011). Although natural disasters are studied at some faculties, only the University of Applied Sciences at Velika Gorica has included DRR as part of a crisis management study programme.

Non-profit organisations carry out various CM-related training activities targeting the larger public. This especially includes CRC, CROMAC, CMRS and CFA. Although there are no official data available on the total number of citizens trained per year, the authorities and NGO representatives pointed out that these types of training activities are well-attended and they contributed to a significant reduction of number of accidents. However, CM training sessions are usually conducted for professionals rather than for citizens and thus intervention actions in emergencies are mostly performed by professionals (Interview, Croatian Parliament, December 2012).

NPRD's Firefighting Protection and Rescue School is providing and monitoring education and training for professional firefighters and response-oriented specialist courses for protection and rescue forces. The school also conducts courses for civil servants in local administration involved in protection and rescue (NPRD, 2013e) and until 2011 a total of 1,353 representatives, including members of counties and cities protection and rescue headquarters have passed these training sessions (NPRD, 2012, p.5). The CFA also (co)finances specialized training activities and education of firefighting officers, as well as regional exercises. In 2011, a total of 6,527 persons were trained as firefighters, while 1,038 attendants have passed special-oriented training sessions. Furthermore, in 2011 a total of 200 firefighting exercises were held for 5,815 participants and 190 professional seminars covering 2,190 participants (CFA, 2012 pp.16–21). Various educational programmes for professionals are also provided by the NMHS, CRC and CMRS.

There is a lack of in-depth scientific research on civil security issues in Croatia. However, upon an NPRD initiative, the government is (since 2009) supporting annual conferences of the Croatian National Platform for Disaster Risk Reduction, in line with the UN Hyogo Framework for Action (NPRD 2012, pp. 5-6). The government encourages activities of the CROMAC's Centre for Testing, Development and Training and the Trust Fund for Humanitarian Demining of Croatia. Within governmental support, CROMAC has co-founded the Cluster for Humanitarian Demining Operations Abroad and the South Eastern Europe Mine Action Coordination Council – SEEMACC (CROMAC, n.d. b). Furthermore, due to the great role of NMHS in preparedness and threats announcements, the government supports its international research and technological cooperation (e.g. ALADIN project) and its national projects, e.g. the Anemo Alarm software development (Interview, NHMS, December 2012).

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs)

Overview: The Croatian Government has formal partnerships with the non-profit organizations responsible for civil security through pursuant legislative acts.⁴² These organizations are the CRC, CMRS, CFA, Croatian Community of Technical Culture, cynological, speleological and other associations or institutions established by the government. They are obliged to participate in protection and rescue activities and measures, when requested by the NPRD. The other non-profit organizations are included in the civil security system if needed, such as scuba diving, amateur radio

⁴² Legislative provisions defining the governmental partnership with the NGOs in the civil security domain are: Protection and Rescue Act, NN 174/04, 79/07, 38/09, 127/10, Croatian Red Cross Act, NN 71/10, Croatian Mountain Rescue Service Act, NN 79/06 and Technical Culture Act, NN 76/93, 11/99, 38/09

organizations, search and rescue dog organizations, organizations for psychological assistance, organizations of Croatian Homeland War veterans, organizations dealing with landfill sites, etc. These associations represent important complementary resources at the national, regional and local levels, forging public-private partnership in dealing with security threats.

Formal role: Non-profit organizations are obliged to undertake preparedness measures from threats and consequences of accidents/disasters (NN 174/04, Article 18). Moreover, organizations that are operational forces of the system are additionally compelled to plan measures and undertake activities aimed at elimination/reduction of disasters and accidents (NN 174/04, Article 5). CMRS is among the distinguished non-profit organizations dealing with crisis management preparedness, rescue and protection activities in the mountains and rivers, inaccessible areas and other emergency situations. It educates various societal groups and rescuers aiming to foster responsible behaviour and prevent accidents; performs training and exercise programmes. Volunteer firefighting societies, being part of the firefighting communities, play an indispensable role in raising crisis management preparedness through educating and training activities, organizing exercises and acquiring appropriate logistics for extinguishing fires (NN 139/04, Interview, CFA, December 2012)

The non-profit organizations take part in crisis management response as collective entities of operational forces (CMRS, CRC, CFA) or by involving individual members of particular associations that supplement NPRD's civil protection units. This engagement is in line with their formal obligations because non-profit organizations belonging to operational forces are obliged to take part in coordination/mobilization efforts and respect management authority of the NPRD when a disaster is proclaimed (NN 174/04, Article 4). CFA undertakes most of the crisis management response, having the highest level of equipment, expertise and experience within the Croatian civil security system.

Financing: Public authorities provide funding for non-profit organizations through direct budget payments from the central state, regional and local governments, through reimbursements by public enterprises and contracted programmes and activities. These revenues supplement organizations in implementing their plans and programmes through training and equipment of staff, infrastructure development and international cooperation.

Example: The Croatian Red Cross - CRC is an important non-government organization in crisis management with 130 associations/offices across the country and the national headquarter that together embraces 8,852 volunteers. These offices are spanned across regional and local levels with 20 counties, 101 towns and 9 municipal associations/offices (CRC, 2011). CRC acts in mitigating human suffering caused by military conflicts (e.g. during the Independence war 1991-1995), but also caused by great natural, ecological, technological and other accidents and epidemics. In these circumstances, CRC trains and equips teams for offering assistance, organizes emergency shelters, search service and secures drinking water, communication and technical assistance. Additionally, it reduces consequences of accidents through gathering financial means, material goods and delivering humanitarian assistance. One of the CRC's most distinguished activities is continuous informing and training of citizens about the mine threats. Finally, CRC implements first aid assistance programs, promotes and organizes voluntary blood donation, enhances health education and actively prevents spread of infectious diseases (NN 71/10, Articles 3, 8, 9, 10).

2.4.2 Role of profit-oriented organisations

Overview: Public agencies outsource civil security responsibilities to profit-oriented organizations through subcontracting to them the implementation of civil security-related activities. Namely, public agencies such as the NPRD, Ministry of Environmental and Nature Protection and Croatian Waters cooperate with companies being officially authorized for engagement in emergency situations based on public tenders (Interview, NPRD and Ministry of Environmental and Nature Protection, December 2012). Their involvement depends on specific expertise and different types of threats.

Formal role:

Legal persons whose activities may jeopardize life and health of the people/environment (companies dealing with energy/water supply or producing/transporting/storing of hazardous material) are obliged to undertake preparedness measures, equip and train staff and make operational protection and rescue plans (NN 174/04, Articles 18, 19, 20, 22, 25). Through these internal and external safety plans, companies fulfil environmental/health safety standards and outline crisis response activities. Hence, big companies like INA Oil Industry or Croatian Electric Company (HEP) are important stakeholders in protecting Croatian critical infrastructure by implementing surveillance and capacity building measures (Matika, D., Poljanec - Boric, S., 2009. pp. 8-49). Regarding public-private partnership, private companies are mostly included by conducting threat assessment and protection/rescue plans for different public agencies, like in the case of the Kontrol-biro company (Interview, Emergency Management Office Zagreb, December 2012). Additionally, companies implement education/training programmes, covering occupational health, fire-protection and environmental safety, an example being "Institute of Safety Research and Development" while Cian and Elkron deal with sanitary and food security-related measures. Regarding crisis management response, legal persons having protection/rescue expert teams are obliged to make them available at the NPRD's disposal in case of a disaster or major accident. This particularly refers to companies dealing with the energy/water supply and hazardous materials whose equipped and trained employees should become part of operational forces (NN 174/04, Articles 19, 23). Referring to public-private partnership, there are more than 30 companies engaged in floods and water pollution protection. They are engaged by public enterprises like Croatian Waters through deploying mechanization, building protection banks, etc. (Interview, State Water Management Inspectorate, December 2012). Other important actors in crisis management response are Croatian deminingcompanies like DOK-ING Demining Ltd., Mungos Demining Ltd. and Heksogen (Interview, Government Office for Demining, December 2012) and firms developing environmental accident response services in the case of sudden accidents like IND-EKO with its expertise in tackling oil spills, sea pollution and transport accidents (IND-EKO, 2007).

Financing: Public agencies finance companies through public tenders, based on the particular needs for civil security services by the central state administration bodies, state agencies, public enterprises, local and regional self-government units. Hence, there is no permanent state-sponsored funding of the private sector because it occurs on a contractual basis (Interview, NPRD, December 2012).

Example: DOK-ING Demining Ltd. is the leading Croatian demining company and one of the global market leaders in humanitarian demining niche. It develops and commercializes its own technology by producing robotic products with the main purpose of protecting human lives. It is primarily focused on humanitarian demining activities but it also produces special firefighting vehicles. The

company is in the Croatian market mainly funded through public tenders opened by the Croatian Mine Action Centre (CROMAC) where it competes with other demining companies.

3. Quality Measures

3.1 Effectiveness

Overview: The effectiveness of the system depends on the type of the crisis event and on the particular actors that are involved. Generally, the effectiveness of firefighting could be estimated as the highest due to the fact that Croatian fire brigades are well trained, well equipped and the most coordinated in the activities which they are leading (Interview, NPRD and Mol, December 2012).

In the case of serious failures of the system, there are two types of inquiry procedures – official internal and public inquiries. In the majority of cases where problems have occurred, no political inquiries were undertaken and only internal professional analyses were carried out. However, the outcomes of internal inquiries are usually not available for the wider public. Besides, a single surveillance body for objective monitoring the work of all actors in Croatia does not exist (Interview, Mol, December 2012). Political resignation based on political liability is quite seldom in Croatia.

The Protection and Rescue Act (Article 58-60) envisages only financial penalty provisions for legal persons, responsible persons in the local and regional self-governments or individuals for a misdemeanor of obligations. There is no evidence of the penalties that have been imposed in practice. However, the inspection and control of the implementation of protection and rescue activities is carried out by NPRD inspectors, and reports on such inspection activities are regularly submitted to the Parliamentary Committee for Internal Policy and National Security. In 2011 there were 1,280 inspection surveillances from firefighting inspections and 777 protection and rescue surveillances. In general, the NPRD report for 2012 estimates that regular inspection surveillance has raised the operational preparedness of the system (NPRD, 2010).

Assessment of effectiveness: As an illustration of big cases that were widely debated in public, the following examples could be mentioned:

The Kornat Island case (August, 2007). On August 30, 2007 the largest firefighters accident in the history of firefighting in Croatia happened on Kornat Island when a routine firefighting operation ended with great loss of human lives. Twelve out of thirteen firefighters (both professional and voluntary), who found themselves surrounded by fire, lost their lives and one was badly injured by high temperature. In an almost one and half century long history of firefighting in Croatia, no accident with similar consequences was ever recorded. The Office for National Security of Croatian Parliament and Mol formed a voluntary forensic investigation team composed of researchers from various Croatian universities and institutions while national institutions and agencies contributed to the official investigation. The law-court in Sibenik has appointed its own independent team of court experts to analyse the fire spread and possible accident's causes. The research team from the Forest Fire Laboratory of the University of Coimbra, Portugal has also undertaken an independent scientific investigation from meteorological, vegetation, fire spread, thermodynamics and aerodynamic points of view, but also the firefighters injuries as well as rescue operation organization.

The official explanation was that the Kornat accident was caused by a natural phenomenon known as "burning of a non-homogenous gas mixture" i.e. a high temperature burning, with fast expansion of hot gasses (see: Stipanicev, D. and Viegas, D., 2009, pp. 48). Actually, the summer of 2007 was one of the most severe fire seasons. Meteorological conditions were extremely unfavourable on the day of the tragedy, and the fire danger index was very high. Even today there are still questions related to this tragedy left unanswered, while the responsibility for the major failures that occurred bears solely on the former commander of the Sibenik County firefighting unit Drazen Slavica, who only recently went to court and whose proceeding is still underway (Vuko, 2011).

However, the Kornat Island case remains an example of uncoordinated crisis operation which was inefficient both on the prevention and response side. In particular, the fire protection was not appropriately organised, the firefighters' radio communication was not completely functional and there were some organisational failures (involvement of juveniles). Thus, the victims rescue operation in terms of crisis response was late and not well organised, indicating unpreparedness of the system for such a disaster. Although it is difficult to estimate whether better coordination of the crisis event could have reduced the human losses, the main conclusion remains that changes in system coordination are needed.

Unfortunately, there were no major changes after this case in terms of division of competences and responsibilities. Weaknesses in coordination should be reduced by the new act which is in preparation and should clearly define direct responsibilities for collaboration of action in signature crisis ("on-site commander" at operational level) (Interview, NPRD, December 2012). The National Fire Protection Strategy 2012 - 2020 was prepared in 2012 and introduced a stronger role of firefighting inspection. On the other hand, the lessons learned should help avoiding future similar accidents. The concept of such (eruptive) fire behavior should be introduced in preventive education related to forest fires in Croatia while information about the danger associated with this type of fire danger should be disseminated to people involved in firefighting interventions (see: Stipanicev, D. and Viegas, D., 2009, pp. 50-51).

The Baxter case (October 2001). 23 kidney patients died in Croatian hospitals during dialysis in October 2001. The patients died in a single week beginning with October 8, but the alarm was only raised when one clinic reported four deaths in one day (while, usually, about six dialysis patients die in a week).⁴³ As a consequence, there were calls for ministerial resignations. The Croatian health minister, Ana Stavljenic Rukavina, offered her resignation over the deaths (in spite of the fact that most of the tragic events happened after the alarm was raised). Prime Minister Racan rejected her resignation calling for an official inquiry instead. An investigation was undertaken by the Ministry of Health, police and the state prosecutor's office. The Baxter company representatives took part in the investigation. The inquiry led to the suspicion that the filters made by Baxter could have caused these tragic events but Baxter has denied any responsibility, pointing out that dialysis was only one part of the treatment process. However, the findings showed that some patients died during dialysis treatment, while others died from choking or heart problems shortly afterwards (BBC, 2001). Similarly, an independent investigation in Spain has not established any link between Baxter's equipment and its own deaths. However, after comprehensive investigation it was confirmed that a certain quantity of filters were not correct and might have caused the death of patients during

⁴³ Before this tragedy, ten kidney patients died in one week in Spain (August 2000), while undergoing dialysis using the same equipment produced by US-based firm Baxter.

dialysis. The Baxter case showed the weaknesses of the system: the flow of information at the state level was not adequate, there was no "physical" focal point equipped with trained staff for crisis management in such situation (Interview, Ministry of Health, December 2012).

The flood cases in Western Croatia (June 2010) were the highest in the last fifty years and caused significant damage due to delayed prevention and inefficient response (shortage of sand and bags, lack of coordination and communication, inadequately equipped operational units). Particularly affected were the areas of the river Sava, Mura, Drava and Danube, Istrian and Dalmatian catchment basins. The National Centre against Floods has taken responsibility for the damage and the director of the Croatian Waters has offered his resignation (Jutarnji list, 2010), which was not accepted by the decision makers⁴⁴. Following this experience the procedures for preventive action in the future were clearly defined. Namely, operational management of flood risks and flood protection measures are determined by the National Flood Protection Plan (NN 84/10) and the General Implementing Flood Protection Plan (Croatian Waters, 2011). It is the example of crisis which was followed by internal inquiries only.

3.1.2 Limits to national capacities

Croatia has never considered or requested external assistance because it has not been faced with a signature crisis. International assistance would be activated in a case of strong earthquake or accident in the Krsko (Slovenia) nuclear plant located some 20 km from the state border. The reason for such a potential request would be insufficient capacities to respond on wider civil protection demands (NPRD, 2013f; Interview, NPRD, December 2012).

According to legislation in force, the NPRD proposes to the government a declaration of a state of emergency. However, a state of emergency or signature crisis has never yet been declared (Interview, NPRD, December 2012).

3.2 Efficiency

Overall: There are no unified analyses of the efficiency of total cost of protection and rescue services in Croatia in the strategic and planning documents and annual reports.⁴⁵

Assessment and monitoring: The reform of the system in 2005 aimed to establish a comprehensive and more transparent approach with higher cost efficiency through establishing the NPRD. However, due to partly overlapping (or not clearly defined) responsibilities between national, regional and local levels regarding monitoring, approving and the reporting, the financial aspects are still not completely transparent in practice.

The Protection and Rescue Act does not warrant that the protection and rescue plans should contain an estimate of the implementation costs.⁴⁶ The current Protection and Rescue Plan (96/10) states

⁴⁴ According to the Water Act (NN 153/09 and 130/11) flood protection is managed by Croatian Waters

⁴⁵ Planning and financing of the system of protection and rescue is regulated by Articles 40 and 41 of the Protection and Rescue Act (NN 174/04, 79/07, 38/09). Protection and rescue plans at the national level are part of the Croatian Defence Plan, and they incorporate all existing national plans for different types of threats. Plans also establish material, technical resources and sources of funding proposed activities.

⁴⁶ The need for financial planning and cost analysis is underlined in the protection and rescue plans, but only as a means of financial resources to implement the plan, i.e., determining the ways and sources of financing the system of protection and rescue, without specific financial indicators.

that all participants in a protection and rescue operation are entitled to reimbursement of actual expenses of operation from the state budget. The reduction in investment in this area over the last few years and until 2015 is primarily the result of the overall efforts to reduce the budget expenditures due to the economic recession.

According to Article 35 of the stated Act, monitoring of all operational forces should be conducted by the NPRD, but it is not related to the efficiency, i.e. financial planning and management. Representative bodies of local and regional self-governments should meet at least once a year or when passing the budget, and consider the state of the protection and rescue system, including the sources and methods of financing (Article 28 of the same Act). Typically, the report on the protection and rescue system in the previous year precedes the development of a new plan. The reports at local and regional levels contain information on the work done, on the implementation of the plan from the previous year, and on the funds used for a particular purpose. Since the plans do not contain financial indicators, except for monitoring the realization of the budget, it might be concluded that there is no systematic monitoring and analysis of their effectiveness.

According to the protection and rescue items in the period 2009 - 2011, the budget is below 100 percent as a result of continuous efforts to reduce expenses. The savings in the field of protection and rescue are direct consequence of the economic crisis and the intention to rationalize budgetary expenditures at all governmental levels in recent years.

Costs of the civil security system:

According to estimates by the Ministry of Finance (Croatian Government, 2010a, p.28) the overall budget for protection and rescue (key users including other relevant sectors) ranges between 439 and 499 million kunas annually (60-68 million euro) which is some 0.4 percent of the state budget. These numbers relate to the national level only and there are no available comprehensive data for the investment in the protection and rescue system at the local and regional levels. The state budget covers the majority of costs of key bodies: NPRD, CRC, CMRS and partly CFA, and the allocations for the mentioned institutions over the last three years were about 0.2 percent of the annual state budget.⁴⁷ In 2012, 177.4 million kunas (24.3 million euro) are planned for the budgetary users in the function of protection and rescue or 4.9 percent less than the previous year, with a declining tendency of funds in future years. Out of the available budgetary sources in 2012, some 90 percent was allocated to NPRD, 6 percent to the CFA, 3.9 percent to the CMRS and 0.1 percent to the CRC.

In addition to these direct resources at the national level, the funds are planned and allocated for protection and rescue through the budgets of other ministries, such as the MoD (firefighting as part of the other tasks of the Armed Forces), the MoI, the Ministry of Sea, Transport and Infrastructure (e.g. road safety), the Ministry of Agriculture (protection from floods), the Ministry of Environmental and Nature Protection (prevention of accidents in industrial plants), the Ministry of Health, and agencies under their jurisdiction. These funds are in continuous decline, too. Furthermore, funds allocated from the budget for the CMRS and the CRC are only part of the resources available to these organizations, i.e. they are also funded from other sources, such as donations, EU funds, etc.

A detailed analysis of allocations for all segments of protection and rescue is hardly possible due to the diversity of sources. In the period 2009-2011 the allocations for protection and rescue at the

⁴⁷ In 2011 the key institutions of the system were allocated 186.5 million kunas (25.5 million euro) from the budget.

county level ranged from 0.46 percent to 1.5 percent of the annual budget (1.5 percent allocated by the City of Zagreb). In 2011 the counties have allocated about 114 million kunas (15.7 million euro) for protection and rescue, which is a decrease of 9.3 percent in comparison to 2010.

Restructuring/reforms: By 2005 Croatia had a fragmented protection and rescue system with many units in the sector whose activities overlapped, which were not sufficiently well equipped and financial sources were not spent efficiently. By reforming the system in 2005, essential progress has been made in the organization of the protection and rescue system according to the level and the example of other European countries. However, the reform has not been fully implemented, especially regarding the establishment of a transparent funding of protection and rescue services, which would have significantly increased the efficiency of the system. Therefore, one of the key goals for the next few years is the harmonization of quality of the protection and rescue system at the national level, with regard to still significant regional disparities, and financial consolidation with the aim of reduction and more rational cost management⁴⁸ (interview, NPRD, December 2012, Croatian Government, 2010b).

Privatization: Competition in the private sector in Croatia is quite large, and the market is small. The firefighting activities include more than 20 companies, about 15 companies are selling military and police equipment from mostly foreign suppliers, while jobs related to environmental protection are still in initial stages and are mostly focused on eliminating waste, etc. Over the past few years, several companies offer consulting services in the sector and are preparing protection and rescue plans. Although quality is of utmost importance, in some jobs that require special types of goods and services that should be of high quality and which must pass all possible foreign or Croatian certificates of quality, the price is usually a key factor. Although a part of the service users in this segment primarily seek to meet the legal obligations, low price is the main reason for the decision on vendors.

Major investments: The acquisition and disposal of equipment was not coordinated among multiple actors in the system. Some institutions and agencies order equipment individually. There is still no unified control and connection centre from which everyone could obtain the necessary information about available equipment. In recent years there have not been significant investments; however, there are needs and plans to increase investment in the future. Cost-benefit analysis has not been carried out for the investment projects in the sector so far.

Public perception: There were some public debates about the CM expenditures which are usually raised after a certain crisis occurs. One of the examples is the general flood in 2010 when the public raised questions on the amount of funds available for protection and rescue activities and how the money was spent on the consequences of flooding.

3.3 Legitimacy

⁴⁸ The strategy of government programs for the period 2011-2013 (Croatian Government, 2010b) assesses the Croatian protection and rescue system as satisfactory, but with the need to further strengthen the coordination. Further alignment with the EU *acquis communautaire* in the sector is stated as a special task, as well as strengthening of GIS system coordination and integration and technological development of the 112 system

3.3.1 Political support

The major criticism on the system relates to insufficient coordination and lack of clear division of responsibilities which significantly undermine the overall capacity to prevent or react to a crisis in an appropriate manner (Interview, MoI and NPRD, December 2012). One of the main reasons for it lies in an inappropriate present legal framework – i.e. the legal vacuum regarding still undefined civil protection as a category within the legal framework. The most noticeable case that supports the existing scepticism is the Kornat Island case (August 30th, 2007) which is practical evidence of the main dysfunctions of the system.

The Kornat Island case was one of the few crises that resulted in wider political debates, questions and inquiries, due to the immense public and media pressure. However, even that case has not resulted in significant legislative amendments that could contribute to the overall quality of the system (Interview, CFA, December 2012). If there is need for it, internal queries are undertaken but there is a lack of independent oversight body responsible for conducting an objective analysis (Interview, Mol, December 2012).

Several tough public debates took place in the time of some specific crises. One of them was after the general flooding in mid-2010, the highest in the last fifty years in the region. The system in Croatia was not well prepared and the response was late.⁴⁹ According to the Water Act (OG 153/09 and 130/11), flood protection is managed by Croatian Waters. Its director has offered his resignation, but it was not accepted by the decision makers (Jutarnji list, 2010). However, this case resulted in better operational management of flood risks and the immediate implementation of flood protection measures determined by the National Flood Protection Plan (OG 84/10) and the General Implementing Flood Protection Plan (Croatian Waters, 2011). In the second half of 2012 another strong flood caused the damage of some 30 million kunas and it led the government to allocate 4.5 million kunas from funds for emergency situations as a down payment for the mitigation of floods. These experiences have contributed to launching activities for reducing the risk of flooding. A multiyear program of building regulative and protective aquatic facilities and buildings for amelioration is being prepared (to be adopted by the government) for the period 2013-2017. Moreover, through the process of harmonization of water environmental legislation with the acquis communautaire, the newly prepared flood protection plans in Croatia will after 2015 become a systematic part of the river basin management plan.

Debates on crisis management structures and/or their performances regularly take place at the annual conferences of the Croatian Platform for DRR (Interview, NPRD, December 2012).

No crisis has ever led to the collapse of the government and/or resignation of responsible ministers due to political pressure.

The reform process itself has been on-going since the very beginning of the formation of Croatia's institutions for a functioning civil security system. However, the real reforms actually started with the change of relevant legislation in 2005 and establishment of the NPRD as the main executive protection and rescue body. The reform process is still underway having in mind the fact that the new legal act is under preparation (the draft is expected to be finalised by the end of 2013).

⁴⁹ Areas of the Sava, Mura, Drava and Danube rivers, and Istrian and Dalmatian catchment basins were particularly affected.

While the reform process is on-going, the debate itself is less substantial and limited to the narrow group of experts and practitioners within the system, while the general public is rarely being consulted or invited to take part in it (Interview, MoI and NPRD, December 2012). The Croatian National Platform for DRR⁵⁰ contributed to the overall debate by highlighting the need for changes within the system which can be accomplished by strengthening coordination, strategic planning and risk management at national level, building an integrated system for horizontal and vertical linking of the actors for natural disaster risk reduction, as well as stronger involvement of local and regional self-government.

The reforms were mainly initiated by experts and practitioners within the system in order to consolidate it and make it more functional. On the other hand, the process of Croatia's accession to the EU and adjustment to EU standards played important role in the reforms.

3.3.2 Legal support

There have been no major ombudsman cases related to crisis preparation and response laws or activities. However, there are two cases of the ombudsman's reaction which are worth mentioning. The first is related to environmental pollution⁵¹ while the other one is linked to protection of children in the areas which were hit by the flood in 2010 (interview, Croatian Parliament, December 2012).

One of the few preparation/response actions in crisis that has been legally challenged in national courts was the one related to the Kornat Island case. In the mentioned case, the State Attorney Office has issued an indictment against the fire commander for the area where the accident took place. In 2009, the judge panel of the county court has dismissed all the charges but a year after the Supreme Court has abolished the decision and put the case back in court. In order to collect more details about this tragedy, the MoI has established the Committee for the Kornat Accident, but the case is still in procedure.

The extent of inclusion of basic human rights and civil liberties into the civil security system has not been much debated. Namely, the character of crisis situations so far has not had to face the state apparatus choosing between the breach of human rights/civil liberties and appropriate reaction.

3.3.3 Popular trust and support

According to the results of the Growth for Knowledge (GfK) survey conducted by Croatia in 2009 (the most recent available study), the majority of Croatian citizens (87 percent) feels safe in the place of their habitat (Metro-portal, 2009).

⁵⁰ The Croatian national platform for DRR is organised on an annual basis since 2009 in Zagreb

⁵¹ Related to the need for air pollution protection in Slavonski Brod from the releases of the oil refinery in Bosanski Brod (BA), the ombudsperson for children has requested the report from ministries, agencies, local level units and the Parliamentary Committee for Environment Protection and Nature of the Croatian Parliament (November in 2012). The reason for it was vulnerability of health and life of the children due to industrial pollution of the mentioned oil refinery. Furthermore, the ombudsperson for children was invited to parliamentary sessions related to air pollution from Sisak refinery.

Table 2: Safety perception of Croatian citizens

Study of GFK Agency	
'very safe'	48%
'pretty safe'	39%
'safe and unsafe'	10%
'very unsafe'	3%

Source: GfK, 2009

As for the citizens' opinion on the way the country is managing different types of crises, according to our respondents at interviews, opinion polls on issues related to civil security and rescue have not been conducted yet (Interview, Emergency Management Office Zagreb and MoI, December 2012).

Since the Special Eurobarometer 371 on Internal Security covers only EU member states, data on the extent to which Croatians believe that the state is doing enough to manage different types of threats are not available. The only source that may be helpful is the Readers Digest Survey on 'Trust in our community', where firefighters are the first on the list of most trusted institutions in Croatia with a very high score of confidence among the population during the last two years (93 percent).⁵²

There were no noticeable consequences of crisis preparation and response to the outcome of the elections, regardless of their type (presidential, parliamentary and local).

Regardless of the fact that there is no specific statistical data on internal security as in EU Member States, the interview respondents highlighted the need for better coordination and cooperation between all actors involved in the civil security system and for raising awareness about the importance of the citizens' voluntary contributions. It is difficult to measure individual cases of voluntary engagements and their potential impact/reflection on general trust in the system, but there are a number of organizations that are an important part of it that are actually formed from citizens on a voluntary basis, such as CFA, CRC, CMRS, etc. (Interview, Emergency Management Office Zagreb, December 2012).

The way the floods were fought in continental Croatia in 2011 might be a good example of the aforementioned argument as well as of their effect on crisis management legitimacy, due to the extensive coverage of the media.

⁵² For details see Readers Digest website - <u>http://www.rdtrustedbrands.com/tables/community.shtml</u> [Accessed 31 January 2012]

4. Croatian Civil Security in the EU context

EU-state. The European Union is a relevant factor for the functioning of the civil security system in Croatia. The country has become an EU member in mid-2013 and has during negotiations been harmonising its relevant legislation with the *acquis communautaire* in the area of environmental protection. The provisions of the SEVESO II Directive (98/82/EC) have been transposed into national legislation. The Environmental Protection Act (OG 110/07) was adopted together with related bylaws (regulation and rulebook covering issues of managing dangerous substances and preventing major accidents). Through this, Croatia has also partially transposed the Directive 2003/105/EC that amends and supplements the SEVESO II Directive. The Protection and Rescue Act was also harmonized with the SEVESO II Directive. The areas related to civil security where Croatia has implemented reforms with support from the EU include water and dangerous waste management, industrial pollution control and risk management, nuclear safety and radiation protection, etc.

By entering into EU membership, Croatia has an obligation to define European critical infrastructure within its area as well as protection of such infrastructure for other member states which is in its own national interest. Creation of such a legal framework is underway (NPRD, 2013f, p.74).

State-EU. Croatia participates in the Civil Protection Mechanism and Civil Protection Financial Instrument. The Memorandum of Understanding (MuO) on Croatia's participation in the Civil Protection Mechanism entered into force in September 2009 (International Agreements NN 9/09), making Croatia the Mechanism's 31st participating state, while the country has taken part in cooperation since 2002 as an observer. The EU Civil Protection Mechanism enables Croatia to have access to the European Commission's Monitoring and Information Centre (MIC) as well as to the Common Emergency Communication and Information System (CECIS) which facilitates communication between the MIC with national authorities. Since May 2008, Croatia has participated in all activities, including inter alia the co-organisation of the Modules Basic Training programme (European Commission, 2012b). In 2014 Croatia will have to take into consideration the newly adopted legal framework establishing the Emergency Response Centre which is becoming the new "operational heart" of the EU Civil Protection Mechanism, replacing and upgrading MIC. The country will have to prepare national risk assessments and risk management plans as a precondition for the use of structural funds. Furthermore, the creation of civil protection modules will be necessary in order to make Croatian capacity available to European emergency response capacity (Kpal-Milic-Vahtaric, 2013, p 1296-1305).

Croatia has never considered or requested external assistance (through MIC) because so far the country has not faced a crisis that surpassed its national capacities. Croatia reacted to MIC requests and to Civil Protection Mechanism requests several times. The cases of sending sand bags to Hungary during floods in 2010; assistance during floods to Albania in 2010 and assistance with Canadairs and firefighting helicopters to Greece, Bosnia and Herzegovina and Montenegro in 2012 could be mentioned (European Commission, 2012c). The MIC assistance would be activated in case of a

signature crisis such as a strong earthquake or accident in the Krsko (Slovenia) nuclear plant which is located some 20 km from the state border. The reason for such a potential request would be insufficient capacities to respond to wider civil protection demands (Interview, NPRD, December 2012).

Being an EU candidate country, Croatia was eligible for Solidarity Fund assistance and received support for flooding twice in 2010. The amount was granted as exceptional assistance to natural disasters (3.8 m euro for the spring flooding and 1.2 m euro for the autumn 2010 flooding) because both cases were according to the damage not considered to be "major natural disasters" in Croatia, but a neighbouring country, as the flooding in Croatia led to a major disaster in Slovenia (European Commission, 2012d).

The EU crisis management approach is based on the principle of EU member states' responsibility to protect their citizens and the principle of solidarity in crisis situations (Kopal, Vahtaric, 2011, p. 296). Croatia is committed to the EU the concept of internal security and the line ministries are responsible for implementing activities of the Internal Security Strategy within their own competences, while the responsibility of civil protection is on the national level. The country is also taking part in consultations on the solidarity clause which is not fully implemented yet and the implementation activities are being developed on the EU level (Interview, NPRD, December 2012).

The country has participated in several simulation exercises to enhance joint capacities in dealing with earthquakes (EU TEREX in Italy in 2010; EU Danubius in Romania in 2009; SweNorEx 2009 in Sweden) and flooding (EU HUROMEX 2008 in Hungary) (European Commission, 2013; European Commission, 2012e)

Croatia also participates in a number of civil protection projects aimed at cooperation between the countries of South-Eastern Europe (SEE) funded by the EU. One of them is financed through the EU Instrument for Pre-Accession Assistance - IPA Programme entitled 'Civil protection cooperation for candidate countries and potential candidate's, aiming to bring them closer to the EU Civil Protection Mechanism and to contribute to the development of their civil protection capacities⁵³ (European Union, n.d. a). Another project was the IPA Civil protection exercise (2011-201 through which Croatia organised the CRO-FLOODS 2012 field exercise which gathered civil protection intervention teams from seven Western Balkan countries (European Union, n.d. b).

Furthermore, Croatia takes part in cooperation supported by the EU and other sources on development of the Regional Sustainable Development and Civil Protection programme in Bosnia and Herzegovina, the Croatia and Montenegro Project, with the aim to establish the first joint South East European Fire fighting Regional Centre (SEEFREC), as a mechanisms for coordination of firefighting related activities and joint operational structure in line with the Hyogo Framework with increased participation of communities and businesses in risk reduction to forest fires (SEE RDRMP, UNDP Croatia and UNDP, 2011, p.21).

⁵³ The project was implemented from 1 December 2010 to 30 November 2012, with funding of 4m EUR

Citizens' level. Croatia was not covered by the Eurobarometer Special Report 383 and there are no public opinion surveys focusing on the attitude and general awareness of citizens regarding EU coordination of civil protection, apart from issues already mentioned in this study.

5. Conclusion

What works – what doesn't:

Croatia inherited a long tradition of the former Yugoslav federation which has built and implemented an efficient civil security system. Historical legacies and administrative traditions provided a good basis for developing its civil security capabilities. The crisis management system in Croatia functioned well during the war of independence when it had an important role in organizing civilian evacuations, refugee acceptance, taking care of displaced persons, humanitarian assistance and related activities. However, the principles of civil security have been changed during its further development. The building of the CM system has occurred simultaneously with the EU and NATO integration processes which positively impacted Croatian strategic culture.

The strengths of Croatia's civil security system are highly professional and operational protection and rescue capacities particularly at central government level; well trained and well equipped forces, particularly in firefighting, with good experience in addressing forest fires, in flood crisis management and in some other areas. Besides, huge progress has been made in dealing with the mine action that Croatia was faced with during the recent war and in the post-war period. Croatia has developed humanitarian demining capacities (physical demining, equipment, know-how, and rehabilitation of mine victims) which became its comparative strength in Europe and worldwide.

The Croatian protection and rescue system needs to be reorganised. It needs more adequate coordination and a clear division of responsibilities for raising its operative efficiency. The structures and actors are well functioning, but coordination among them (particularly the commanding dimension, procedures, responsibilities and competences) is not adequately defined, causing problems in implementation. The system of crisis management is not well enough recognised. These problems are intended to be solved with the new legal act, which is under preparation and aims to clearly define responsibilities. In terms of operational forces, the coastguard remains severely underfinanced which in turn has impacted on its CM capacity and equipment. The technical capacity and human resources potentials need to be reorganised particularly in local self-government units, which are the weakest executive and implementing component of the system. This is partly resulting from Croatia's regional development imbalances. The system is facing financial problems and there is a need for rationalisation without double capacities. There is lack of unified analyses and transparency of total costs of the system and its services especially at regional and local levels, monitoring, approving and reporting on financing of certain activities is not clearly defined, costbenefit analyses are not undertaken. However, a new model of financing is envisaged to enhance transparency whereby, amongst others, the financing of local levels will be based on clear risk assessment for a certain area.

Although the information on different segments of the civil security system is relatively actively and widely distributed to the citizens, it is difficult to estimate the overall level of public perception and knowledge in the CM field since comprehensive research on citizens' opinions, views and

expectations has not been undertaken in Croatia so far. Surveys on citizens' perception of threats and government's responsibility regarding civil security are also missing. According to available data, citizens have trust in the civil security system, particularly in the police, while most of them feel safe in the place of their habitat. Education on protection and rescue is partially included in the school curricula, but there is a poor disaster risk reduction education. Citizens are willing to take part and are actively involved in rescue activities as volunteers in various organizations providing service in disaster management, such as volunteer firefighting societies and associations, mountain rescue services, the Red Cross, speleological associations, and search and rescue dog organizations. Generally, there is a lack of citizens' and media awareness regarding protection and rescue issues as well as a lack of systematic, in-depth scientific research on civil security issues in the country.

Non-profit organisations and private parties significantly strengthen the civil security system in Croatia. Non-profit organisations cover all aspects of the system and represent important complementary resources at the national, regional and local levels, forging public-private partnerships in dealing with security issues. Public agencies outsource civil security responsibilities to profit-oriented organizations and companies which are officially authorized for engagement in emergency situations through subcontracting. Big companies with specific expertise in different types of threats are important stakeholders in protecting Croatian critical infrastructure by implementing surveillance and capacity building measures.

EU value added. The European Union has been a relevant factor for the development of the civil security system in Croatia during the EU accession period. EU membership represents an opportunity for strengthening and improving the quality of the civil security system through implementing EU values and following the new achievements in this sector. The adherence to principles and guidelines of the EU Internal Security Strategy could raise the quality of crisis management practices in Croatia in terms of efficiency and internal coherence, particularly through strengthening of an all-hazards approach to threat risk assessment, reinforcing the links between sector-specific early warning and local levels. Acting in a spirit of solidarity has already been demonstrated in the cases of previous Croatian assistance to other countries through MIC but in the eventual case of a big natural or manmade disaster, it represents an important external assistance mechanism for the country. Finally, the EU could be understood as an umbrella for facilitating cooperation in civil security assistance interventions in the event of a disaster or major accident. The experience of Croatia's participation in IPA pre-accession funds on civil security is a good starting point for an efficient use of the financial resources available from EU funds.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 CROATIA

	Systems in Europe							
1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)			
1. a	ls there an official/formal definition of crisis?	No = 0 Yes = 1	1	Protection and Rescue Act NN 174/04				
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	NPRD, Mol (interview)				
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1	Constitution NN 85/10				
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	Protection and Rescue Act NN 174/04				
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)			
2.1	Cultural and historical aspects							
2.1.1	Administrative tradition							
2.1.1 .a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	Constitution NN 85/10				
2.1.1 .b	Is the political system parliamentary or presidential?	Presidential system = 2	1	Constitution NN 85/10				
2.1.1 .c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	Constitution NN 85/10				

2.1.1	Is the political system	Consociational			
.d	a consociational or a majoritarian	democracy = 1 Majoritarian	1	Political practice	
	democracy?	democracy = 2			
2.1.1	Is delegation	Top-down = 1			
.e	constructed in a top-	Bottom-up = 2			
	down or bottom-up	Both = 3	3	NPRD, Mol (interview)	
	fashion?				
2.1.2	Culture				
2.1.2	Geert Hofstede		73	http://geert-	
.a.i	country national			hofstede.com/countrie	
	cultural score - DPI			<u>s.html</u>	
2.1.2	Geert Hofstede		33	http://geert-	
.a.ii	country national			hofstede.com/countrie	
	cultural score - IDV			<u>s.html</u>	
2.1.2	Geert Hofstede		40	<u>http://geert-</u> hofstede.com/countrie	
.a.iii	country national cultural score - MAS			s.html	
2.1.2	Geert Hofstede		80	http://geert-	
.a.iv	country national		00	hofstede.com/countrie	
	cultural score - UAI			s.html	
2.1.2	Geert Hofstede		NA	http://geert-	
.a.v	country national			hofstede.com/countrie	
	cultural score - LTO			<u>s.html</u>	
2.1.2	World Value Survey's		0.08	http://www.worldvalu	Year 2000
.b	national score on			essurvey.org/	
	dimension 1 -				
2.1.2	traditional vs. secular World Value Survey's		0.31	http://www.worldvalu	Year 2000
.C	national score on		0.51	essurvey.org/	
	dimension 2 - survival				
	vs. self-expression				
2.2	Legal &				
	constitutional				
2.2.1	aspects Statutory basis				
	-				
2.2.1 .a	To what extent is the legal framework that	Highly centralized (1-2 key laws			
.a	regulates civil security	regulates civil			
	centralized versus	security) = 1			
	fragmented?	Neither			
	-	centralized nor			
		fragmented (3-5		Protection and Rescue	
		key laws	1	Act	
		regulates civil			
		security) = 2			
		Highly fragmented (6 or			
		more key laws			
		regulates civil			
		security) = 3			
2.2.1	When was the last	Provide the year			
.b	major reform in the	of the reform	2005	NPRD, Mol (interview)	
	civil security field		2003		
	undertaken?				

2.2.1 .c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	NPRD, Mol (interview)	
2.2.1 .c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1	1	Constitution NN 85/10 (Article 17 and 101)	
2.2.1 .d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	No = 0 Yes = 1	1	Protection and Rescue Act NN 174/04	
2.2.2	Political dimension				
2.2.2	On what level of	At the national			
.a	government does executive responsibility for civil security FIRST AND FOREMOST rest?	level = 1 At the regional level = 2 At the local level = 3	1,2, 3	NPRD, Mol (interview)	
2.2.2 .b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	1	Protection and Rescue Act NN 174/04	
2.2.3	Operational dimension				
2.2.3 .a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1	1	Protection and Rescue Act NN 174/04	
2.2.3 .b	Are there specialised agencies for crisis response at the regional level?	No = 0Yes = 1	1	Protection and Rescue Act NN 174/04	
2.2.3 .c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	1,2	Protection and Rescue Act NN 174/04	
2.2.3 .d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number	16-20 (4 to 5 annuall y)	NPRD (interview)	

2.2.3 .e 2.2.4	How many major exercises with an international dimension have been organised in the period 2008-2012 External dimension	Register the number	1	NPRD (interview)	*hiletorol
2.2.4 .a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	1	NPRD (interview)	*bilateral agreement with the Republic of Serbia is in the process
2.2.4 .b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	7	The official website of NPRD	
2.2.4 .c	Howmanyregional/multilateralagreementsonRESPONSEorienteddisastermanagement(i.e.notgeneralconventionsconventionsonenvironmentalprotection)isthecountry part of?	Register the number.	With all major interna tional organiz ations	NPRD (interview)	
2.2.4 .d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	0	NPRD (interview)	
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1 .a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	Protection and Rescue Act NN 174/04	
2.3.2	Information				

2.3.2	Deep the country	No = 0		Rulebook on	
2.3.2 .a	Does the country maintain a siren	NO = 0 Yes = 1		procedures of alerting	
	system?		1	the population NN	
	-,			47/06, 110/11	
2.3.2 .b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3	Rulebook on procedures of alerting the population NN 47/06, 110/11	
2.3.2 .c	Does the government have a central website with updated information on crisis events?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	2	NPRD (interview)	
2.3.2 .d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	0	NPRD (interview)	
2.3.2 .e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	0	NPRD (interview)	
2.3.3	Education				
2.3.3 .a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1	0	UNICEF and UNISDR EUR, 2011.	
2.3.3	Do societal/voluntary	No = 0			
.b.	actors offer civil emergency training?	To members/profess ional = 1 To members and limited public outreach = 2 To member ands wide-spread training programmes for	3	Croatian Mountain Rescue Service, Croatian Firefighting Association, Croatian Mine Action Centre, Croatian Red Cross (interview)	

		general population = 3			
2.3.3 .c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	0	NPRD (interview)	
2.3.3 .d	Does the government provide for a budget for sponsoring research/technologic al developments on civil security/crisis management?	No = 0 Yes = 1	0	Croatian Platform for DRR - conclusions	*these activities are not envisaged in annual budget, but occasionally supported??
2.3.3 .e	If yes, please provide the overall volume of research funding for civil security	Register the number			
2.4	Role of private sector				
2.4.1	Role of societal/ non- profit organisations				
2.4.1 .a	Do societal/non- profit actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	Constitution NN 85/10, Protection and Rescue Act NN 174/04, NPRD (interview)	
2.4.1 .b	Do societal/non- profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	2	Constitution NN 85/10, Protection and Rescue Act NN 174/04	
2.4.2	Role of profit- oriented organisations				
2.4.2 .a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	Protection and Rescue Act NN 174/04	
2.4.2 .b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	2	Protection and Rescue Act NN 174/04	
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				

3.1.2	Limits to national capacities				
3.1.2 .a	How many times has external assistance been received during a crisis?	Register the number for 2000- 2012.	0	NPRD (interview)	
3.1.2 .b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000- 2012. If there are no legal provisions for state of emergency/disast er, note NA	0	NPRD (interview)	
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000- 2012. If there are no legal provisions for state of emergency/disast er or data is not accessible at this level, note NA	0	NPRD (interview)	
3.3	Legitimacy				
3.3.1	Political support				
3.3.1 .a	How many major reforms have been undertaken?	Register the number for 2000- 2012.	1	NPRD, Mol (interview)	
3.3.1 .b	How many major national political debates on crisis management structures or performance have taken place (2000- 12)?	Register the number for 2000- 2012.	Exact data not availabl e (aroun d 5)	NPRD (interview)	*national political debate (2004) regarding promulgation of the Protection and Rescue Act; 4 conferences of the Croatian Platform for DRR
3.3.1 .c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000- 2012.	2	NPRD, Mol (interview)	(Kornat island case, Baxter case)
3.3.1 .d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0	NPRD, Mol (interview)	

3.3.2 .a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000- 2012.	1	NPRD, Mol (interview)	
3.3.2 .b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000- 2012.	0	Ombudsman (interview)	
3.3.2 .c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None = 0 Partial (legally defined leeway for operational crisis management) = 1 Extensive (e.g. no civilian jurisdiction over military actors in crisis management) = 2	0	Protection and Rescue Act NN 174/04	
3.3.3	Popular trust and support				
3.3.3 .a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man- made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	NA	Special Eurobarometer 371 (2011)	
3.3.3 .b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	NA	Special Eurobarometer 371 (2011)	
3.3.3 .c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	0	NPRD, Mol (interview)	
3.3.3 .d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011			
3.3.3 .e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	Accordi ng to the availabl e data approxi mately	Croatian Mountain Rescue Service (interview), Croatian Firefighting Association - Annual Report 2011, Croatian Red Cross - Brochure 2011	

			4		
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007- 2011	To be comple ted by UI/IFHS	http://ec.europa.eu/ec ho/files/policies/disast er_response/EUCPM_a ctivations_since_01012 007.pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007- 2011	To be comple ted by UI/IFHS	http://ec.europa.eu/ec ho/files/policies/disast er_response/EUCPM_a ctivations_since_01012 007.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009-2010 training cycle	15	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002- 2012	4	http://ec.europa.eu/ec ho/policies/prevention _preparedness/prepar edness_en.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002- Sept 2012	2	http://ec.europa.eu/re gional_policy/thefunds /doc/interventions_sin ce_2002.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	5	http://ec.europa.eu/re gional_policy/thefunds /doc/interventions_sin ce_2002.doc	
4.h	BasedonEurobarometerdata,whatpercentageofrespondentsawarethattheEUcoordinatescivil	Register the percentage	NA	Special Eurobarometer 383 (2012)	

	protection both inside and outside the EU? (Proxy for awareness)				
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	NA	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in Croatia

Pandemic influenza (H1N1) emerged in Croatia in June 2009, while the most intensive wave of patients diagnosed with the influenza virus was recorded in mid-November of the same year. The number of patients diagnosed with influenza in the 2009/2010 season was 58,234, out of which 2,510 were hospitalized and 57 died (out of which 32 were virologically verified).

24 April 2009	 WHO issues alert on new virus in Mexico and the USA
24 April 2009	
	- the Croatian National Institute of Public Health alerts Ministry of Health which has
	activated its Crisis Management Committee of the Ministry of Health (CMCMH)
	- Epidemiological service and all health care professionals are informed on new virus
	- on the basis of National Preparedness Plan for Pandemic Influenza, epidemiologists
	issue the need of preparedness for a potential pandemic to the county institutes of
	public health
	- there is a continuous communication with the media and general public
29 April 2009	 National Preparedness Plan for Pandemic Influenza is activated
	- CMCMH takes over coordination function, while the anti-epidemic function is carried
	out by the Infectious Disease Epidemiology Service and the Ministry of Health takes
	over the coordination of local crisis headquarters
30 June 2009	- first cases reported in Croatia
	- Epidemiological service implements anti-pandemic measures, stipulated by National
	Preparedness Plan for Pandemic Influenza
mid-November 2009	- Main wave of illness caused by Virus effects Croatian population
2009 27 November 2009	- Vaccination begins: priority groups
27 11010111001 2000	- media campaign against vaccination
	- CMCMH launches new communication strategy with the media – CMCMH has
	appointed 3 experts who may communicate with the media, with a prior permission of the Minister
November-	 Vaccination begins: Entire population (a total of 22 000 people have been vaccinated instead of 75 000 people and period and because d)
December 2009	instead of 75 000 people envisaged)
	2009/2010 season a total of 58 234 patients were diagnosed with influenza, out of which 2510 were
nospita	alized and 57 died (out of which 32 were virologically verified)

Source: Interview, Epidemiological service, March 2013

A crisis management committee of the Ministry of Health (CMCMH) was activated in April. The CMCMH was structurally organized within the body for coordination and management of local self-government units and to that end organized county health headquarters (CHH) in all Croatian counties. One of CMCMH departments, namely the Department for Preventive-Medical Care (PMC) was in charge of epidemic control activities. CMCMH was formed as a central state administration body tasked for crisis management and thus representing a link between existing central state administration, local authorities and professional organizations in order to ensure a *timely response* to *crisis* situations. Primarily as a management body, PMC used the following professional expertise:

- 1. The Croatian National Institute of Public Health (Infectious Disease Epidemiology Service and national laboratory for influenza)
- 2. 21 county institutes of public health (Epidemiology Service)

 113 Sanitary – epidemiological branches of the county institutes of public health i.e. hospitals and family physicians

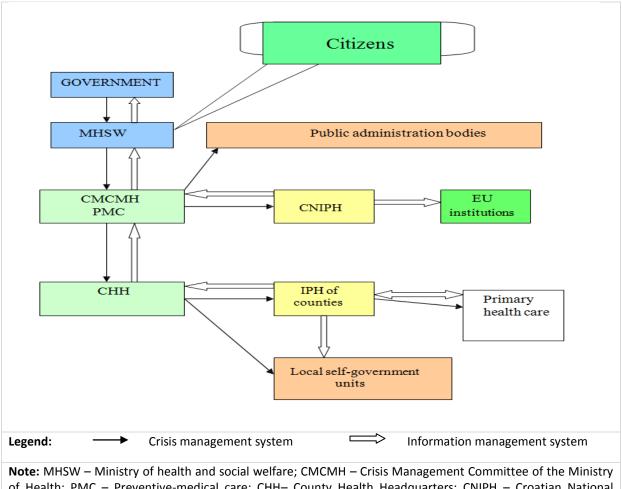


Chart: Health crisis management and information system - the event of epidemics:

Note: MHSW – Ministry of health and social welfare; CMCMH – Crisis Management Committee of the Ministry of Health; PMC – Preventive-medical care; CHH– County Health Headquarters; CNIPH – Croatian National Institute of Public Health; IPH – County Institute of Public Health (including the City of Zagreb).

Source: National Preparedness Plan for Pandemic Influenza (adopted by Croatian Government on October 26, 2005

The key strategic decisions regarding the managing of the H1N1 crisis taken by the government included:

- To establish national body tasked for pandemic preparedness planning
- To define the vaccination strategy
- To plan a comprehensive strategy for flu pandemic suppression
- To strengthen the epidemiologic and virologic flue monitoring system
- To ensure the availability of drugs, vaccines and logistical support

No investigations were undertaken in the aftermath of the crisis. Thus, the H1N1 crisis did not contribute to any political crisis nor lead to major changes regarding legislation, policies or institutions. Except for the dilemma regarding vaccination, the general public perception on the

government's dealing with the pandemic influenza remained positive. In parallel with the appearance of epidemic vaccine, the media campaign escalated against it, regardless of professional epidemiologists' instructions and explanations that it is a proven and well – known vaccine which is not harmful but prevents complications and deaths. However, media reports on potential side effects of the vaccine resulted in exceptionally low responses to the vaccination scheme and, also, a large number of patients. Although the media campaigns against vaccination were based on not-verified and not-completed information and thus directly endangered public health, no inquiry occurred. On the other hand, the epidemiologists from the Epidemiologic Service had a slightly narrower communication space than usual because any time when addressing the public, it had to be approved by the Ministry of Health. The attempts of some politicians to demonstrate the safety of the vaccine, and thus support vaccination in media, were not successful and have even worsened the situation due to the fact that the public in general do not trust politicians. In general, the whole situation was extremely dangerous and was the first of its kind in Croatia. In future events of epidemics, the media should be required to convey advice from the professional community during crisis situations in order to avoid fatal consequences.

Annex III: Resources

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No.	Institution	Month, year	
1	Croatian Mountain and Rescue Service	November, 2012	
2	National Protection and Rescue Directorate	December, 2012	
3	Croatian Red Cross	December, 2012	
4	Croatian Fire Fighting Association	December, 2012	
5	Ministry of Health	December, 2012	
6	Ministry of Environmental and Nature Protection	December, 2012	
7	City of Zagreb, Office of Emergency Management	December, 2012	
8	Ministry of Maritime Affairs, Transport and Infrastructure	December, 2012	
9	Ministry of Interior	December, 2012	
10	National Meteorological and Hydrological Service	December, 2012	
11	Croatian Parliament	December 2012	
12	Ministry of Agriculture - State Water Management Inspectorate	December, 2012	
13	Government Office for Demining	December, 2012	
14	Clinic for Infectious Diseases "Dr. Fran Mihaljevic", Zagreb	December, 2012	
15	University of Applied Sciences Velika Gorica	March, 2013	
16	Croatian National Institute of Public Health - Epidemiological service	March, 2013	
17	Office of the Ombudsman	April, 2013	

Conducted interviews

Czech Republic

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Executive Summary

The Czech civil security system was set up in its current form in 2000. Since this time, the system has not undergone any significant changes and is understood to be consolidated and well functioning. There have been no large controversies regarding any aspect of civil security. The operational ability of the system was tested mainly through floods (the most frequent crisis), especially severe cases being in 2002. The signature crisis in the collective memory dates back to 1997 when mismanaged floods led to modernization and conceptual unification of the civil security system.

Crisis management is organized on three administrative levels (central, regional and local). Principles of subsidiarity are applied. The most important role is played by the regions. Executive responsibility primarily rests at the regional level, although also at the local level, mayors are responsible for crisis planning and preparedness in their municipalities. At all levels of administration, there is a legal requirement to form a security council.

If a crisis in its extent surpasses the territory of a region, the central government can declare a state of emergency. In this situation, rights of citizens can be restricted, yet always in accordance with the Charter of Rights and Freedoms. So far, a state of emergency has been declared during floods (in 2002, 2006 and 2013) and a storm (Kyrill, in 2007). Declaration of the state of emergency is a part of functional crisis management. None of the declarations has provoked complaints.

In the Czech Republic, an all-hazards approach is applied. Civil security is provided by the Integrated Rescue Services, or IRS, which is the national operating platform to respond to crises. Its three main agencies are the fire rescue brigades, the health emergency services and the police. These usually operate at the regional level. The overall responsibility for civil security rests with the Ministry of Interior (Mol).

Popular trust in the civil security system is very high. The fire rescue bridgades are trusted almost absolutely. People are generally willing to help and volunteer. Typically, the floods create large waves of spontaneous solidarity with people helping in the affected areas. There is also a long tradition of voluntary fire brigades with over 300,000 members. These are an important part of the IRS. They are also involved in official exercises. The involvement of for-profit organizations is minimal.

When a crisis occurs, the primary method of informing the public is through sirens, including mobile devices. As complementary means, the public media – Czech television and radio – are used. The public administration is trained. At central level, the training is organized by the Mol General Directorate of the Fire Rescue Brigades (GD FRB).

The Czech Republic has established a bilateral cooperation with all its neighbors and with Hungary. Regional, multilateral and cross-border regional agreements exist to facilitate cooperation in the case of crisis. The country actively participates in the EU mechanisms for disaster assistance and at EU crisis-response exercises. The country is traditionally providing rather than receiving assistance. In one case so far, international help was requested (floods of 2002). Currently, the largest challenge to the system is budgetary cuts, especially a reduction of the number of professional firefighters which will increase the need for an active engagement of citizens.

Key Findings

- At operational level, the so-called IRS works very well. It is a platform of cooperation. Its main bodies are: fire rescue brigades, health emergency services and the police. The leading agency depends on the type of crisis, usually it is a fire rescue brigade. The system operates typically at the regional level; however, it can operate at the state level as well. The level of operation depends on the scale of the crisis.
- 2. The Voluntary Fire Brigades (VFB) are an important part of the Czech civil security system. They have a long tradition in the country and more than 300,000 members. They are also seen as a large potential also for the future. They are an official part of the IRS (as one of the "secondary" bodies) and are involved in official exercises.
- **3.** The crisis management system is relatively simple and quite efficient. The responsibilities are clear. Crisis management works well at the regional level (crisis staffs formed by both administrative as well as operational bodies' representatives). When up-scaled (subsidiarity) to central level the crisis management works also well.
- 4. The Czech Republic is very active in the provision of rescue assistance. Also in participating in international exercises.
- **5.** There is not much education of the public on what to do during crises. There was no education in the 1990s. Some was re-introduced in 2003.
- 6. Police investigations have often led "nowhere" when responsibility of larger (both state and private) companies has been undertaken after the floods.

List of Abbreviations

- CRC Czech Red Cross
- ČTK Czech Press Agency
- EADRCC NATO's Euro-Atlantic Disaster Response Coordination Centre
- ECHO EU Humanitarian Aid and Civil Protection Directorate General
- FEU Federation of European Union Fire Officer Association
- GD FRB General Directorate of the Fire Rescue Brigades
- IRS Integrated Recue System
- MFA Ministry of Foreign Affairs
- MIC EU's Monitoring and Information Centre
- Mol Ministry of Interior
- VFB Voluntary Fire Brigades

1. Introduction

The most frequent crises in the Czech Republic since its democratic transition in 1989 have been caused by extreme weather conditions, most notably by floods. In the area of industrial and transportation disasters, the Czech Republic has witnessed only five such events since 1990. These were two explosions – one methane explosion in a coal mine in 1990 and one ammunition explosion in a Soviet army barracks in early 1991. Furthermore, there were two railway accidents in 1995 and 2008 and a bus crash in 2003. Quite interestingly, nothing other than natural disasters resulted in changes in the provision of civil security. The explosions in the early 1990s were treated as risks integral to their specific fields, not threatening the general public. Similarly, the transportation accidents were not understood to be a system failure. Table 1 provides an overview of crises between 2000 and 2012 and the number of persons killed, injured, and affected, according to the available data.

Year	Crisis description	Crisis category	Damage		
			# of persons killed	# of persons injured	# of persons affected
2002	Flood (esp. in Bohemia)	Natural disaster	18		200,000
2002	Storm (Jeanette)	Natural disaster	2		
2003	Extreme temperature (heat wave)	Natural disaster	418		
2003	Bus crash at Nažidla	Transport accident	19	35	
2005	Storm	Natural disaster		3	
2005	Flood (esp. Moravskoslezský region)	Natural disaster	1		
2005	Extreme temperature (heat wave)	Natural disaster	15		
2006	Flood (both in Bohemia and Moravia)	Natural disaster	6		4,315
2007	Storm (Kyrill)	Natural disaster	4		
2008	Storm (Emma)	Natural disaster	2		
2008-06-28	Tear gas attack by rightwing extremists in Brno during Gay Pride	Terrorist attack (no responsibility claimed)		20	

Table 1: List of Crises (2000-2012)

	parade				
2008	Train crash at Studénka (EC Comenius)	Transport accident	10	100	
2009	Storm (esp. Liberec Reigon)	Natural disaster	2	12	
2009-07-09	Suitcase bomb explosion in Prague ⁵⁴	Terrorist attack (no responsibility claimed)		4	
2009	Flood (both in Bohemia and Moravia)	Natural disaster	13		14,450
2009 - 2010	Flu H1N1	Infectious disease	102		
2010	Flood (esp. in Moravia)	Natural disaster	11		1,400
2010	Extreme temperature (heat wave)	Natural disaster	12		
2012	Extreme temperature (heat wave)	Natural disaster	25		

In the Czech Republic, an all-hazards approach is applied. The relevant legislation (Act 240/2000 Coll.) defines a "crisis situation" (*Krizová situace*) as an "extraordinary event as defined by the Act on IRS"; or "a disruption of critical infrastructure"; or other danger when the "state of danger (*stav nebezpečí*), state of emergency (*nouzový stav*) or state of threat to the state (*ohrožení státu*) is declared". Under the Act on IRS (IRS) (Act Nr. 239/2000 Coll.), an "extraordinary event" (*mimořádná událost*) is further defined as "harmful impact of forces and phenomena caused by human activity, natural disasters and accidents which threaten life, health, property or the environment and which require rescue or relief works". (ibid.)

So far, a state of emergency has been declared three times in the Czech Republic: in connection with floods in 2002 and in 2006 and with the Kyrill storm in 2007⁵⁵. In all three cases a state of emergency was declared for several affected regions and not for the country as a whole.

Civil security is provided by the so-called IRSwhich is an operating platform to respond to crises. The IRSis made up from three main agencies: the fire brigades, the health emergency services and the police. These usually operate at the regional level; however, a cross-regional or national cooperation

⁵⁴ Unknown explosive device, thought to be contained in a briefcase, detonated in a restaurant. It is unknown if the owner of the briefcase was responsible for the explosion or if someone had put the explosive in his briefcase. No motive for the attack was reported and no group has claimed responsibility. (Global Terrorism Database online)

⁵⁵ Fourth time with floods in June 2013.

is also possible, depending on the scale of the crisis. The overall responsibility for civil security rests with the MoI. (ibid.)

In the Czech Republic a clear distinction between internal and external security exists. Both of these spheres are ruled by their own legislation and have different leading agencies (General Directorate of Fire Rescue Bridgades under the MoI responsible for civil security; Ministry of Defense responsible for any deployment of armed forces). Some units and resources of the armed forces can be allocated for use in rescue and relief work, however, only upon request of the fire brigade of a region, of the regional office or of the MoI. (ibid.) Military assistance has been used during the 2002 floods to help realize evacuation measures and later demolition actions and humanitarian assistance. (Samostatná záchranná rota Rakovník 2009) The military thus represents only a marginal part of the civil security system and – when used – it operates under the command of the lead agency of the civil security system, commonly the fire brigade. The military is not used for the maintenance of public order.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

The Czech Republic is a unitary state with a parliamentary system; the Parliament⁵⁶ consisting of two houses – the Chamber of Deputies⁵⁷ and the Senate⁵⁸. At the lower administrative level, the country is divided into 14 regions⁵⁹ and the statutory City of Prague. This division has been in place since 2002, when the Reform of Territorial Administration took place and the counties (76 in 1996) were replaced by regions. (Koudelka 2003) The regions are further sub-divided into municipalities. The legislative and main administrative competences rest on the national level with respective ministries. The political system of the country is best described as a majoritarian democracy with some significant aspects of consensus democracy. (Hloušek, Kopeček 2002)

The civil security system is rather decentralized. Authority and responsibility for crisis preparation and response rest at the regional level. A *state of danger* can be declared by the regional council president (*hejtman*) for the whole region or its part, for a period of maximum 30 days when there is a natural disaster, ecological or industrial accident or if life, health or property of citizens is threatened. When a crisis cuts across the regions, the central government assumes responsibility. Up-scaling to a

⁵⁶ Parlament

⁵⁷ Poslanecká sněmovna

⁵⁸ Senát

⁵⁹ Kraje

higher degree, then, is the *state of emergency* which is called by the government for a period of maximum 30 days. The reasons are the same as in the previous case; however, the scale of the disaster must be here "significant". Typically, the state of emergency is declared when two or more regions are affected by a crisis. (Krulík 2011)

Table 2: Crisis Management structure

Administrative level	Crisis management authority	Consultative and advisory body	Crisis Management Centre
Centre	Government, the prime minister	National Security Council (esp. Committee for Civil Crisis Planning)	Central crisis staff
Region	Regional president (<i>hejtman</i>)	Security council of the region	Crisis staff of the region
Municipality with extended powers	Mayor (<i>starosta</i>) of the municipality with extended powers	Security council of the municipality with extended powers	Crisis staff of the municipality with extended powers
Municipality	Mayor (<i>starosta</i>)	-	Crisis staff of the municipality

The *security council* is a permanent body. At the regional and municipal levels it consists of the representatives of the regional/ municipal office, basic bodies of the IRS, military and health bodies. Typically, it meets twice a year. The crisis staff is then called only when a crisis (or an exercise thereof) arises. The composition of its members varies according to the character of the crisis.

2.1.2 Government/societal culture

According to the Geert Hofstede's grid-group country scores, the Czech Republic shows a high score of *uncertainty avoidance* (score 74). Hence, a high preference for avoiding uncertainty is present, also associated with security as "an important element in individual motivation". (Geert Hofstede, undated) Avoiding uncertainty may then result in high reliance on rules and formal procedures with clearly defined responsibilities. On the other hand, the country scores low on *long term orientation* (score 13), applying rather a short-term point of view. This feature is, however, typical for Western societies as such. (ibid.) In this perspective, immediate solutions are preferred.

In the other three dimensions (i.e. *power distance, individualism and masculinity/femininity*) the country scores rather high (score 57-58). Hence, centralization and hierarchical organization are broadly accepted as organizing elements. At the same time, the society can be described as individualistic; people are expected to take care of themselves.

According to the World Value Survey, referring to modernization and democracy, the Czech Republic scored relatively high on "self-expression values". The country is steadily a secular one (as opposed to traditional values). (Inglehart, Welzel 2010) Religion and religious communities thus do not play an important role in the society. Czechs are also somewhat more optimistic about the dangers stemming from the environment than they were ten years ago. Problems are often claimed not to be solvable at the individual level. (Soukup 2012)

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The country takes an all-hazards approach and the key functions of the civil security system are embedded in two acts: the Crisis Act and the Act on IRS (both from the year 2000). A general anchor for these is the Constitutional Act on Security (from 1998). The leading institution in civil security policymaking is the MoI. The General Directorate of the Fire Rescue Brigade (a body under the MoI) is then responsible for civil security, including research and education. The main responsibility for the implementation and for dealing with crises rests upon the regions.

The most current legal framework governing the civil security system was established in the year 2000. Prior to this, civil security as such was not comprehensively covered by the legislation and the responsibility rested with the Ministry of Defense – a relic from the Cold War era. Mostly triggered by the floods of 1997, which pointed to the general unpreparedness of the system, the crucial reforms took place quite swiftly – beginning with the adoption of the Constitutional Act on Security in 1998 and ending with the adoption of the crisis legislation in 2000. Since then, the acts have been subject to many changes; yet none of them can be seen as a large reform, changing the operation or the whole set-up of the system. The largest change since the year 2000 was the definition of the so-called critical infrastructure and its incorporation into the aforementioned legislation. The Crisis Act now thus also involves protection of critical infrastructure as part of crisis management. The functioning or set-up of the system was not touched by this change. No reforms of the system are envisaged.

2.2.2 Political dimension

Executive responsibility primarily rests at the regional level, although also at the local level; mayors of municipalities are responsible for crisis planning and crisis preparedness in their municipalities. At all levels of administration, there is a legal requirement to form a security council. When conducting rescue or disposal works, the services of the IRS are obliged to follow the orders of the commander in place (usually from the fire brigades) or of the mayor of a municipality with extended powers or of the regional president or of the Mol. The regional president has the power to call a state of danger for the region or its part for the time of maximum 30 days with the obligation to inform the Mol. (Act Nr. 239/2000 Coll.)

If the crisis surpasses the boundaries of a region, the government can call a state of emergency. The orders of the MoI are to be followed. The prime minister has the same right with the approval of the Parliament within 24 hours. (ibid.) Unless the state of emergency (or higher) is called, the central responsibility for operational crisis management rests with the regional presidents. These are also entitled to call the state of danger for a maximum of 30 days. Under the (qualitatively higher) state of emergency, crisis management is in the hands of the MoI. The MoI is responsible for policy formulation in the area of civil security. (Act Nr. 240/2000 Coll.)

2.2.3 Operational dimension

As mentioned above, crisis management responsibility was moved to the lower levels of administration and lies with the regions and municipalities with extended powers. At the same time, the aim is not to increase the burden of the self-governing bodies where the tasks and responsibilities can efficiently be taken by the state public administration through its subordinated bodies. According to the Crisis Act, the preparedness for crises and their management is coordinated by the Mol. The GD FRB (which is a part of the Mol) ensures through its regional offices and territorial districts an efficient coordination of the preparation for crisis situations and their management at the regional, municipal and local level. The regional fire rescue brigades are responsible for crisis preparedness and management in cooperation with municipal bodies. (Plzeň city website)

At the regional level, the regional president (*hejtman*) is responsible for crisis management. He/she chairs the security council of the region (a permanent body) and the crisis staff of the region (non-permanent body, called upon a crisis or exercise thereof). Every region (the regional president's office) has a crisis management department or similar. This is (among other) responsible for analyzing the information for the regional president, informational support to the municipalities with extended powers, coordinating of crisis management and planning of the municipalities with extended powers and for analysis and evaluation of exercises for crisis situations. (Pardubice Region

website)

Humanitarian aid in the region is then organized by the regional fire rescue brigades. If the regional measures are not sufficient, help can be requested from the central level, from the GD FRB under the Mol. During crises, material help can be also requested from the Administration of State Material Reserves. Also the participation of NGOs and citizens' initiative is expected. This is coordinated by a standing working group of the crisis staff. (Conception of Civil Protection 2009)

Members of the security councils and crisis staffs, mayors of municipalities and bodies of the IRS are informed about the emergence of a crisis by the fire and rescue brigades through operational and information centers (regional and sectorial)⁶⁰. Crisis communication then runs through commercial mobile network with a negotiated priority of connection for specified phone numbers when a crisis state is declared. Routinely, information (e.g. meteorological warnings) is provided through the WAP server of the Fire and Rescue Brigades with a text-message notice. Increasingly, an Automated Message Delivery System is used for disseminating information notices and calling of the security councils and crisis staffs. (ibid.)

An instructive example is the floods of 2002 which were the most severe ones in the country's modern history. In mid-July, the meteorological situation was unfavorable, accompanied by intense torrential rains – especially in the Blansko District and the South Bohemia Region. The IRS was used; large numbers of persons had to be evacuated (1,500 people were evacuated, ca. 100 people were rescued). This period is referred to as the first wave of 2002 floods.

A second wave of flooding started on 11th August when on the upper stream of the Vltava River the water level rose due to torrential rains. Consequently, the areas of the South Bohemian, Karlovarsky and Plzensky regions were affected, followed by Prague, Central Bohemian, Ustecky, South Moravian and Vysocina regions. In the whole country, in total ten regions were affected with the greatest flooding on the Vltava and Elbe rivers. In line with the §7 of the Act on IRS (239/2000 Coll.), the Mol – GD FRB was coordinating rescue and recovery works starting from 12th August 2002.

At first, the affected regions declared a state of danger. The extent of the floods was such that it made it impossible to coordinate the rescue works only from district or regional levels. Therefore, coordination from the national level was necessary. In accordance with § 7 of Act No. 239/2000 Coll., the Mol – GD FRB started to coordinate the rescue and recovery works from 10am, 12th August 2002.

⁶⁰ See also section 2.3.2. on Information.

About this fact, as well as about the details of the central coordination of the regional fire rescue brigades, regional offices, district offices and the central administrative authorities were informed.

The crisis staff of the general director of the fire rescue brigades was called on 12th August at 2pm. At the meeting of the crisis staff, the prime minister, deputy prime minister, ministers of the interior and of regional development as well as representatives of other administrative bodies were present. Subsequently, based on the assessment of the situation, the prime minister (Vladimír Špidla at that time) declared a state of emergency for the affected areas. It was within the crisis staff, too, that the technical and material humanitarian aid from the Czech Republic and from abroad was coordinated. (Prudil 2002)

During the crisis, several specific measures and rescue actionswere conducted, including the informing and warning of the threatened population together with subsequent evacuation of people and consequent disposal measures. At all levels of administration, the crisis staffs were activated and put into operation. This enabled a managed evacuation of several tens of thousands of people. Due to the public media and the well-functioning regional warning systems, also spontaneous evacuation of tens of thousands of additional people took place without any large problems. To warn the population, the sirens of Czech Television, Czech Radio and mobile warning devices were used.

From the beginning of the crisis situation till the 31st of August, 2002, approximately 24,200 firefighters were deployed, including 5,100 members of the fire rescue brigades from all regions (4,000 members deployed directly; 1,100 deployed in operational management, in crisis staffs and in logistics and supplies provision. The rest, i.e. some 19,100, were voluntary and corporate firefighters. In sum, 123,200 persons were evacuated and a further 3,374 were rescued (mostly with the help of boats or helicopters). Foreign aid came from eight different countries and accounted for 214 rescue workers. (ibid.)

2.2.4 External dimension

The Czech Republic has established bilateral cooperation with all its neighboring countries - i.e. Germany (signed in 2000), Poland (signed 2000), Slovakia (signed 1998) and Austria (signed 1998); and with Hungary (signed 1999). All of these agreements are treaties under international law on help and cooperation in the time of catastrophes and large disasters. (MFA 2005) In addition to bilateral agreements, the country has signed regional and multilateral provisions: it is a member of the Council of Europe, the EU, NATO, the OSCE and the UN. Also the regional organization *Visegrad Group* (V4) is important. The Czech Republic is also a party to the Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations of 1998 (effective since 2006) and the 1992 Helsinki Convention on the Trans-boundary Effects of Industrial

Accidents (effective since 2002). (MFA 2006) Coordinating bodies for providing aid in the times of catastrophes in other countries are the MoI and the MFA.

In the field of nuclear safety, the Czech Republic is party to the Vienna Convention on Civil Liability for Nuclear Damage. More importantly, it is also a party to the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, Convention on Early Notification of a Nuclear Accident and the Convention on the Physical Protection of Nuclear Material (effective since 1993). (State Office for Nuclear Safety online)

The country has traditionally provided rather than received assistance. An important aspect of the aid provision related to catastrophes and natural disasters. Although a large majority of these activities are provided in a form of cash payments to implementing organizations, in-kind contributions were provided as well – such as e.g. in the case of Pakistani earthquake in 2005, when medical and rescue teams were provided. Similarly, in 2007, material for fire rescue service was provided to Albania and Macedonia. (EDRIS online)

In one case so far, international help has been requested. This was the case of the 2002 floods which were unprecedented in their scale in the modern history of the country. These floods have also raised a large wave of solidarity – both internally and externally. The offers of humanitarian aid were evaluated within the crisis staff and put at disposal of the affected areas. After discussing the issue within the central crisis staff, humanitarian aid from abroad was requested through the MFA, representation offices of the country abroad and through international organizations (NATO, UN OCHA, EU). All needs from the affected areas were able to be operatively covered. (Prudil 2002)

Besides international agreements, also cross-border regional agreements exist to facilitate cooperation in the case of crises as the floods or the storms Kyrill and Emma. This cooperation takes on different forms. Official methods of cooperation exist between the Czech Republic and Poland (signed 2002 by the Czech general director of the fire rescue bridgades and by the Polish chief commander of the National Headquarters of the State Fire Service). With Slovakia, too, a similar document (signed 2004 by the president of the fire rescue brigades of Slovakia and his Czech counterpart) exists. (Prudil, undated)

Another example is the Agreement on Mutual Cooperation between the Fire Rescue Brigade of the Karlovarsky Region and the German THW Chemnitz (in effect since 2005). Similar cross-border cooperation can be found in the border regions with all three other neighboring states. (Volf, undated) For example "protection against catastrophes" has been an integral part of the Agreement of Cooperation between the Federal Country of Lower Austria and the South Moravian, South

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Bohemian and Vysocina regions. (Dohoda 2011) The Czech region of Southern Bohemia also has similar agreement in place with Upper Austria.

Only recently, in April 2013, a framework agreement on the cross-border cooperation of the health rescue services was signed between Germany and the Czech Republic. This agreement, signed by the ministers of health of both countries, is a first of its kind in the field of health. It concerns two German federal states (Bavaria and Saxony) and five Czech regions (Liberec, Usti, Karlovy Vary, Pilsen and South Bohemia). In case of a crisis, the backbone of this agreement is the governmental agreement between the Czech Republic and Germany on mutual assistance in disasters and major emergencies. In the coming years, a similar agreement to be signed with Poland is expected. (TV RTM 2013)

At the local level in the cross-border regions, cooperation can be found as well although usually focused more broadly to include such areas as environment or regional development. An illustrative example provides the agreement on cooperation between two Czech towns, Rumburk and Varnsdorf, and their two Germen counterparts, Seifhennersdorf a Groβschönau. The agreement was signed by the mayors of these towns in February 2013. One of the areas of cooperation being fire protection and security, especially during emergencies such as natural catastrophes, floods, wild fires, etc. (Rumburské noviny 2013)

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

The crisis legislation and particularly the Crisis Act (nr. 240/2000 Coll.) stipulates the rights and obligations of the population in the state of crisis (§ 31). In this way, the right to information about prepared crisis measures to protect life, health and property is ensured. The obligations, on the other hand, are relatively generally stated and do not represent an essential part of the functioning of the civil security system. The essential obligation is to – in the state of crisis – obey the call of responsible authorities of crisis management to carry out imposed labour duty; to provide requested material means; or to accept restrictions stemming from crisis measures (art. 3). A person can reject these obligations should the fulfilling of these endanger his/her life and health or the life and health of other people or if the obligations are against the law (art. 4).

The expectations of the public towards the government are relatively high. The majority of the population feels rather safe in the present (as of the year 2005). The levels of satisfaction with the provision of security have been highest after the country entered NATO and the EU. The public is also

quite open to measures which would lower the risk of terrorist attacks if these measures do not impact too much the privacy of the people. (Factum Invenio 2005) Overall, the public highly esteems the role of the rescue forces and of the army. A positive evaluation of the armed forces was especially linked with the experience from the 2002 floods, where the army participated in rescue and recovery works. (ibid.)

According to the Eurobarometer survey (Special Eurobarometer 2012), people feel concerned about a wide range of threats – including natural disasters (51 percent of the respondents concerned), manmade disasters (47 percent) and terrorist attacks (45 percent concerned – the second highest score just after Spain). Especially the threat of terrorism was taken up by the politicians and the media resulting e.g. in moving Radio Free Europe as a potential terrorist target away from the center of Prague. Threat perception among public varies rapidly in reaction to crises both home and abroad. In 2009, 58 percent of the people thought epidemics to be a large threat. In 2008 it was 31 percent; in 2010 – when the H1N1 flu turned out to be under control – only 24 percent held epidemics to be a large threat. (Frank, undated)

People are generally willing to help and to volunteer. There is a long tradition of voluntary fire brigades with over 300,000 members (see section 2.4.1. on societal sector). Since democratization in 1989, voluntary activities started to develop and to be organized on a professional basis. Volunteering is now seen as an integral part of the new 'information/ post-industrial' society in the Czech Republic. (Frič 2010, 47-48) The new volunteers exhibit a short-term, occasional approach to volunteering. (ibid. 56) Typically, the floods create large waves of solidarity with people helping in the affected areas. E.g. immediately after the floods in 2002, 45,000 donors and volunteers were registered. Other thousands of people were donating through phone-lines or SMS messages. (Marek 2003)

2.3.2 Information

The primary means of informing the public about an immediate crisis are sirens, including mobile devices. The "general warning" tone (oscillating tone lasting 140 seconds) is currently used for all kinds of danger. Prior to 2002, different tones were used in connection with different hazards. The warning signal is followed by verbal information (e.g. "danger of flood wave", "chemical accident", etc.). There are about 6,000 sirens installed in the country. (Kovařík, Smetana 2006) In places not covered by the warning signal, the municipality ensures alternative warning through mobile devices of the IRS (fire rescue brigade of the region, police of the Czech Republic) or by a personal notification (through members of the voluntary rescue brigades of the municipality or municipal police).

As complementary means, the public media – Czech television and radio – are used. According to the Crisis Act (§ 30, Act Nr. 240/2000 Coll.), television and radio broadcasters are obliged to disseminate information about the state of crisis when this has been called upon and about the ordered emergency measures. The broadcasters have to do so immediately, upon request of the crisis management bodies. This service is not paid or refunded to the broadcasters.

So far, the use of the Internet for warning or informing the public has not been large. Similarly, the use of social media has not been apparent. The government's office started its own Facebook group only in 2010. It has not been used for updating on crisis events yet. Regional offices, too, joined Facebook mostly in mid or late 2011 and are not widely followed as of the time of writing of this report.

No single webpage with comprehensive information on civil security exists at the national level. The webpages with information have always been issue-related. This can be illustrated e.g. by the official webpages related to H1N1 pandemics (<u>http://pandemie.mzcr.cz/</u>) or the flood information system on the Internet. At the regional level, the information on civil security, including an update on the current crisis situation, is always a subpart of the official webpages of a region.

When a crisis appears, warning is technically provided with the help of the so-called Integrated Alert and Warning System⁶¹ – a system of notification centers located with the fire rescue brigades and other entities involved in the integrated warning system. The system was designed to speed up and improve possibilities of informing citizens in crisis situations. Information comes to the centers from the crisis staff or from rescue services or other entities. Information is collected and notification to citizens is then made through sirens, TV and radio, outdoor speakers and sent through mobile phones and pagers. The notification centers operate at four hierarchical levels: central level (placed with the GD FRB for emergencies beyond the territorial reach of the regional centers; regional level; local level (placed with territorial departments of the fire rescue brigades); and the fourth level (located e.g. with the controlling departments of facilities which can impose serious damage, such as chemical plants). (Kovařík, Smetana 2006; 15-22)

2.3.3 Education

According to the Conception of Civilian Protection (Conception 2013), the authorities are responsible for raising awareness about civil security among the public. The *education on civil security* (called "civil defense" at that time) was completely abandoned in the early 1990s with no substitution,

⁶¹ Integrovaný výstražný a varovací systém

resulting in relatively low knowledge of the population about what to do in the state of crisis. Only the terrorist attacks on the USA in 2001 and the large floods of 2002 brought the need for prevention and information back on the agenda. Since 2003 the education on civil security has been again on the primary and secondary schools' curricula.

Recently, the goal of creating a program for education of the population has been set. (ibid.) The main responsibility rests with the MoI, in collaboration with the Ministry of Education, Ministry of Health and the Ministry of Transportation. Typically, the fire brigades are involved in the education of both public and administration. In 2009, the proposition was made to incorporate the topic of civilian protection into the curricula of pedagogic faculties of universities.

The education of teachers to teach the topic of civil security is also supported by the fire rescue brigades. In this way, 1,666 teachers were trained in 2011 in 126 different courses. In sum, more than 16,200 teachers were trained by the year 2012. (HZS ČR 2012) Also, governmental employees at all levels are trained in special courses on civil security management. In total 8,007 servants were trained in 2011. The participation of the mayors of smaller municipalities, however, is rather low compared to others. (ibid.) This can be explained by the fact that for the mayors – unlike the local government officials – this education is not compulsory.

At the central level, the training is organized by the Mol – GD FRB in cooperation with the ministries of Defense, Health, Finance, Environment, Administration of State Material Reserves, Police Presidium and the Security Policy Department of the Mol. The provision of education in the field of crisis management is obligatory by law. Since this legislation entered into force (in 2001), the training has been organized once in every election period (usually after communal elections). So far, the training for mayors has taken place in 2003, 2007 and 2011. (Svitáková 2011)

In the past, the government did run some educational campaigns, including TV spots. So far, the last TV spots directly related to civil security were aired in 2010. (Initiative for Civilian Protection online) In the years 2009-2010, educational spots were aired with the information on important phone numbers (campaign called "What to do When..."). At the regional level, the public is educated through regional press materials, and local radio and TV stations. For example, the Fire Brigades of the Moravskoslezský Region signed a license agreement with two local cable TVs. Six spots on fire and civil protection were made. (HZS ČR 2012)

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organizations/NGOs

In the Czech Republic, an important role is played by the VFB. In 2012, this organization had 345,455 members (including 46,426 children and youngsters). There are 7,810 VFB at the municipal level, 77 district units and 14 regional units of VFB. VFB are typically established by the municipalities and financed mostly through grants from the MoI and the regions. The role of the VFB is also in rescue works and civil protection.

VFB are an important part of the IRS. Especially during floods, the VFB participate in evacuation, warning and humanitarian help. They are also trained and involved in exercises of the IRS. The members of the voluntary firefighters are also assigned to enterprise units such as chemical plants. (Union of Fire Fighters online)

Another important institution from the civic sector is the Czech Red Cross (CRC). In civil security, it focuses most importantly on first aid – both in a form of educational and training activities as well as actual provision of first aid at different events; search for missing persons after emergencies; and on humanitarian aid and disaster relief. In the field of first aid, the CRC is the main actor from the civic sector⁶². The number of members and volunteers (excl. employees) was 27,060 in 2011. The organization operates on the whole territory of the country. It has 70,381 members working in 1,712 local groups. Local groups (municipal level) are the cornerstone. On a higher level, there are 76 district associations. At the top of the organization is then the National Society of the CRC. There are no regional associations – one of the district associations is authorized to deal with regional institutions in every region. (CRC online)

The CRC was typically involved during the floods of 2006: The main crisis staff of the CRC was called on 29th March 2006. The crisis staffs of the local groups cooperated with local authorities in the affected territories, e.g. in České Budějovice, Český Krumlov, Písek, Prachatice, Jindřichův Hradec, Liberec etc. The Red Cross initiated a collection aiming at post-flood assistance to the people. (CRC 2006)

There are also other NGOs active partially in the field of civil security – mostly in organizing money or material collections and voluntary help. The best examples here are the ADRA organization and Caritas which participated in the post-flood assistance. However, the scope of these organizations is much broader and the assistance during crises is not their main focus. There is no official data on the exact number of active members. Typically, all of the mentioned NGOs are not directly financed by

 $^{^{62}}$ Some other local civic organizations focusing at first aid exist as well (e.g. the professional Association of First Aid based in the town of Kladno in central Bohemian Region), yet they are far less important – e.g. the mentioned one has 15 members). (http://first-aid.cz/)

the state but they get part of their funding through projects which are financed by the state (by the ministries of Interior and Foreign Affairs in this case).

2.4.2 Role of profit-oriented organizations

Legal persons are obliged to prepare for emergencies and to participate in the preparation of emergency plans and to provide assistance during a crisis when requested. They can be asked to do so by the regional president or by the mayor of the municipality. (Act nr. 240/2000 Coll., §29) Cooperation and crisis preparedness, however, have not always gone smoothly. E.g. during the floods of 2002 the Spolana Neratovice plant was flooded, leading to leakage of chloride. In the vicinity of the chemical plant, the highest degree of chemical danger had to be declared. Police closed roads and firefighters sprinkled the area with water mist which would "pull" the gas to the ground. Although the responsible company was sued for the leakage, the case was put to a halt. (Baroch 2004)

In the field of civil security provision, the absolute majority of bodies are public ones. As an example of private bodies, for-profit health rescue services can be mentioned. These are typically smaller than the health rescue services which are established by the regional authorities. They specialize e.g. in the transportation of patients or assist at various cultural and sporting events (paid by the organizer). Usually, one such organization exists in every region although they do not necessarily have an agreement with the regional authority or all health insurance companies.

Being an integral part of the IRS, the flight rescue services must be mentioned as well. Currently, there are 10 stations facilitating air rescue. This represents a very dense network (one of the densest in Europe) covering an overwhelming majority of the territory of the country. (Fojtík 2011) The flight rescue services are operated both by private (eight stations) and by state (two stations) bodies. The latter ones are operated by the Police Air Service and by the army. (DSA undated) So far, there have been no criticisms on the functioning of the flight rescue services.

The role of private (for-profit) bodies in other spheres of civil security is slightly more complicated. During the floods of 2002, for example, there was a large group of relatively well organized citizens who in many cases voluntarily participated at the rescue actions, although they were not explicitly asked to do so. These were some 54,000 workers of private security services. Due to the absence of legal regulation of the activities of private security agencies, the integration of these into the IRS remains problematic. (House of Representatives 2002) It has to be noted, however, that this legislation is currently under preparation by the Mol. (Novák, undated)

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Throughout the first half of the 1990s, civil security was a marginal political topic and lacked any public interest. After the floods of 1997 which proved the system to be malfunctioning, a report of the Mol was conducted and its conclusions used: Large reform followed, introducing new legislation and system lay-out, bringing the agenda of civil security to a newly established GD FRB under the Mol. The enaction of the new legislation went quite smoothly, without any significant controversies or opposition. Since this time (since the year 2000) no major reforms have taken place.

After the 1997 floods, the whole crisis system was modernized and conceptually unified. The 2002 floods serve as an example of a well-managed crisis situation after which nothing (important) had to be changed (Špidla 2012; Fire Rescue Brigade 2012). The 2002 floods constituted a big "test" of the system and are generally perceived by both politicians and practitioners as well managed. (Špidla 2002)

With respect to floods, no professional inquiries have been initiated at the state level. There was e.g. a commission of the Municipality of Prague – established to investigate responsibility for the flooding of the Prague Metro in 2002. The conclusions of the commission were, however, quite ambiguous and only "the water" was blamed. Also, police investigation led to no effect. There were discovered some shortcomings; however, it was impossible to point to any particular person responsible. As a result, nobody was accused of the crime of public threat. Two officials from the Prague Public Transit Company were dismissed but in the view of some these were only scapegoats. (Otto, Hrbáček 2004)

Overall, three police investigations were initiated after the 2002 floods: with respect to the Prague Metro flooding; investigations into possible criminal liability for improper management of runoff range of retention reservoirs of the Vltava Cascade; and with respect to chloride leakage from the Spolana Chemical Company. (Fiala 2003)

After the floods in 2010, an Evaluation of Floods was published under the Ministry of Environment. (Brtníková 2011) Overall, the report assessed the whole approach very positively with no significant flaws in functioning. The floods were understood as very well managed, especially at the regional level which was the main level dealing with the disaster. Coordination and cooperation was positively assessed. So was the functioning of the IRS. The measures taken were sufficient and the system for crisis management has proven to provide a sufficient support. What turned somewhat problematic was the neglect of the law by private companies and land owners – in particular not preparing the "flood plan" as obliged by the law. (ibid., 44-45)

There is no standing committee to assess or evaluate crises. Also the number of political inquiries regarding any aspect of civil security is very small. With respect to floods, only in 2003 a written deputy interpellation on the prime minister was stated asking for the analysis of the causes of the 2002 floods. In January 2011, the minister of interior was subject to interpellation in the case of the project of the National Center for Crisis Preparedness (which is to be established in 2013). In oral interpellations, the topic of budgetary cuts and their impact on the functioning of the IRS was predominant. Three times the flu pandemic was brought up. The functioning of the system as such was never questioned in the period between 2000 and 2012. (Interpellations online)

3.1.2 Limits to national capacities

The only cases when foreign assistance was requested were the floods of 2002 described as "thousand years' water". The assistance was requested through NATO and through the representative offices of the Czech Republic abroad. Besides these, Cyril Svoboda, then minister of foreign affairs, also dealt with the EU and the UN. (Pokorný, undated)

As the country was not yet member of the EU, NATO was an important organization to turn to: the government requested assistance through the Euro-Atlantic Disaster Response Coordination Centre (EADRCC). In particular, portable dryers and pumps were requested together with vaccines against Hepatitis A, chlorine-based disinfectants and repellents. (NATO 2003)

This assistance (albeit important) was not crucial for managing the crisis. Most importantly, the aid was used to enhance the extant material capacities – most notably dryers and vaccines which were needed in large quantities. Due to the extraordinarily large scale of the floods, there was a shortage of dryers and vaccines which were simultaneously needed in big quantities in many regions. (Špidla 2002)

Foreign help was delivered quickly. In sum, some kind of aid came from almost fifty countries. (Krul et al. 2003) The details of this assistance are provided in Table 2. At the same time, e.g. the firefighters from the Znojmo Region (south-east of the country) were helping with the floods in Austria, thus the country was a receiver and a provider of help at the very same time. (Špidla 2002)

Table 2: Foreign help granted to the Czech Republic with respect to floods of 2002					
European Commission	60 million EUR				
International Federation of Red Cross and Crescent	1.7 million CHF to the victims of floods in the Czech Republic, Slovakia and Rumania				

Poland	50,000 PLN from the Caritas Polska	26 terrain vehicles, 7 dozens of
	charity	Polish firefighters for dealing with
		the consequences of floods
USA, American Fund for Czechoslovak Relief formed by US citizens of Czech and Slovak origin.	50,000 USD	Vaccines, disinfection, 2 georadars
Belgium		14 pumps, 8 dryers, 2 electric generators
Greece	100,000 EUR	3 firefighters, 50 water pumps
France		10 rescue workers, 200 pumps
Denmark		12 experts with pumps, 3 electric generators
Sweden	4 million SEK	8 experts with 150 pumps, 50 dryers, 2 georadars
Slovakia		61 pumps, 9 tons of Calcium hypochloride, control chemical laboratory
Finland	200,000 EUR	35 dryers, 227 pumps
Tai-wan	100,000 USD offered to cultural heritage restoration	
Netherlands	100,000 CZK given to the CRC, 50,000 to the Prague ZOO	5,000 vaccines
Germany		Norimberg Firefighters with water pumping equipment, 75 Firefighter from Frankfurt/Main, 27 fire engines
Ireland	200,000 EUR	
Norway	8.5 million CZK	
Switzerland	20,000 CZK	100 pumps, 80 dryers, 4 generators, disinfection
Great Britain	100,000 GBP	pumps and dryers
Italy		2 army aircraft with technical material, 376 dryers, 85 pumps
Croatia		truck with 20 pumps
Slovenia		truck with 20 water pumps

Israel		50 pumps, 1,000 kilograms of baby food, 500 blankets, 200 kilograms
		of plastic bags
Canada	50,000 CAD for the CRC	
Luxembourg	500,000 EUR	2,000 vaccines
Japan		material aid worth 5 million CZK
Spain		40 dryers, 10 tons of disinfection,
		1,000 vaccines
Latvia		1,048 vaccines
Bulgaria		20 tons of chemical detergents
	Source: Krul, P., Hornová, M	I., Jachková, E. Eds. (2003), based on ČTK data

So far, a state of emergency has been declared four times (floods 2002, 2006, 2013 and storm 2007). All these were typical crises for the country. A state of emergency is declared almost automatically, when large territories (i.e. many regions) are significantly affected by a crisis. The aim is to adjust the level of crisis management to the scale of the crisis in the logic of subsidiarity. Hence, the declaration does not mean a failure of the security system but is an integral part of its functioning.

3.2 Efficiency

If we look at the so-called sectorial breakdown of the state budget, the civil security issues belong under group 5, *security of state*. The group is further divided into sections: *defense; civil preparedness for crisis situations; security and public order; legal protection;* and *fire protection and IRS*. (MFI 2013) The budget for these sections is outlined in Table 3.

Table 3: Group 5 – Security of State: Budget in 2012.

Section of the Budget of the Czech Rep.	Budget in 2012 (in billion CZK)	Share of the total. expenditure for 2012
Defense	34.6	2.9%
Civil preparedness for crisis situations	2.3	0.2%
Security and public order	35.9	3.0%

Legal protection ⁶³	19.5	1.6%		
Fire protection and IRS	6.8	0.6%		
Source: Ministry of Finance 2013, p.9				
*for 2013 no major (more than 0.1) changes in the share structure are envisaged				

In 2011, the expenses on the budget group 5 were 101.1 billion CZK in total. In comparison with the year 2010, this meant a decrease by 10.9 billion (i.e. by 9.7 percent). On the overall budgetary expenses, the share of security was 8.7 percent (9.7 percent in 2010). On the fire protection and IRS, 7 billion CZK was spent in 2011 (an amount smaller by 1.4 billion than in the previous year). The absolute majority of these means went to professional firefighting bodies (6.4 billion CZK). The expenses for education and technical equipment were 0.3 billion CZK; 0.1 billion CZK went to the VFB. Within civil preparedness for crisis situations 2.1 billion CZK were allocated in 2011 (0.2 billion less compared to 2010). Most of the resources were spent on acquisition and protection of state material reserves (1.8 billion CZK), including oil reserves and emergency supplies which are stocked for 24 various predefined crisis situations. (Ministry of Finance 2012a; Administration of State Material Reserves online)

It is necessary to underline that the budgetary sections here represent the spending at the central level. Regarding the regional level, no comprehensive information exists. For example fire rescue brigades get - in the frame of multi-source financing – regulary contributions from the region. Also, the VFB are co-financed from the regional budgets. Regional budgets are the main source of financing for the Health Rescue Service. (Pfeiferová 2011) This, however, does not mean that the public health is completely excluded from the budget. The above mentioned section on civil preparedness also includes resources appropriated from the budget of the Ministry of Health. In this way, e.g. in 2010 some 377,000 CZK were spent on preparedness of health rescue workers; 11.8 million were devoted to selected faculty hospitals⁶⁴ for running of transfusion centers and for increasing capacity of burn medicine centers (a task given by the State Security Council). (Ministry of Health 2011; 41)

According to the act on IRS, a reserve for extraordinary expenses has been created. In 2013, this reserve was 100 million CZK. The same amount (i.e. another 100 million CZK) is also taken as a reserve for managing crisis situations, their prevention and dealing with their consequences, as

⁶³ Note: Covers the functioning of courts, Institutional Court, prisons, etc.

⁶⁴ Faculty hospitals are state-funded organizations and founded by the Ministry of Health.

stated by the Crisis Act. (Act Nr. 504/2012 Coll.) The size of this amount is held constant – e.g. in the years 2010 and 2011, this was the same.

Due to the financial crisis, the budgetary cuts also hit civil security, resulting especially in reducing investments. (John 2011) Even the reduced budget, however, was not overrun. There has been no large public debate regarding the expenditures in this sector. The cost-saving measures are general, concerning all functional levels. Although there is only very little involvement of for-profit organizations in the provision of security, privatization is not considered.

3.3 Legitimacy

3.3.1 Political support

The 1997 floods were a trigger for major changes and new legislation. There was political consensus about these changes. Since the year 2000, no major reforms have taken place and the system is understood to be well-performing. The topic of security has never been subject to large political debates. Some exception has been regarding the debate connected with the threat of terrorism (debate on the moving of Radio Free Europe in the center of Prague as a potential terrorist target). The terrorist attacks in the USA in 2001 stressed the importance of crisis preparedness and of the health emergency services. As a result, the minister of health was integrated into the National Security Council in 2002. (Fišer 2006)

Recently, the government asked the Supreme Audit Office to include control of the Administration of State Material Reserves into the plan of activities for 2012. This should include the effectiveness of spending state resources – especially at the control of already existing contracts, their profitability for state and enforcement of contractual penalties. (Lékó 2012) Also, in 2011, the Ministry for Regional Development allowed examination of the usage of grants (worth 760 million CZK) which were divided among municipalities after the floods in 2009. The anti-corruption police prosecuted nine mayors and two entrepreneurs who cheated by drawing off grants for natural disasters and willfully overestimated the costs. (Nohl 2011)

The aspect which is seen currently as problematic is the financing of the health rescue service. In the letter to the minister of health in 2012, the chairman of the Association of Medical Rescue Services pointed to the center-regions tension in financing these services. (Slabý, undated) Here, however, it is problematic to distinguish the day-to-day operation from the states of crisis. Health provision during crises does not raise any serious debates.

3.3.2 Legal support

With respect to the floods, in sum two petitions were delivered to the court by citizens. In both cases, the case was about suing the state for damage compensation. (Profipravo online) These were neither

large nor newsworthy cases. With respect to civil security or the functioning of the civil security system, no petitions to the ombudsman were submitted. (Ombudsman online) After the floods of 2010, several entrepreneurs in the town of Chrastava filed a criminal complaint against the state company *Elbe River Basin* which allegedly neglected its duties. Also mayors of the towns of Chrastava and Nová Ves demanded an explanation from the company. (ČT24 2010) In the end, no accusations were made.

Also the debate about a possible shooting down of an airplane hijacked by terrorists was neither large nor intense. The head of the Constitutional Court was asked for an analysis of the legal system. No legislation was changed. Under the extant Czech law, such a plane theoretically can be shot down if this damage will prevent greater damage. The responsibility lies with the minister of defense. (BBC 2002)

Special legal conditions apply when a state of emergency is called (so far four times⁶⁵). The duration of the state of emergency is always limited (maximum 30 days with extension possible only with the consent of the House of Representatives). Along with the declaration of this state, the government must strictly delineate which rights will be restricted (in accordance with the Charter of Rights and Freedoms) and to what extent (e.g. during the state of emergency after the 2007 storm, the access to forests was prohibited in certain regions). Declaration of the state of emergency is a part of functional crisis management. None of the declarations has so far provoked complaints.

3.3.3 Popular trust and support

Natural and man-made disasters are perceived to be a relatively large threat. They are seen as a threat to national security by 22 percent of the people (EU average is 11 percent). (Eurobarometer 2011) In 2008, a representative survey showed that most people are afraid of traffic accidents (39 percent very afraid, 39 percent somewhat afraid) and of fires (28 percent very afraid, 36 percent somewhat afraid). This threat perception contrasts with natural disasters like floods or storms of which only 19 percent are very afraid (35 percent somewhat afraid). The threat of terrorist attacks scored even lower (11 percent very afraid, 18 percent somewhat afraid). (STEM 2008)

The signature crisis in the Czech collective memory remains the flood of 1997. No crisis thereafter has been perceived as a systemic failure. No crisis has had an impact on election results nor has become a topic in an election campaign. After the largest floods in 2002, the then governing party was re-elected in the next election period.

⁶⁵ 2002, 2006,2007 and 2013

Despite the wide range of perceived threats, popular trust in the civil security system is very high. The organization of police work during the floods of 2002 (dealing with consequences, cooperation with other bodies of the IRS) was considered to be good in public opinion. (Fiala 2003; 5) The fire rescue brigades are trusted almost absolutely (found definitely trustworthy by 64 percent of population and 0 percent finding them untrustworthy). In contrast, the army is definitely trusted by 20 percent of the people (47 percent finding it rather trustworthy). The police are definitely trusted by only 11 percent (rather trusted by 36 percent and definitely not trusted by 16 percent). (STEM 2008) It has to be noted, though, that the police were here assessed overall and not as a part of the IRS. A high level of trust to the medical rescue services can be inferred from a survey about peoples' opinion on medical doctors and pharmacists. (Factum Invenio 2011)

4. Czech Civil Security in the EU Context

The Czech Republic is actively represented in the EU mechanisms for disaster assistance Monitoring and Information Centre (MIC) and an active provider of help. The main contributing actor is the fire rescue bridgades. The country regularly contributes to the actions organized through the MIC as well as through other international organizations (NATO, UN, etc.). In 2011, based on an MIC request, an expert was sent to Japan to command the coordination and evaluation team of EU-MIC. In 2010, help through the MIC was sent to Poland; and also to Hungary and Slovakia in the same year (the last two cases did not go through the MIC). In 2009, through MIC, help to Moldova, Namibia and Tajikistan was realized. In 2008, foreign humanitarian aid was provided by the Czech Republic six times material was transported and delivered by the members of the fire rescue bridgades. In connection with the 2008 floods, help was delivered to Romania, Ukraine and Moldova. In 2007, material humanitarian assistance was given to Albania and Macedonia after large forest fires in these countries in July 2007. In 2006, through the MIC, assistance was granted to the Philippines. In the same year, 48 members of the fire rescue brigades were made available for Spain to help with forest fires. However, due to a change in climatic conditions, Spain rejected the help offered. In 2005, rescue work was delivered after an earthquake in Pakistan and material assistance granted to Sweden (after a snow storm), Romania and Bulgaria, Serbia and Montenegro (after floods). In 2003, rescue assistance was sent to Algeria, France (which asked for help through the EU) and Iran. (Czech Emergency Response Team online; European Commission, undated)

Since 2004, the country has regulary participated in EU crisis-response exercises. These include EUDREX (October 2004), EUPOLEX (June/July 2005), EURATECH (April 2005), ALBIS (May 2008), EU COMMAND POST (May/June 2010), EU CARPATHEX (September 2011), EU COMMAND POST (November 2012) and TARANIS (June 2013). The range of these exercises varies from floods and

earthquakes to chemical, biological, radiological and nuclear threats. (European Civil Protection online) the Czech Republic also takes part in other international exercises, such as the MODEX exercise of civil protection modules organized by the Falck Company in Denmark in January 2013 where the Czech Trauma-team participated. The country participates in the provision of aid under the EU Humanitarian Aid and Civil Protection Directorate General (also known as ECHO). (EDRIS online) The Czech Republic also participates in the EU exchange of experts programme. Under the theme *Improve Crisis Management/ Stronger EU Disaster Response* the country was a lead country in 2012. (FEU 2012)

Contrasting with the actual activity of the country, the citizens seem rather unaware of EU coordination of civil protection inside and outside the Union (23 percent claiming to be aware of this co-ordination). The Czech public is very well informed with respect to the emergency 112 number (it is known to 58 percent of the population - the highest percentage in Europe). More than one half think that citizens are sufficiently informed about the existence of this helpline. (Fire Rescue Brigades 2009) Although natural disasters were recognized as an important challenge to EU security (Eurobarometer 2011), the Czech respondents do not tend to agree that the EU needs a common civil protection policy (only 35 percent agree - the third lowest from the countries surveyed). (Special Eurobarometer 2012) This, however, can be explained by the general perception of well-functioning of the Czech civil security system.

5. Conclusion

Floods are both the most important and most common threat to the Czech Republic. The civil security system has adapted to this kind of threat quite well. The trigger for setting up a comprehensive civil security system was the damaging and mismanaged flood of 1997. After this, comprehensive legislation on civil security and crisis management was adopted for the first time. Also the responsibility was shifted from the Ministry of Defense to the Mol, signifying a definitive break-up from the past and from the concept of civil defense. The military now plays only a secondary, supportive role in the system, always under civilian command.

The civil security system was newly designed as universal (with an all hazards approach) and it seems to be able to react reasonably well to new and more unusual kinds of threats as well. This was the case of the Central European gas crisis in 2009 when Russian-Ukrainian disputes resulted in cut-offs of the gas supplies transported through the Ukrainian territory. The Czech Republic was then able to sustain operation of its industry and heating facilities by using its strategic reserves. Moreover, help was provided to Slovakia which found itself in a similar situation and declared an emergency. With respect to the H1N1 influenza, civil security was assured as well, yet the government might be seen as somewhat over-reacting when purchasing large numbers of vaccines which remained unused.

Once the current form of civil security system was established in the year 2000, there have not been any significant changes to it. The largest flood of 2002 successfully proof-tested the system. Also floods in 2006 and 2010 were managed without any larger problems. The provision of civil security was viewed in a positive light in all these cases by politicians, practitioners and the public. Since 2000, none of the crises has been perceived as a failure.

The public regards rescue services, especially the fire rescue brigades (the most important actor here) very highly. Among the experts as well as politicians a consensus exists about the relatively good performance of the civil security system. Also, therefore, civil security does not belong to the list of hotly debated topics in the country. Overall, there have been no voices raised on the necessity to transform or reform the system of the provision of civil security. Civil security has its fixed place in the state budget, as well as in the budgets of the regions and municipalities with the state budget being the most important one.

In case of crisis, the public is immediately informed through sirens, mobile devices and public media. The so-called Integrated Alert and Warning System also works well. Expectations of the public towards the government are relatively high. At the same time, people are generally willing to help and to volunteer. Typically, the floods create large waves of solidarity with people spontaneously helping in the affected areas. A downside has been education of the public. The *Education on civil security* program was completely abandoned in the early 1990s and returned to schools' curricula only in 2003. This might cause problems should any less common crises appear. Education of public administration, on the other hand, is organized regularly and is required by law. At the central level, the training is organized by the Mol – GD FRB

In the Czech Republic, a very important role is played by voluntary firefighters. Established mostly by municipalities and financed also through grants from the MoI and the regions, the VFB are an important part of the civil security system. Especially during floods, the VFB participate in evacuation, warning and humanitarian help. They are also trained and involved in professional exercises. Among the NGOs, the VFB have a prominent position, having some 300,000 members. The CRC then focuses mostly on first aid – both in a form of educational and training activities as well as its actual provision. During floods, Red Cross local units cooperate with local authorities. While there is a consolidated involvement of the NGOs, the inclusion of for-profit organizations in civil security and crisis management is minimal.

The Czech Republic is very active in the provision of rescue assistance and humanitarian help – both through the European MIC mechanism and through bilateral agreements and other organizations. In

turn, only one time during the 2002 floods, assistance from abroad was requested and received. This assistance was important yet not crucial for managing the crisis. The country is also active in EU civil protection simulations. Since the accession to the EU in 2004, the Czech Republic has integrated itself well and actively in the EU civil protection mechanisms. Also, the country has been transferring the EU directives into its legislation – in the field of civil security, this has been the source of most of the changes to the extant crisis legislation over the last ten years. The best example is the legal basis for the protection of critical infrastructure.

Overall, the experience so far shows that the weakest link seems to be companies poorly observing their obligation to prepare flood plans in particular; and often inconclusive investigations of responsibility in general. Also the education of the public is rather weak, yet the situation seems to be improving somewhat. Paradoxically, the largest threats to the Czech civil security system stem from its environment: The budgetary cuts resulted in cutting investments and in focusing on "running" the system only. The strongest link is then the functioning of the IRS (including the ability to help abroad) and of crisis management, especially at the regional and also at the state level (when up-scaled to this level) with clearly set responsibilities and procedures.

Annex 1: Coded Data

ANVIL PROJECT MAPPING PROTOCOL - WP2 CZECH REPUBLIC



1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Act No. 240/2000 Coll. on Crisis Management; Act No. 239/2000 Coll. on the IRS	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	Act No. 240/2000 Coll. on Crisis Management	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?		1	Act No. 240/2000 Coll. on Crisis Management	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	Act No. 239/2000 Coll., §2 b) on the IRS	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	Constitutional law	
2.1.1.b	Is the political system parliamentary or	Parliamentary system = 1	1	Constitutional law, art. 15	

	presidential?	Presidential system = 2		
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	Constitutional law
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	2	Majoritarian with some significant aspects of <u>consensus democracy</u> . Source e.g. Hloušek, V., Kopeček, L (2002): Česká republika - konsensuální nebo majoritní model demokracie? Available at http://www.pf.upol.cz/fileadmin/user_upl oad/PF- katedry/politologie/Politologie_2002-1 _02aStudieCR _konsensualni_nebo_majoritni_model_de mokracie.pdf
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	2	See e.g. Fišer, V. (2006): Krizové řízení v oblasti zdravotnictví. Available at http://www.hzscr.cz/soubor/modul-j-kr-v- oblasti-zdravotnictvi-pdf.aspx; Document of the Mol (2005): Krizové řízení. Available at http://aplikace.mvcr.cz/archiv2008/udalost i/prirucky/bezpecnost/bezpecnost.pdf
2.1.2	Culture			
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		57	http://geert-hofstede.com/countries.html
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		58	http://geert-hofstede.com/countries.html
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		57	http://geert-hofstede.com/countries.html

2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		74	http://geert-hofstede.com/countries.html	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		13	http://geert-hofstede.com/countries.html	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		1,23	http://www.worldvaluessurvey.org/	Year 2000
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		0,38	http://www.worldvaluessurvey.org/	Year 2000
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?		1	see e.g. Fišer, V. (2006): Krizové řízení v oblasti zdravotnictví. Available at http://www.hzscr.cz/soubor/modul-j-kr-v- oblasti-zdravotnictvi-pdf.aspx	The key acts are the Act 239/2000 on IRS and Crisis Act 240/2000. There are also other relevant acts such as 241/2000 on Economic Measures for Crisis States or the overarching Constitutional Act on Security 110/1998.
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2000	Act Nr. 240/2000 Coll., Act nr. 239/2000 Coll.	
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?		1	Act Nr. 240/2000 Coll., Act nr. 239/2000 Coll., Constitutional Act on Security nr.110/1998	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	Constitutional Act on Security Nr. 110/1998 Coll.	Called "state of threat to the state" (<i>ohrožení státu</i>). Was never used in the recent hisory.

2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		0	1	Constitutional Act on Security Nr. 110/1998 Coll.	Called "state of emergency" (<i>nouzový stav</i>) in the Czech Rep.
2.2.2	Political dimension					
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?		level = 1 level = 2	2	Act Nr. 240/2000 Coll.	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?		level = 1 level = 2	1	Act Nr. 240/2000 Coll.	
2.2.3	Operational dimension					
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = Yes = 1	0	0	Act Nr. 239/2000 Coll.	There is IRS(= organizaitonal platform), including Fire Brigades, Health Rescue Services and the Police. It can operate at all levels, depending on the scale of the crisis.
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = Yes = 1	0	1	Act Nr. 239/2000 Coll.	There are 3 lead agencies in delivering civil security within the Integrated Rescue Systém.
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = By law By executive mandate =	0 = 1 2	1	Act Nr. 239/2000 Coll., § 17	

2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	8	Šiman, J. (2009): Plán cvičení orgánů krizového řízení na léta 2009 až 2011. <i>112</i> . Vol. 8, Nr. 3/2009. Online at: http://www.hzscr.cz/clanek/casopis-112- rocnik-viii-cislo-3- 2009.aspx?q=Y2hudW09OA%3D%3D. Soviš, J. (2008): Aktuální problematika zajišťování bezpečnosti ČR. Online at: http://old.chmi.cz/katastrofy/cnvonk08060 Ssovis_soubory/frame.htm	
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	6	Šiman, J. (2009): Plán cvičení orgánů krizového řízení na léta 2009 až 2011. 112. Vol. 8, Nr. 3/2009. Online at: http://www.hzscr.cz/clanek/casopis-112- rocnik-viii-cislo-3- 2009.aspx?q=Y2hudW09OA%3D%3D.	Data for period 2009-2011!
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?		1	Mol, General Directorate of the Fire Rescue Brigade (undated): IRS. ISBN 978-80-86640- 59-4	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?		1	Pages of the MFA - list of agreements at http://www.mzv.cz/file/75578/sez120106. pdf	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	2	Pages of the MFA - list of agreements at http://www.mzv.cz/file/75578/sez120106. pdf	

2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"			Report of Mol at http://aplikace.mvcr.cz/archiv2008/casopis y/150hori/2002/listopad/prudil.html	
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	Act Nr. 240/2000 Coll., § 31	
2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	Vademecum at http://ec.europa.eu/echo/civil_protection/ civil/vademecum/cz/2-cz-3.html	
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3	Act Nr. 240/2000 Coll.	Public radio and TV obliged by law to publish information and warning about a crisis.
2.3.2.c	Does the government have a central website with updated information on crisis events?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	1	No single page at national level. At regional level always as subpart of official webpages of the region, see.eg. webpages of the Středočeský kraj Region at http://www.kr- stredocesky.cz/portal/instituce/krizove- rizeni/	

2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		Government's Office started its Facebook in 2010. It has not been used for updating on crisis events yet. See https://www.facebook.com/uradvlady?ref =ts&fref=ts Regions joined Facebook mostly in mid or late 2011 and are not wide-followed. See eg. The Středočeský kraj at https://www.facebook.com/stredoceskyKr aj or the Liberecký kraj at https://www.facebook.com/liberecky.kraj. cestou.necestou	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		Methodic procedure to warning population by MoI at http://www.hzscr.cz/soubor/ob- 03-varovani-pdf.aspx; Webpages of Regional Fire Brigades - e.g. of Moravskoslezský kraj at http://www.hzsmsk.cz/index.php?a=cat.8	
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		1	Krobath, J., Stejskal, L. (2004): Branná výchova : participace občanů na přípravě k obraně. In: Balabán, Miloš, ed.: Bezpečnostní politika České republiky - výzvy a problémy. Praha: Ministerstvo obrany ČR - AVIS, pp. 149-164. ISBN 80- 7278-217-7.	

2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No=0Tomembers/professional=1Tomembersandlimitedpublicoutreach=2Tomemberandswide-spreadtrainingprogrammesfor general population = 3	0		CRC offers FIRST AID training.
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	0	Last in 2010. Source: website of the Iniciative for Civilian Protection http://www.ochranaobyvatel.cz/tv_spoty/ #article	
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		1	Mol (2008): Program of Research in the Field of Security. Available at: http://www.mvcr.cz/soubor/program- bezpecnostniho-vyzkumu-ceske-republiky- v-letech-2010-2015-bv-ii2-vs-pdf.aspx	
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	41 million CZK	Ministry of Finance (2012): Tabulková část ke Státnímu rozpočtu ČR na rok 2012. Available at: http://www.ospzv- aso.cz/addons/RHSD93/Tabulkova_cast_ke _SR_CR.xls (last accessed 15.4.2012)	
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	Annual Report of the Fire Rescue Britade 2011; Act Nr. 239/2000 Coll.	Voluntary Fire Brigades are an official part of the Integrated Rescue Systém. This applies both to "normal" as well as exceptional crises.

2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	1	ibid.	Voluntary Fire Brigades.
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	0		With the exception of Flight Rescue Services where 8 stations are private and 2 run by state bodies (police and army).
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?		0		With the exception of Flight Rescue Services where 8 stations are private and 2 run by state bodies (police and army).
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				

3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	1	ReportofMolathttp://aplikace.mvcr.cz/archiv2008/casopisy/150hori/2002/listopad/prudil.html;Špidla, V. (13.8.2012): Speech delivered atPublic Debate on the 10th anniversary offloods 2002, organized at the Academy ofSciences of the Czech Rep. ; Report of theGeneral Directorate of the Fire RescueBrigade on Logistics Center for MaterialHelpathttp://zlol.cz/zl-olomouc/historie/povodne-humanitarni-pomoc-tuny-materialu-pro-potrebne/	
3.1.2.b		Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA	3	Collection of Documents of the Government of the Czech Republic, available from www.vlada.cz	
		Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA	NA		Comprehensive data not accessible at this level
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	0	No MAJOR reforms.	One minor: Restructuring of Army Rescue Corps (= not crucial part of the Rescue System). Source: Webpages of the Parliament and of the government

3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.	0 (1)	No MAJOR debates.	Only smaller debate on the Restructuring of Army Rescue Corps. Source: see above
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.	0	Webpages of the Office of the Government and of the Parliament; ČTK	
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No=01-2instances=13 or more instances = 3			
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	0	Webpages and archive of the ombudsman's office at www.ochrance.cz	
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0	Database of Judicial decisions at http://www.judikaty.info/cz/ ; Webpages and archive of the ombudsman's office at www.ochrance.cz	
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?		0	Act Nr. 239/2000; Act Nr. 240/2000; Act Nr. 1998/2000	
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made	Record the sum percentage for "Agree" and "Tend to agree"	41	Special Eurobarometer 371 (2011)	

	disasters?				
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?		52	Special Eurobarometer 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes=1	0	Webpages of the Mol. Act nr. 198/2002 Sb. on Volunteary Service	
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011			
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	0.031 (0.035)	299,029 volunteers (345,455 incl youth under 18 yrs) as of 31.12.2011 (Source Voluntary Fire Rescue Brigade at http://www.dh.cz/index.php?option=com_ content&view=article&id=1689:vyroni- zprava-sh-ms-2011&catid=117:vyroni- zpravy&Itemid=144). Red Cross Czech Rep members and volunteers (excl. employees) was 27,060 as of 31.12.2011. To 10,505,445 inhabitants of the Czech Rep. as of 31.12.2011 (Source: Czech Statistical Office at http://notes2.czso.cz/csu/redakce.nsf/i/ob yvatelstvo_ceske_republiky_v_roce_2007_ zakladni_udaje)	Rescue Brigades, 27,060 volunteers of the CRC. Other NGOs are only partially active in civil security thus the number of volunteer would not be entirely correct.
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be completed by UI/IFHS	http://ec.europa.eu/echo/files/policies/dis aster_response/EUCPM_activations_since_ 01012007.pdf	

4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be completed by UI/IFHS	http://ec.europa.eu/echo/files/policies/dis aster response/EUCPM activations since 01012007.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009-2010 training cycle	25	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	8	http://ec.europa.eu/echo/policies/preventi on_preparedness/preparedness_en.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	3	http://ec.europa.eu/regional_policy/thefu nds/doc/interventions_since_2002.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	145	http://ec.europa.eu/regional_policy/thefu nds/doc/interventions_since_2002.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	23	Special Eurobarometer 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	78	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in the Czech Republic

In 2009, the H1N1 pandemic hit the Czech Republic. The main responsibility rested with the Ministry of Health. Information was made available at a special website of the Ministry of Health at (pandemie.mzcr.cz), in the public media and information leaflets were issued.

Date	Description				
18.11.2006	Government approves Pandemic Plan prepared by the Ministry of Health				
28.04.2009	First 3 people tested, infection H1N1 not confirmed				
30.4.2009	EU Council Special meeting on H1N1 organized under the Czech EU presidency				
05.05.2009	Government reserves vaccines against H1N1, although these are not yet fully developed				
25.5.2009	First case of infection confirmed in the Czech Republic (29 year-old male)				
11.06.2009	WHO declares pandemic				
06/ 2009	Specialized webpages with regularly updated information on H1N1 created by the Ministry of Health				
22.06.2009	Updated Pandemic Plan approved by the government				
01.07.2009	10 cases of infection confirmed				
09.07.2009	20 cases of infection confirmed to this date in the Czech Republic (in total)				
14.09.2009	Vaccination Strategy prepared by the Ministry of Health				
12.10.2009	Minister of health (Dana Jurásková) participates at the EU Council special meeting on H1N1				
22.10.2009	First case of death, 31 year-old female				
23.11.2009	Vaccination starts with selected persons				
2.12.2009	Vaccination strategy of children presented by the Ministry of Health discussed at the National Security Council				
7.1.2010	Broad vaccination started. 55,436 vaccines given				
02/ 2010	Government decides to provide vaccines to all citizens free of charge				
11.3.2010	Over 66,000 vaccines given to this date				
26.5.2010	102 cases of death registered to this date in the Czech Republic (final number)				
26.5.2010	2,477 cases of infection confirmed to this date in the Czech Republic				

Table 4: Main events in the H1N1 epidemic in the Czech Republic

31.5.2010	Vaccination of the population terminated
10.08.2010	WHO announces entry into post-pandemic phase

In reaction to the so-called avian flu (H5N1), the Ministry of Health prepared a strategic document called the Pandemic Plan for a case of a flu pandemic caused by a new type of the flu virus in 2006 (approved by the government in November 2006). This was updated with respect to the H1N1 influenza in June 2009.

At the beginning of May, the government unanimously approved the offer from the American pharmaceutical company Baxter to priority purchase of vaccines against the H1N1 influenza as soon as this would be developed. No competitive selective procedure took place regarding this supplier. The government reasoned that this company was the only one able to develop the vaccination within three month as opposed to other pharmaceutical companies which would need twice as much time to do so. (ČT24, 5. 5. 2009)

At the end of May, the first person (29 year-old pilot coming from New York) was confirmed to be infected by the virus. At the beginning of July, there were 10 people infected. From the medical and epidemiological perspective, the situation was dealt with in a standard way. Epidemiological inquiries were conducted to track possibly infected people who were travelling on the same airplanes as the first infected passengers who arrived to country. (Ministry of Health, 1.7.2009)

In September 2009, the Ministry of Health proposed a *vaccination strategy*, specifying target groups of the population to be vaccinated. The largest part of the vaccines (one million doses of a two-dose vaccine) was assigned to risk and chronically ill patients (0.5 million doses). The rest was intended for medical staff, workers of the IRS and for people important for functioning of the state. (Ministry of Health, 14.9.2009) In November 2009, the first vaccines (95,000 doses) arrived and the vaccination of the target groups specified in the *vaccination strategy* started. Vaccination was conducted in all regions in specified health facilities. (GSK, 26.11.2009) In February 2010, the government (in accordance with the approach of other European countries, the Central Epidemiological Commission and the State Security Council) agreed to make the vaccination available to the general public for free. (Czech Pharmaceutical Chamber, 8.3.2010) The vaccination program was terminated on 31st May 2010.

Although the purchase of the vaccine was agreed unanimously at the political level, many medical practitioners turned to refuse to get vaccinated. In this way, they were undermining the credibility of the vaccination in the eyes of the public. Although the Ministry of Health was waiting for the new vaccine to get registered and to get a positive statement from the European Medicines Evaluation Agency before applying it, the medical practitioners were publicly stating their unwillingness to undergo vaccination. (Ministry of Health, 2.10.2009) Most of them believed the vaccination to be beginning too late and to be

insufficiently tested. Many medical practitioners also believed the H1N1 influenza to be a media bubble. In no health facility was the proportion of vaccinated personnel higher than one fourth. There was also a very low interest among citizens. The vaccination was voluntary, both for the practitioners, administration and the public. (ČTK, 2.12.2009)

The largest controversy was caused by the large number of vaccines which remained unused. In August 2009, one million vaccines (worth 220 million CZK) were ordered. When the situation proved to be less dramatic, the scale of the order was lowered. Without further sanctions, the state had to take 700,000 doses. Thus, some 55 million CZK were saved. Despite the fact that the country had one of the highest mortality rates to the H1N1 influenza, the target groups of the population were not convinced that the vaccination truly helped. (ČTK, 18.3.2010)

In all, some 80,000 doses of the vaccine were used with 69 thousand people getting vaccinated, among these mostly patients with lung (27,000) and heart disease (14,500). From the medical personnel, more than 11,000 got vaccinated. (Pergl, 2.6.2010) This was significantly less than planned and expected. 480,000 doses of the vaccine remained. Part of this was given to vaccination centers for people going abroad. Another part was stored in the State Material Reserves.

According to the heads of both the Chief Sanitary Inspectorate (Michael Vít) and the Czech Vaccination Society (Roman Prymula), the purchase of vaccines was necessary as nobody knew how the virus in the population would behave. (Pergl, 2.6.2010) This might also explain why no inquiries (neither political nor professional) were undertaken. As there was political consensus on the vaccination, the situation did not result in any political crisis. Nor did it lead to any major changes.

Annex III: Resources

References

Act Nr. 239/2000 Coll. On IRS

Act Nr. 240/2000 Coll. "Crisis Act""

Act Nr. 433/2010 Coll. On State Budget for the year 2011

Act Nr. 487/2009 Coll. On State Budget for the year 2010

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Estonia

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Executive Summary

In Estonia the civil security system had to be re-built from the ground up after 1991. The old Soviet-type system of civil defence, based on the idea that civil society should be fully mobilized in support of the country's defence in case of war, has been gradually developed towards a "people-oriented" civil protection model. Its primary responsibility lies in protecting the population against natural and manmade disasters, as well as in civil emergency planning.

Since 2005 the Estonian system could be characterized as being essentially centralized. In this system the different ministries and agencies are responsible in their respective functional fields for civil emergency issues, while the Ministry of the Interior has overall responsibility for civil protection in Estonia. The coordinating body at the national level is the Estonian Rescue Board. The civil security system of Estonia has twofold dimensions as having both functional and area responsibility to respond to emergencies. The critical infrastructure protection is divided among several ministries based on their special expertise areas.

At the national level the *Ministry of the Interior* is the main body to deal with civil protection in Estonia. At the regional level the county governors are responsible for development and planning, and they report directly to the minister of the interior. The Estonian Rescue Board examines the regional dimensions of the national crisis management system, reviews the regional risk map and the overall preparedness to tackle risks. The board also supports the regional civil protection agencies, organizes training for all phases of crisis management as well as establishes and maintains a territorial crisis committee which is chaired by the head of the regional crisis centre.

The main regulative framework of civil security and civil protection is based on Rescue Act and the Emergency Act. The *Rescue Act* regulates the fire and rescue services, and it defines the role of responsibilities in this field. The *Emergency Act* of 2009 defines the mechanisms to be activated in the case of large-scale natural or man-made disasters or infectious diseases such as the swine flu.

The main civil security and emergency management actors are four territorial inter-agency emergency preparedness committees that are managed by the national rescue board. Four levels share responsibility for operational crisis management: the state level, the regional level, the municipal/county level, and the private/voluntary level.

The Estonian model is based on an all-hazards approach. Although civil security is a primary function of public entities and specialized agencies in Estonia, the Estonian citizens have a long tradition to contribute and take part in the civil security maintenance and operations.

Estonia is one of the most advanced countries in Europe using the private sector and its resources as a supportive factor for the preparedness and planning of civil security. This can be seen in several development projects and programmes based on public-private partnerships in this field.

At the regional level, civil security is taken care of by the fifteen county rescue services, which have since 2005 been subordinated to the national rescue board. Each county rescue service has a main fire brigade and several supporting fire brigades. At the local level, the four regional services are the highest civil emergency planning authorities. They may, however, contract auxiliary (voluntary) fire brigades to perform routine fire-fighting duties in the municipality concerned. An Emergency Centre within the jurisdiction of the national rescue board is responsible for receiving emergency calls on the single number 112 over the whole country, and for the deployment of fire and ambulance brigades. Geographically

speaking, calls are received in one of four alarm centres distributed across the country.

Key Findings

1. History has hindered the development of the Estonian civil security system but it also paves the way for rapid usage and adaptation to modern technologies. The Estonian civil security system had to be re-built from the ground up after 1991. The old Soviet-type system of civil defence, based on the idea that civil society should be fully mobilized in support of the country's defence in case of war, has been gradually developed towards a "people-oriented" civil protection model. Its primary responsibility lies in protecting the population against natural and man-made disasters, as well as in civil emergency planning. The fact that the whole system has been built from scratche has given Estonia an advantage to benefit from other countries' mistakes and to invest in usage of private resources and outsourcing.

Estonian citizens have a long tradition to contribute and take part in civil security maintenance 2. and operations and this trend is increasing. Also the role of private sector getting stronger as Estonia is still seeking alternative models to replace the old civil security system. This might bring some new innovations and cost benefit solutions in the future. Estonia is one of the most advanced countries in Europe using the private sector and its resources as a supportive factor to the preparedness and planning of civil security. This can be seen in several development projects and programmes based on public-private partnerships in this field. The Estonian Neighbourhood Watch (ENW) is a rather unique association established in May 2000. It is a civic initiative which has a goal to increase the sense of security of citizens in homes. It was a citizens' reaction towards a dramatic cut in the number of police officers in 2000. The main aim of the ENW is to motivate and mobilize dwellers or private houses and apartment buildings towards neighbourhood watch and to inform them of the goal, principles and possibilities of neighbourhood watch. The task of this association is to be an organization that unites non-governmental associations and persons dealing with neighbourhood watch, to share information and training regarding civil security issues. Besides the above mentioned Neighbourhood Watch there are three civic society institutions contributing to civil security in Estonia. The Estonian Voluntary Rescue Union which was founded in 2010 is one. It is an umbrella organisation to multiple associations of voluntary fire-fighting and other civil security tasks in Estonia. There is also an Institution of Voluntary Assistant Police Officers. The Assistant Police Officers Act (633 SE) was initiated by the government in January 2011. It provides the rights, obligations and the sphere of activity of assistant police officers with the aim of involving persons in the activities of the police in order to protect public order and to ensure social security. An assistant police officer is a person who participates in the activities of the police as a volunteer in his or her free time on the basis and pursuant to the procedure provided by law. Assistant police officers are not police officers.

3. The Estonian Rescue Board (ERB) is a unique structure which has a leading role in planning preparedness for emergencies and the operational management of four regional rescue centers. The ERB is the leading institution in responsibility of preparedness planning and tactic-operational management and civil protection capacities. This is carried out within four regional rescue centres. The ERB is also in charge of national rescue policies and strategies. It is also responsible for the development and implementation of national rescue policies.

List of Abbreviations

BALTDEFCOL	Baltic Defence College
BALTNET	BaltNet is a radar network operated by the militaries of Latvia, Lithuania, and Estonia.
BALTRON	Baltic Naval Squadron
CII	Critical Infrastructure
EDRT	Estonian Disaster Relief Team
EMHI	Estonian Weather Forecast Institution
ENW	Estonian Neighbourhood Watch
ERB	Estonian Rescue Board
MOD	Ministry of Defence
MOI	Ministry of the Interior
NSA	National Security Authority
NSC	National Security Concept
PDI	Power distance
PBGB	Police and Border Guard Board
RIA	Estonian Information System Authority

1. Introduction

The most common crises in Estonia since World War II have been caused by extreme weather conditions, most recently winter storms, extreme temperature and floods. In addition, there have been several transportation accidents, such as the sinking of the M/S Estonia in 1994 and the Copterline helicopter crash in 2007. Both cases have resulted in considerable casualties. Table 1 provides an overview of crises between 2000 and 2010 and the number of persons killed, injured, and affected, according to the available data.⁶⁶ These crises have had mostly local impact and there has not been any major country wide crisis situation during the period 2000-2010.

Year/ Month	Crisis description	Crisis category	Damage		
			# of persons killed	# of persons injured	# of persons affected
09/1994	Transport accident (M/S Estonia)	Technological disaster	912		140
01/2005	Extreme temperature	Natural disaster			100
01/2006	Extreme temperature	Natural disaster	3		
02/2011	Fire accident (Haapsalu)	Technological disaster	10		

Table 1: List of Crises (2000-2010)

Estonia has no nation-wide and coherent definition of crisis situations or major emergencies.

Since 2005, the Estonian system could be characterized as being essentially centralized. In this system, the different ministries and agencies are responsible in their respective functional fields for civil emergency issues, while the Ministry of the Interior has overall responsibility for civil protection in Estonia. The coordinating body at the national level is the Rescue Board.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

The Republic of Estonia (Eesti Vabariik) is a parliamentary democracy with unicameral parliament, the *Riigikogu*. It has 101 seats and its members are elected by popular vote to serve four-year terms. The Cabinet ministers are appointed by the prime minister and approved by the Parliament. The prime minister is nominated by the president and approved by the Parliament.⁶⁷ The president is elected by the Parliament for a five-year term and is mainly a symbolic figurehead and holds no executive power.

⁶⁶ For quantitative data, see <u>http://www.emdat.be/country-profile</u>.

⁶⁷ https://www.eesti.ee/eng/topics/citizen/riik/eesti vabariik 2/uldandmed

The civil security system of Estonia has two dimensions. First, the functional responsibility is such that a certain sector ministry is in charge of a specific emergency or disaster management duty at national, regional and local levels. Second, the area responsibility is based on geographic mapping of respective areas. The areal responsibility highlights the different administrative levels of national, regional and local levels. Critical infrastructure protection is divided among several ministries based on their special expertise areas.

At the national level the *Ministry of the Interior* (MOI) is the main body to deal with civil protection in Estonia. It is the largest ministry in Estonia and employs about 11,000 persons in total. In the field of *internal security,* the MOI have a mission to ensure the internal security of the state and to protect the public order, to guard and protect the state borders and maintain the border regime. The MOI also regulates crisis management and rescue operations as well as citizenship and migration. The personnel of the internal security structures have been educated and trained in the *Estonian Public Service Academy*.

The *Estonian Rescue Board* (ERB) was formed in September 1991 under the jurisdiction of the Ministry of the Interior. In May 1992 the Fire Authority was joined with the ERB, and since 1993 there have been regular training courses for the higher civil security servants in the United States.

At the regional level the county governors are responsible for development and planning, and they report directly to the minister of Interior. The ERB examines the regional dimensions of the national crisis management system, reviews the regional risk map and the overall preparedness to tackle risks. The ERB also supports the regional civil protection agencies, organizes training for all phases of crisis management and establish and maintains the territorial crisis committee which is chaired by the head of the regional crisis centre.

At the local level the main civil protection authority is the *local government council* which has established the local crisis management committee chaired by the mayor or an equivalent official. The responsibility of the ERB is to review and implement the national crisis-management systems at the local level. The ERB also conducts risk mapping, develops and enhances holistic disaster prevention and maintains preparedness. It also supports the persons responsible for emergency management and supports the local government agencies in terms of communication systems and coordination. When needed, the ERB provides comprehensive training (preparedness, response, consequence management) and takes care of public information.

International civil security cooperation is largely conducted by the *Estonian Ministry of Foreign Affairs* (MFA). It has defined its mandate as to safeguard the Estonia's security and welfare, as well as promoting Estonia's *interests* in the world, by planning and implementing the nation's foreign policy and co-ordinating its foreign relations.

The *Ministry of Defence* (MOD) is responsible for the planning and implementation of the national defence policy and activities. The national defence organization comprises the following tasks: to determine the overall guidelines for national defence; to organize international co-operation in the sphere of national defence; to arrange the preparation and implementation of mobilization; to implement the subsequent record management and training of reservists; to arrange and finance the activities of the Defence Forces (Kaitsevägi) and the voluntary organization Defence League (Kaitseliit); to develop the defence industry; to supervise the activities of the Defence Forces and the Defence League; and to draft subsequent legislation.

The ministry's area of responsibility includes the Defence Forces, the Defence Resources Agency, which organizes recruitment and conscription issues, the Information Board, the educational institutions of the Defence Forces, the Estonian War Museum and the Health Centre, which provides rehabilitation services

to military personnel. The ministry is divided into areas of four deputy undersecretaries: defence policy, defence planning, defence resources as well as legal and administrative matters.⁶⁸

The *Estonian National Security Authority* (NSA) protects the classified information of foreign states in the Republic of Estonia. The NSA was established in 1995 and by regulation number 231 the respective authority was transferred to the Ministry of Defence. In April 2009, the department's name was changed to *National Security Authority Department*. The NSA is covering functions related to classified information of foreign states. This includes also supervision at the representations of Estonia and in the units of the Defence Forces which are outside the territory of the state and participation in the work of the NATO and European Union structures.⁶⁹

2.1.2 Government/societal culture

Estonia's political culture shows approval rates for democratic values and institutions. Geert Hofstede's grid-group country scores point to low on this dimension (40), which suggests that the Estonians do not readily obey and respect people in authoritarian positions based merely on their rank and status as power-holders. Instead, Estonians welcome managers that give them the opportunity to state their opinions and express disagreement, as well as to be included in the decision-making process. Estonia has recently passed the transition state, which means however that the older generation and state organisations often demonstrate high PDI tendencies. The older Soviet ways of thinking and relating to the world still remain and the boss-subordinate relationship among Estonians is sometimes more hierarchical than the score suggests.⁷⁰

The World Value Survey for 2005-2007 puts Estonia in the group of protestant European countries⁷¹ characterized by a high degree of survival values. Estonia ranks especially high on secular-rational values but considerably lower than comparable countries in terms of self-expression values. The Estonians have a tradition to prioritize the local self-government (). Like Professor Wolfgang Drechsler of Tartu University has pointed out, Estonia as a state has emerged from local governments and Estonians have known communal self-government as a form of community life centuries longer than almost any other nation in Europe. It is also often regarded that, because of the centuries of history of foreign rule by Denmark, Germany, Sweden and Russia, the Estonians are largely hesitant in the face of strong state power and prefer local governments. Also as the historical tradition is relatively weak, the people don't have high expectations from central power. This is why neoliberal ideas of a minimal state are still so popular and common in Estonia.⁷² It also explains why the current central-right wing government which is in favour of individuality at the cost of societal rule has maintained its popularity in Estonia.

The purpose of the *Estonian security policy* is to ensure Estonia's independence and freedom, territorial integrity, constitutional regime, and the security of the population. The most important document in this regard is the *National Security Concept of the Republic of Estonia* (NSC). The NSC identifies the generalized goals, principles, and trends of security policy. Strategic documents, which specify the national efforts by spheres, all rely upon the NSC. For the purposes of defence policy, the document concerned is the National Defence Strategy. This is drawn up on the basis of the strategic document for long-term and future-oriented planning of defence policy; the resulting document will identify the military capacities that are most important for protecting Estonia and planning the means for their development in ten year periods.

⁶⁸ Estonian Ministry of Defence. 2013. Website: <u>www.kaitseministeerium.ee</u>

⁶⁹ Estonian National Security Authority. 2013. Website: <u>http://mod.gov.ee/en/estonian-national-security-authority</u>

⁷⁰ The Hofstede Centre. 2013. <u>http://geert-hofstede.com/estonia.html [last accessed June 12, 2012]</u>.

⁷¹ For the statistical data see <u>http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_111</u> [last accessed 15 November 2012].

⁷² Vikerkaar nr 4-5.

Estonia's civil security system is also dependent on its defence forces. The defence strategy is based on two pillars – initial self defence capability of the reserve armed forces and the NATO collective defence system. An integrated approach to national defence represents one of the most important principles for the implementation of Estonian defence policies. The National defence has a scope that extends beyond military defence and which also involves international activities, civil sector support to military, psychological defence, ensuring domestic security, and the consistence of vital functions of society.

2.2 Legal and constitutional aspects of the civil security system

2.2.1 Statutory basis

The statutory basis of civil security in Estonia appears to be fragmented and rests upon formal distinct bodies of formal legislation at the state and regional levels. From the functional perspective, the statutory basis is divided into laws for different emergency response services, sector specific regulations, and provisions for a formal state of emergency and for other kinds of disasters and crises. The Estonian civil security is a mixture of one level or institution coordination and, on the other, a combination of versatile vertical and horizontal control and command lines. A bottom line principle is to support the local decision-making process as much as possible.

The main regulative framework of civil security and civil protection is based on Rescue Act and the Emergency Act. *The Rescue Act* regulates the fire and rescue services, and it defines the role of responsibilities in this field. The *Emergency Act* of 2009 defines the mechanisms to be activated in the case of large scale natural or man-made disasters or infectious diseases such as the swine flu.

The main civil security and emergency management actors are four territorial inter-agency emergency preparedness committees that are managed by the national rescue board.

2.2.2 Political dimension

The executive and political responsibility of civil security provision primarily rests at the local and regional levels. The 15 counties (maakond) are relatively independent in building capacities and developing their civil security competencies. There are also 226 municipalities which include 33 cities (linn) and 193 rural municipalities (vald). Each county is led by a county governor (maavanem), who represents the national government at the regional level. Governors are nominated by the government and there are 227 local governments altogether. Each municipality is regarded as a unit of self-government with its council (Volikogu) and executive bodies (vallavalitsus, linnavalitsus). Each municipality unit has its own budget that is not part of a national budget. They have also their own taxation system and right to form new unions and joint establishments.⁷³

The Ministry of Interior is mainly responsible for policy formulation and its execution in the area of civil security. Under the Ministry of the Interior is the ERB. The ERB has a key role in representing Estonia in various *international forums* such as the UN, EU and NATO and other relevant civil security organizations. It also develops emergency plans and maintains resilience of the country, develops communication systems for the rescue services, coordinates the fire-fighting and rescue operations when necessary, develops the legal basis for civil security mechanism, drafts the general principles and rules for fire-fighting and rescue work and its applications.

⁷³Eesti.ee.2013. See: <u>https://www.eesti.ee/est/teemad/kodanik/riik/eesti_vabariik_2/uldandmed</u>

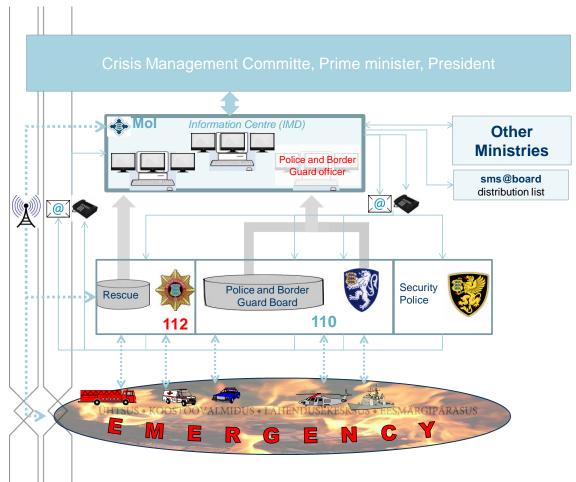


Figure 1: Crisis Management Committee, Estonian Ministry of the Interior, 2012⁷⁴.

The main areas of activity for the Estonian rescue service are: rescue actions, national fire safety supervision, crisis management, emergency prevention, explosive ordnance disposal, and handling of emergency calls.

2.2.3 Operational dimension

Four levels share responsibility for operational crisis management: the state level, the regional level, the municipal/county level, and the private/voluntary level. The private/voluntary level will be highlighted in chapter 2.4.1. Although there are no distinct civil security agencies in the Estonian counties and municipalities, the special character of the Estonian civil security system is that the country is divided into rescue regions which all have a regional rescue board.

The Ministry of the Interior has the overall co-ordinating responsibility for civil protection in Estonia. As a government institution under the jurisdiction of the Ministry of the Interior, the ERB has a leading role in planning preparedness for emergencies and the operational management of four regional rescue centres. The ERB is the leading institution with responsibility for preparedness planning and tactical-operational management and civil protection capacities. This is carried out within four regional rescue centres. The ERB is also in charge of national rescue policies and strategies. It is responsible for the development and

 ⁷⁴ Ministry of the Interior, Information Department, PowerPoint presentation at the meeting with Timo Hellenberg.
 2013

implementation of national rescue policies. Civil protection operational resources in the four regional rescue centres belong to the Estonian Rescue Board.⁷⁵

Operational crisis management responsibility typically lies with the counties and independent cities and municipalities. Depending on the character of the crisis and available resources, local and regional authorities may include permanent staff for civil security tasks. Once a state of emergency or state of disaster has been declared, the counties or independent cities may form specialized task forces that are led and coordinated by the local political actor or institution. Specialized state agencies will provide assistance when needed and when the situation escalates.

The Estonian civil security system has been radically developed based on lessons learned from past crises and emergency situations. There are more than 6,000 people working in the field of civil security in Estonia. *The Police and Border Guard Board* (PBGB) is a police authority, and all its personnel are regarded as police officers. It was established in January 2010 when the Police Board, the Central Criminal Police, the Public Order Police, the Border Guard Board and the Citizenship and Migration Board (CMB) were merged. Based on former prefectures of these institutions, four territorial prefectures were incorporated under the PBGB in 2012. The goal of this merger was to take full benefit of the civil security capacities of Estonia – "people, experience, funds and equipment." Also the accession to the Schengen visa area brought out the need to streamline the management and make full use of resources.⁷⁶

The main tasks of the PBGB are: securing of the external borders of the European Union; determination of citizenship and issuing of documents; maintaining security and public order in the state; and the investigation and prevention of offences. These tasks are divided between four work areas: border guard, public order, criminal police, and citizenship and migration. The first contact points for people in their home town or village are the sub-units of four regional prefectures; constable stations, border guard stations or service offices of the Migration and Citizenship Bureau.

The Estonian Security Police are under the control and command of the Ministry of the Interior. They maintain national security through the collection of information and implementation of preventive measures as well as investigation of offences to the extent established by the 1) Law on Security Services and 2) the Penal Act. The government gives collection guidance according to the Law on Security Services.

The tasks of the Estonian Security Police are: collection and processing of information for the prevention and combating of activities aimed at changing by force the constitutional order and territorial integrity of Estonia; collection and processing of information for the prevention and combating of intelligence activities directed against the state; collection and processing of information for the prevention and combating of terrorism (incl. financing and supporting thereof); protection of state secrets and classified information of foreign states, performance of security vetting; conduct of proceedings of offences related to explosive substances; anti-corruption combat; conduct of proceedings of other offences within the investigative jurisdiction of the Board.

Regardless of this long list of tasks assigned, the prime objective of the Estonian Security Police has been named as "to reduce security threats aimed at the Republic of Estonia and by that to maintain national security." It has also given a task to "actively cooperate with the security and law enforcement authorities of other states and with international organizations." It is obvious that the Estonian Security Police has a major task also in the multiple fields of critical infrastructure protection.

⁷⁵ European Commission – Humanitarian Aid & Civil Protection. 2013. Vademecum. Estonia – Disaster Management Structure. http://ec.europa.eu/echo/civil_protection/civil/vademecum/ee/2-ee-1.html#bilagr

⁷⁶ Politsei – ja Piirivalveamet. 2013. websites: <u>http://www.politsei.ee</u>, <u>http://www.politsei.ee/en/teenused/</u>

The most recent signature crises and emergency situations which have affected the Estonian civil security system are the flooding of the Northern Baltic Sea in 2005, the Copterline accident in 2005 and the cyber attacks in 2007. Here we focus on the floods of 2005 in more detail.

Probably the most devastating natural disaster in the modern history of Estonia was the *flooding of the Northern Baltic Sea on 7-9 January 2005*. Early warning weather indicators gave notice that the sea level would rise significantly. Severe flooding occurred in the coastal areas in Finland, Estonia and Russia. In Finland, critical situations arose in Helsinki and Loviisa, but the situation was managed quite well. The Estonian government struggled with the response in Haapsalu, Saaremaa and Viimsi. Situational awareness there and communications between the main actors and states were rather vague and incoherent.

In this event, the Baltic region faced severe weather conditions that had not been seen before. The emergency management and civil security authorities of the Nordic and Baltic countries were still following the news of the large casualties and victims from the 2004 South-East Asia Tsunami disaster. This alert and readiness to overcome the tsunami disaster caused upgraded readiness within administrative responses. The risk factor was a sudden and unexpected natural hazard that trigged multiple risks (sometimes called as NaTechs) for the critical infrastructures and tested the resilience of these societies.

On 7 January the weather forecasts showing a very strong winter storm approaching the Gulf of Finland. Operational wave and sea level model forecasts showed that something unusual might happen at sea. The comparative analyses of both Finnish and Estonian models showed results that differed considerably from each other. For example, for Helsinki the highest model forecast was +240 cm and the lowest + 95 cm. A forecast for the sea level in the Gulf of Finland was made based on model results and an assessment of the situation. The man-made forecast stated that the sea level might rise by up to +150 cm in Helsinki where the previous record was +136. Furthermore, the forecast stated that the duration of the flood would be unusually long lasting for several hours and would include two peaks.

On Friday the 7th of January a severe weather outlook was issued to the emergency authorities. A storm with winds of 25 m/s was forecast for Saturday-Sunday night for southern and southwestern Finnish sea areas and high winds for land areas. The Estonian Postimees newspaper warned of the impending storm and the predicted a rise in sea levels in Pärnu of at least 2.4 meters above the normal level and the coastal areas of at least 1.5 meters above the normal level. The Estonian government was struggling with response to the flood in Haapsalu, Saaremaa and Viimsi vald. The situation was worst in Pärnu where the sea water surrounded the coastal area of many spa hotels. More than 200 tourists had to be evacuated in the Pärnu area. Also, residential homes, a school and a psychiatric hospital were forced to be evacuated. The sea level in Pärnu was three meters above normal levels. By Sunday evening, eleven Estonians were hospitalized due to hypothermia. Haapsalu city evacuated 60 people on Sunday evening. The giant waves smashed beach houses and other constructions. For example, in the village of Pringi in Viimsi vald municipality, some buildings on the seashore saw severe damage and economic losses. At the same time more than 15 percent of all Estonian households were without electricity, and blackouts were frequent.

The Estonian armed forces provided emergency transportation and small boats for evacuation. Ferry service from the mainland to Saaremaa was interrupted due to flooding. A rescue helicopter sent from Finland was already in use in Pärnu evacuation operations, but also prepared for the emergency department to provide border guards through a Agusta Bell 412 helicopter on loan to Estonia, if requested. The coastal damage was extensive, but mainly occurred on uninhabited beaches, thus lowering the expenses, 775 houses were affected in Pärnu alone. Sadly, only 1/3 of the house-owners had insurance. Electricity cuts affected some 15 percent of households in Estonia, as several hundred substations were damaged by the storm. The Estonian Meteorological and Hydrological Institute (EMHI) ensured a sufficiently early hurricane warning. Hurricane warnings were provided in various media channels prior to the event. However, although individual scientists provided unofficial warnings of up to 2.4 m sea level rise, no official storm surge warnings were available and almost no adequate measures

against possible sea level rising were implemented. Thus a crisis committee gathered in Pärnu only after the storm surge began. During the storm, evacuation of people from flooded areas was organized. After the storm various mitigation and repairing actions, documentation of losses, analysis of lessons learnt, and a broad national discussion on warning responsibilities and insurance issues ensued.⁷⁷

The capital Tallinn was more prepared for the storm. A storm alert was given, the rescue board was ready to take action, and a crisis committee gathered. As there was no impact of the storm in Tallinn, however, no measures were taken. In Estonia an agreement was established between the weather forecast institution (EMHI) and the marine scientists from the Institute of Marine Systems for better communication.⁷⁸ The flooding of January 2005 resulted in a more systemic response, planning and streamlined crisis management system in Estonia. It also improved the cross-border cooperation and information exchange between agencies in Estonia and Finland.

2.2.4 External dimension

Estonia has not officially requested assistance through regional and international arrangements. It has bilateral agreements with Finland, Sweden and Latvia.⁷⁹ In addition, Estonia has signed related regional and multilateral provisions of the Council of Europe, the EU (since 1 May 2004), NATO (since 29 March 2004), the OSCE (since 2010) and the UN.⁸⁰

The Estonian disaster profile is comparable to her Nordic and Baltic neighbours in the way the response mechanisms are divided along the sector ministries and other state organisations. The Estonian model is based on an all hazards approach whereas the Nordic models are only recently transformed towards a comprehensive crisis management model and a more holistic disaster conceptualization.

The *Estonian Disaster Relief Team* (EDRT) is a multifunctional rescue unit that is capable of international cooperation and can operationally take part in international rescue actions and, if necessary, to react to emergencies in Estonia. The EDRT was established in 1996, and its first task was in 1997 to take part in the Icelandic NATO/PfP training. Since then it has taken part in more than 20 international training exercises and missions in Indonesia, Pakistan and Latvia. The EDRT consists of five teams: search and rescue team (U-SAR); medical team (MED); chemical team (NBC); support team (SUP) and a group of experts (EXP).⁸¹

The national rescue board represents Estonia in international relations in terms of civil security and cooperates with the emergency and crisis management bodies of the UN, EU, NATO, and other relevant organizations.⁸² The Regulation on Participation in International Rescue Operations, 2009, coordinates the formation of a team to participate in a rescue operation beyond the territory of the Republic of Estonia under international agreements signed by the Republic of Estonia or on the basis of requests for assistance from foreign countries or international organizations in need of assistance.⁸³

OSCE, PCA, Schengen Convention, UN; UNCTAD, UNESCO, UNHCR, UNTSO, UPU, WCO, WHO, WIPO, WMO, WTO. ⁸¹Estonian Rescue Service. 2013. <u>http://www.rescue.ee</u>

⁷⁷ Hellenberg, T. & Visuri, P; 2011. Myrskyn silmässä - Suomi ja Uudet kriisit, WSOYPro, 2011.

⁷⁸ Astra Project. Impacts of Winter storm Gudrun: Available from: http://www.astraproject.org/sites/download/ASTRA_WSS_report_final.pdf

⁷⁹ European Commission – Humanitarian Aid & Civil Protection. 2013. Vademecum. Estonia – Disaster Management Structure. <u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/ee/2-ee-1.html#bilagr</u>

⁸⁰ Estonia is also member of following international organizations: Australia Group, BA, BIS, CBSS, CE, EAPC, EBRD, ECB, EIB, EMU, ESA (cooperating state), EU, FAO, IAEA, IBRD, ICAO, ICC, ICRM, IDA, IFC, IFRCS, IHO, ILO, IMF, IMO,

Interpol, IOC, IOM, IPU, ISO, ITSO, ITU, ITUC, MIGA, NATO, NIB, NSG, OAS (observer), OECD, OIF (observer), OPCW,

⁸²European Commission – Humanitarian Aid & Civil Protection. 2013. Vademecum. Estonia – Disaster Management Structure. http://ec.europa.eu/echo/civil_protection/civil/vademecum/ee/2-ee-1.html#bilagr

⁸³ http://ec.europa.eu/echo/civil_protection/civil/vademecum/ee/2-ee-1.html#bilagr

2.3.1 Expectations

Although civil security is a primary function of public entities and specialized agencies in Estonia, but citizens have a long tradition to contribute and take part in civil security maintenance and operations. The State of Emergency Act of 1996 already defined the basis and conditions for proclaiming a state of emergency, and the tasks and rights of responsible people and organizations during a state of emergency.⁸⁴

The *Estonian Neighbourhood Watch* (ENW) is a rather unique association established in May 2000. It is a civic initiative which has a goal to increase the sense of security of citizens at home. It emerged as a citizens' reaction towards a dramatic cut in the number of police officers in 2000. The main aim of the ENW is to motivate and mobilize dwellers or private houses and apartment buildings towards neighbourhood watch and to inform them of the goal, principles and possibilities of neighbourhood watch. The task of this association is to be an organization that unites nongovernmental associations and persons dealing with neighbourhood watch, to share information and training regarding civil security issues.⁸⁵

Besides the above mentioned neighbourhood watch association, there are three civic society institutions contributing to civil security in Estonia. The Estonian Voluntary Rescue Union⁸⁶ which was founded in 2010 is one. It is an umbrella organisation of multiple associations of voluntary firefighting and other civil security tasks in Estonia. There is also an institution of voluntary assistant police officers⁸⁷. The Assistant Police Officers Act (633 SE) was initiated by the government in January 2011. It provides the rights, obligations and the sphere of activity of assistant police officers with the aim of involving persons in the activities of the police in order to protect public order and to ensure social security. An assistant police officer is a person who participates in the activities of the police as a volunteer in his or her free time on the basis and pursuant to the procedures provided by law. Assistant police officers are real not police officers.

The Defence League has a military supportive role in case of civil emergencies and disasters. This includes also the National Cyber Defence League.⁸⁸ There are also several national support organizations created by citizens or private entrepreuners. These include the Defence Involvement Fund, the Estonian Injured Veterans Association, the Estonian Border Guard Officers Union, and the Estonian Reserve Officers Union.

It seems that disasters and emergencies are generally not a major concern for Estonian citizens compared to other problems. According to Eurobarometer poll 383 for February to March 2012, only 15 percent of Estonian citizens feel very concerned when asked how concerned they are personally about following natural or man-made disasters occurring in their country. Those who are fairly concered are one third (i.e. 33 percent) and those who are not concerned are the rest (52 percent). Regarding man-made disasters, 40 percent are fairly concerned and only 20 percent very concerned. In terms of terrorist attacks, 29 percent are fairly concerned and 17 percent are very concerned. With this, Estonia ranks clearly in the lower level among EU Member States in relation to threat and hazard perception.⁸⁹

⁸⁴ http://ec.europa.eu/echo/civil_protection/civil/vademecum/ee/2-ee-1.html#bilagr

⁸⁵ Estonian Neighborhood Watch. 2013. Available from: <u>http://www.naabrivalve.ee/?lang=1</u>.
<u>http://www.naabrivalve.ee/?lang=1</u>

⁸⁶ Estonian Voluntary Rescue Union: http://www.facebook.com/pages/P%C3%A4%C3%A4steliit-Estonian-Voluntary-Rescue-Union/268129796568807

⁸⁷ Estonian Voluntary Police Officers 2013. Available from: http://www.riigikogu.ee/index.php?id=60377

⁸⁸ Estonian Defence League.2013. Available from: www.kaitseliit.ee

⁸⁹ European Commission. Special Eurobarometer 383. Civil Protection. http://ec.europa.eu/echo/files/eurobarometer/reports/CP.pdf

2.3.2 Information

According to a Eurobarometer poll for September-October 2009, 31 percent of the respondents felt informed about disaster preparedness and 36 percent about disaster response.⁹⁰ The level of positive responses regarding information about disaster preparedness is just above the average of the EU Member States. The difference between this relatively high level of positive responses compared to the relatively low level of positive responses on disaster response could be explained by the numerous reforms which have affected the Estonian response capacities and those governmental agencies in charge of this.

The Estonian public crisis information system is based on the idea of giving guidelines for protection of life, health and property. The information is stated to be transmitted "promptly, clearly, unambiguously and regularly". Only accurate and verified information is regarded as valuable and all misinformation is refuted, at least in official policies. Information is also transmitted to the widest possible audience and the organization that coordinates the event in the settlement also does the informing.⁹¹

All crisis information in Estonia is organised and disseminated according to the emergency law. In order to conduct crisis management and other civil security related tasks based on early warning signals there are three crisis management committees: the state government's crisis management committee; regional crisis management committees and local government crisis management committees. They are called together when necessary and according to the magnitude of an emergency and take necessary actions to solve it.⁹²

The Estonian Information System Authority (RIA) coordinates the cooperation, development and administration of the state information system and as such serves as a key entity in promoting cooperation with the private sector; organizes activities related to information security; and handles the security incidents that have occurred in Estonian computer networks. The RIA advises the providers of public services on how to manage their information systems as per requirements and monitors them. In addition, RIA is an implementing entity of the structural assistance of the European Union. RIA is a subdivision of the Estonian Ministry of Economic Affairs and Communications.⁹³

The Department of Critical Information Infrastructure Protection at the Estonian Information System's Authority (RIA) mainly concentrates on questions related to the protection of such information systems that are needed for the proper functioning of vital services. The main task of the department is to arrange protection for the state's critical public and private information systems on the national level. There RIA arranges the protection of such public and private sector information systems that are relevant for the functioning of the state of Estonia. It mainly focuses on the issues of protecting the information systems that ensure the functioning of vital services. Vital services are services necessary for organizing the functioning of the society, healthcare, security and people's economic and social well-being.⁹⁴

There are 42 vital services⁹⁵ in Estonia. There are several ways to name these kinds of essential functions or infrastructures. For instance in Finland these services are called vital functions and in the larger international literature they might be named as critical infrastructures. On the strategic level the protection of vital services is described as the policy of critical information infrastructure protection

⁹⁰ http://ec.europa.eu/public_opinion/archives/ebs/ebs_328_en.pdf

⁹¹ Kriisiveeb.2013. Available from: <u>http://www.kriis.ee/index.php?path=/16/4/60/179&ro=/16/4/60/179</u>

⁹² Riigi Teataja. 2013. <u>https://www.riigiteataja.ee/akt/13247564?leiaKehtiv</u>

⁹³ Estonian Information System's Authority. 2013. <u>https://www.ria.ee/about-estonian-information-systems-authority/</u>

⁹⁴ RIA. 2013. Available from: <u>https://www.ria.ee/about-estonian-information-systems-authority/</u>

⁹⁵ **Vital service** means a service that is essential for the maintenance of the society, and the health, safety, security, economic or social well-being of people.

(CIIP).⁹⁶ This includes information about critical information infrastructure⁹⁷ (CII) which is collected and maintained. "Critical information" here refers to public information in emergencies but only in the protectable asset category. An umbrella term for public information is government communication; for emergencies there is a crisis communication system, for prevention there is a *risk communication framework*.

Additionally, risk analyses related to CII are prepared, the respective security measures are developed and the supervision for following the methods is initiated. The purpose of critical information infrastructure protection is to maintain a trouble-free functioning of the country's essential information and communication systems under ordinary circumstances and to ensure their continuity on a minimum level during critical situations. The *Computer Emergency Response Team of Estonia (CERT)* handles the protection of the information systems necessary for the provision of vital services.⁹⁸

2.3.3 Education

Educational activities are mainly organized by the Estonian Rescue Board and its four regional offices. There exists also some training organized by the non-profit organizations but this is a relatively minor part of the overall training and educational activities in the civil security field.

Civil-military cooperation takes place in planning, training and exercises at the national and regional levels. The principal national counterparts are the Ministry of the Interior and the Ministry of Defence, while practical cooperation also takes place between the rescue services and the defence forces. At the regional level, the county governments and the Voluntary Defence League regional units also coordinate their activities.⁹⁹

2.4 Role of the private sector

2.4.1 Role of societal/non-profit organizations/NGOs

The Estonian civil security system pays particular importance to the role of the private sector at all levels of preparedness but not so much at the level of response. The role of non-profit relief organizations is very small and limited as this sector has not yet developed extensively after the new independence of Estonia in 1991. However, the existing non-profit organizations are included in all public crisis management structures and major exercises. Most of the operational-tactical services are taken care of by professional staff.

According to the contingency plans, the most important non-profit and voluntary organizations in Estonia are the Red Cross, the Estonian Voluntary Fire-Fighters Union, the Estonian Association of Fire and Rescue Chiefs, and the Estonian Life Saving Association and Defence League, who have also been given the task of assisting in rescue work.

⁹⁶ **Critical infrastructure (CI)** means an asset, system or part thereof, which is essential for the maintenance of vital societal functions, and the health, safety, security, economic or social well-being of people, and whose disruption or destruction would have a significant impact in a Member State as a result of the failure to maintain those functions (see Council Directive 2008/114/EC).

⁹⁷ Estonian Information System's Authority. 2013. <u>https://www.ria.ee/about-estonian-information-systems-authority/</u>

⁹⁸ Estonian Information System's Authority. 2013. <u>http://www.ria.ee/CIIP</u>

⁹⁹ Pursiainen, C; Hedin, S; and Hellenberg, T; Civil Protection Systems in the Baltic Sea Region, Towards Integration in Civil Protection Training, Eurobaltic Publications, 2005.

2.4.2 Role of profit-oriented organisations

Estonia is one of the most advanced countries in Europe in using the private sector and its resources as a supportive factor for the preparedness and planning of civil security. The fact that Estonian civil security authorities are actively seeking web based solutions to improve their data exchange and operational efficiency has paved the way for closer cooperation in this regard. Private entities take actively part to the EU funded projects and programmes along with the public security authorities.

3.Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Political inquiries

The Estonian Parliament, *Riigikogu*, cannot exercise direct political control over matters of crisis management. This is a result of the Estonian political system in which the respective authorities have a rather independent role and their position is protected by law. Overall the Estonian system could be characterized as being essentially centralized. In this system the ministries and agencies are responsible in their respective areas. The areal responsibility highlights the different administrative levels of national, regional and local levels. As mentioned earlier, the coordinating body at the national level is the Rescue Board which was formed in 1991, under the jurisdiction of the Ministry of the Interior.

There have been few signature crises affecting the Estonian civil security system during the past decade. These include the flooding of the Northern Baltic Sea in 2005, the Copterline accident in 2005 and the cyber attacks in 2007. Each one of these cases has revealed some needs to improve the Estonian crisis management system, including multi-sectoral situational awareness and rapid response mechanisms. Few inquiries have been made at the political level and they have resulted in some operational-tactical and polito-strategic improvements of the Estonian civil security system.

Professional inquiries

The Estonian civil security system has faced some professional inquiries about recent emergencies and accidents. These are mostly conducted by the civil security agencies themselves. The Estonian Safety Investigation Bureau (ESIB) is a permanent and independent agency coordinated and hosted by the Ministry of Economic Affairs and Communications. It aims to improve transportation safety through professional and independent investigations. Its sectors include all essential fields of critical infrastructures in maritime, aviation and railway sectors. The ESIB has a mission to determine the causes of accidents and to produce multiple safety recommendations based on its investigations. These are conducted in accordance with Estonian laws and EU regulations.¹⁰⁰

3.1.2 Limits to national capacitites

To date, Estonia has not officially requested any assistance nor any cross-border assistance. Estonia is closely linked with its neighbours Finland, Latvia and Sweden. In addition, it has signed related regional and multilateral provisions of the Council of Europe, the EU, the NATO and the OSCE. Moreover, Estonia has not officially declared a state of emergency after its new independency in 1991. However, the Estonian

¹⁰⁰ Estonian Safety Investigation Bureau. 2012. http://www.ojk.ee/en

civil security system has been drastically reformed based on recent lessons learned from past natural disasters (such as the January 2005 flooding) and other emergency situations.

Estonia has no nation-wide and coherent definition of crisis situations or major emergencies. Since 2005, the Estonian civil security system could be described as being essentially centralized. In this system, the different ministries, agencies and departments are responsible in their respective functional fields for civil emergency issues. The Ministry of the Interior remains in an overall responsibility for civil protection in Estonia. The main coordinating body at the national level is the Rescue Board.

Several new initiatives have been carried out to improve the Estonian preparedness and national capacities to deal with emergencies. These include the all key phases of crisis management starting from response to consequence management. Being a member of the European Union and NATO has brought new resources to the Estonian civil security system.

3.2 Efficiency

In 2012, the government approved the state budget strategy for the years 2014-2017. The aim is to continue with a conservative budget policy, aiming to stabilize expenditures and to restore reserves. The estimation for total expenditures for the four-year period is 33 billion euros. This is estimated to be 7.9 per cent higher than the state budget strategy for the previous period. As stated by the Government Communication Unit in its report of 25 April 2013, a significant amount of expenses will be allocated to internal security.¹⁰¹ This budget strategy comes up at a time when many of the Estonian civil security agencies have faced severe political pressure to cut their operational and administrative costs and to meet the overall governmental budget targets.

The Ministry of the Interior is the largest ministry in Estonia employing about 10,500 people. Its main educational arm is the Estonian Public Service Academy.¹⁰² During the recent years the education and training activities have included joint projects with the European Commission as well as with some private sector entities. By doing this, the Estonian civil security authorities have shown pragmatism when dealing with the shrinking budgetary resources.

3.3 Legitimacy

3.3.1 Political support

The legitimacy of the Estonian civil security system has been relatively clear and widely acknowledged. There might be several reasons for this but the main factor seems to be the historical one. Since the centuries of foreign rule the Estonians are rather suspicious of strong central power and prefer the local governments. This works well with the civil security system although it is rather centralized from an administrative perspective. Executive and political power of the civil security system rests at the local and regional levels.

Civil security issues in general and new approaches such as the Estonia Neighbourhood Watch (see 2.3.1 Expectations) have been widely accepted and supported by the citizens (see 2.1.2 Government/societal culture). As mentioned earlier, the Estonian civil security system is also dependent on its defence forces. The defence strategy is based on initial self defence and on the NATO collective defence system. Both these pillars enjoy wide support and popularity among the major parties at the Parliament.

¹⁰¹ Government Communication Unit. 2013. http://valitsus.ee/en/government/74787/government-approves-state-budget-strategy-for-2014%E2%80%932017

¹⁰² Siseministeerium. 2013. https://www.siseministeerium.ee/?lang=en

3.3.2 Legal support

The legal support for the Estonian civil security system has been based on the Rescue and the Emergency Act. The Rescue Act regulates and provides an operational framework for the main civil protection and rescue services. The Emergency Act of 2009 defines the mechanisms to be activated in the case of large scale disasters and special situations.

The Rescue Act states that the government forms, re-organizes and terminates the activities of militarized rescue units by a regulation. It also lays ground for the staff of the Ministry of Internal Affairs and the Rescue Service Administration. For the local governments it gives an order to administer and carry out fire and rescue work in the rural municipalities and cities if the local government has established a rescue service agency to carry out such work. Furthermore, it states that local governments may enter into contracts with one another or with the county governor when carrying out fire and rescue work. If a county governor enters into an administration contract with a local government for performance of the duties of the state in firefighting and rescue, the duties and rights of a rescue service agency administered by a county government extend to the rescue service agency of the local government to the extent prescribed in the contract.¹⁰³

3.3.3 Popular trust and support

In Estonia the civil security measures are well legitimated as they are based on law and controlled by the Parliament. The civil security mechanisms enjoy wide popular trust and support. As mentioned earlier (2.1.2 Government/societal culture), Estonia can be described as being a rather conservative country with strong secular-rational values. Estonia has a special character of having strong local governance and this has brought support also to the localized civil security approach and its institutions.

In the European comparison, Estonians give a wide support to its relatively new membership in the EU and NATO. This has also affected the support of civil security in general as this has been placed on the same framework with the traditional defence and military policies. Estonian civil security authorities such as police, fire and rescue services and Border Guard are among those authorities who are often seen as trustworthy and most efficient in terms of using public funds.

4.Estonian Civil Security in the EU Context

Civil security cooperation within the European Union and Estonia has so far taken place mainly by information exchange and joint events and exercises. Estonia is an active member of several working parties and hosting conferences on a regular basis. For instance, in the field of maritime cooperation, Estonia has been an active initiator of both strategic and operational dialogue among the Baltic Sea countries. A recent enhancement of bilateral relations with Russia has opened new possibilities also within EU cooperation in this field. The European Commission has been an important facilitator of research and vocational civil security training. This has been mainly facilitated by the Estonian Academy of Security Sciences, which is a state institution, providing professional education for civil servants belonging in the area of government under the Ministry of the Interior. Its objective is through internal security related academic education, research and development activities, and also through the training of honest and competent public servants, to create a secure state and conditions for stable development across the state of Estonia and therewith contribute to the security of the European Union (EU).¹⁰⁴

¹⁰³ Estonian Rescue Act of 1994. 2013. http://www.legaltext.ee/text/en/X2019K4.htm

¹⁰⁴ Sisekaitseakadeemia. 2013. Available from: <u>http://www.sisekaitse.ee/eass/the-academy/</u>

After joining NATO and the EU, Baltic cross-border and inter-agency intergovernmental cooperation has been enhanced with a common code of conduct, joint training and increasing inter-operability in all fields of crisis management. International cooperation is focused mainly on cooperation with NATO and the EU. NATO membership brings Estonia the protection of a collective defence. EU membership merges Estonia with the European economic and legislative space, Common Foreign and Security Policy, and Common Security and Defence Policy.¹⁰⁵

The MOD supports the active participation of Estonia in various activities of the EU and NATO projects, focusing on networking and information exchange. It is important to note that Estonia is the host country for the NATO Collective Cyber Defence Centre of Excellence. From the military side, projects such as BALTDEFCOL (in Tartu Estonia), BALTNET and BALTRON are also worth pointing out. Estonia is also a member of the European Defence Agency and its vast R&T activities.¹⁰⁶

5. Conclusion

In Estonia, the civil security system had to be re-built from the ground up after 1991. The old Soviettype system of civil defence, based on the idea that civil society should be fully mobilised in the support of the country's defence in case of war. This system has been gradually redeveloped towards a "peopleoriented" civil protection model. Its primary responsibility lies in protecting the population against natural and man-made disasters, as well as in civil emergency planning.

The Estonian civil security system can be described as being rather centralized. The Ministry of the Interior has overall responsibility for civil protection in Estonia. The coordinating body at the national level is the Estonian Rescue Board. It supports the regional civil protection agencies and maintains the four territorial inter-agency emergency preparedness committees.

The Estonian civil security and crisis management model is based on an all-hazards approach. This can be seen not only in the administrative developments but also in the research and development projects of the country.

Estonian citizens have a long tradition to contribute and take part in civil security maintenance and operations and this trend is increasing. Also the role of private sector getting stronger as Estonia is still seeking alternative models to replace the old civil security system. This might bring some new innovations and cost benefit solutions in the future.

¹⁰⁵ Estonian Ministry of Defence. 2013. <u>http://mod.gov.ee/en/defence-policy</u>

¹⁰⁶ European Defence Agency. 2013. <u>www.eda.europa.eu</u>

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 ESTONIA

1	Introduction	Scoring instruction	Score	Source	Comments
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	0		
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2		
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1		
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1		
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1		
2.1.1.b	Is the political system	Parliamentary system = 1	1		
	parliamentary or presidential?	Presidential system = 2			
2.1.1.c	Is the country a monarchy or a republic?		2		
2.1.1.c 2.1.1.d	Is the country a monarchy or a	Monarchy = 1 Republic = 2 Consociational democracy	2		
	Is the country a monarchy or a republic? Is the political system a consociational or a majoritarian	Monarchy = 1 Republic = 2 Consociational democracy = 1 Majoritarian democracy = 2			

2.1.2.a.i	Geert Hofstede country national cultural score - DPI		40	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		60	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		30	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		60	http://geert- hofstede.com /countries.ht ml	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		1.27	http://www. worldvaluess urvey.org/	Year 2000
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		-1.19	http://www. worldvaluess urvey.org/	Year 2000
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	2		
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2009		The Emergency Act
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive	Formal legislation = 1 Executive order = 2	1		

	order?			
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?			
2.2.2	Political dimension			
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?		1	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	2	
2.2.3	Operational dimension			
2.2.3.a	Is there a specialised agency for crisis response at the national level?		1	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?		1	
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No=0Bylaw=1By executive mandate = 2	2	
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number		
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number		
2.2.4	External dimension			
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	1	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.		
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on	Register the number.		

	environmental protection) is the country part of?			
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"		0	
2.3	State-citizens relations			
2.3.1	Expectations			
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	
2.3.2.b	Does the government have a system for radio/TV warnings	No=0Yes, at the local/regionallevel=1Yes, at the national level2Yes, at both local/regionaland national levels3	3	
2.3.2.c	Does the government have a central website with updated information on crisis events?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?			

2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		
2.3.3	Education			
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1	1	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To member ands wide- spread training programmes for general population = 3	2	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No=0Yes, moderately (once per year)=1Yes, extensively (more than once per year) = 2	1	
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		1	
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number		
2.4	Role of private sector			
2.4.1	Role of societal/ non-profit organisations			
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?			
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2		
2.4.2	Role of profit-oriented organisations			

2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?				
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2			
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.			
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?				
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA			
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.			
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.			
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?				

3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?				
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	-			
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	-			
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	Partial (legally defined			
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	1 0	62	Special Eurobaromet er 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?		63	Special Eurobaromet er 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1			
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011			
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector?	Register the number per 1000 capita for 2011.			
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and	Register the number for 2007-2011	To be complete d by	opa.eu/echo/	

		I	I	
	Information Centre (MIC) – 2007-2011?		UI/IFHS	disaster resp onse/EUCPM activations since_010120 07.pdf
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	complete	http://ec.eur opa.eu/echo/ files/policies/ disaster_resp onse/EUCPM _activations_ since_010120 07.pdf
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009- 2010 training cycle?	Register the number for the 2009-2010 training cycle	16	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	7	http://ec.eur opa.eu/echo/ policies/prev ention_prepa redness/prep aredness_en. htm
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	1	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions since_2002. doc

4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	1.3	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions since_2002. doc
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	45	Special Eurobaromet er 383 (2012)
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	81	Special Eurobaromet er 383 (2012)

Annex II: H1N1 in Estonia

The Estonian social and health authorities were preparing for an average emergency situation during the early stages of the H1N1 ("Swine flu") event in 2009. As the first stages of the H1N1 outbreak were not seen as dramatic, the actual response and preparedness measures of the Estonian authorities began only during the autumn of 2009.

The first cases were reported in May 2009. In June two people were infected in Estonia with H1N1. On 29 May a 29-year-old man tested positive for swine flu (H1N1). He had returned from the United States. The man was taken to hospital.¹⁰⁷

H1N1 reached Estonia more deeply in November 2009. The positive cases were from persons travelling abroad. There was no alert concerning an epidemic special situation in Estonia at the time as the positive cases were only 150 which was still below the crisis limit of 200 persons. Most of these cases were persons under 40-years-old. The biggest concentration was in Tallinn. Although there were not more than 150 cases, the trend was rapidly increasing with dozens per week which brought some additional concern among the authorities.

Estonia did not purchase vaccinations at the early stage of May/June like many other European countries. The main reason was the economic downturn in the country. On the other hand, the deputy chancellor of the Social Ministry Ms. Ivi Normet pointed out, there were no possibilities to order vaccinations beforehand as situational information was lacking, i.e. who is producing them. Interestingly, there were only a few critics in public as the tendency in Estonia is not to take vaccinations (only 2 per cent take vaccinations on an annual basis). So far, there were no casualties caused by the H1N1 in Estonia.¹⁰⁸

In early November 2009, the Estonian Health Inspection launched an information campaign performed by an Estonian singer Gerli Padar. This was done via TV and radio news by a dancing performance "how to avoid the swine flu". Besides many practical tips there was an announcement to avoid unnecessary travelling and getting enough rest. Tiiu Aro, Director General of the Estonian Health Inspection, pointed out that whereas the H1N1 infection is not prevented or treated by dancing, this project was a good method to spread risk awareness of its causes and symptoms. Later on, the Estonian government purchased Tamiflu and Relenza vaccinations for 10,000 citizens.¹⁰⁹

As the situation progressed, also experience and information increased which made the crisis management efforts more smooth and coherent. All together it is estimated that during the flu season 2009/2010 up to 124,000 people became ill (9.5 per cent of the population). From November 2009 onwards intensive care was given to 149 citizens. There were possibly 21 persons who died in Estonia from this special civil security situation but there is no fully confirmed data available about this matter.¹¹⁰

The response measures were relatively profound with 250,000 doses of the vaccine of which 148,000 doses (Celvapan) were funded from the state budget and 100,000 doses (Pandemrix) were covered by health insurance funds).

The essons learned from this pandemic in Estonia were twofold. On the positive side some additional financial resources were budgeted and administrative solutions created to support the inter-agency cooperation between the authorities in charge of pan-epidemic issues. These included an improved monitoring system and enhanced laboratory capacities. The communication systems were also improved

¹⁰⁷ Flutrackers.com. 2013. http://www.flutrackers.com/forum/showthread.php?t=108092

¹⁰⁸ Kaleva. 2009. http://www.kaleva.fi/uutiset/kotimaa/sikainfluenssa/viro-on-sikainfluenssaepidemiankynnyksella/247799/

¹⁰⁹ Uusi Suomi. 2009. http://www.uusisuomi.fi/ulkomaat/76593-viro-tanssii-sikainfluenssaa-vastaan-rokotteita-ei-ole ¹¹⁰ VV kriisikomisjon. 29.9.2010. Powerpoint presentation: "Eesti valmisolek epideemia hädäolukorraks ning luhiulevaade "seagripi" oppetiundidest". Sosiaalministeerium, Terviseamet. Health Board.

as a result of the H1N1 situation. This resulted in the opening of a phone based helpline and several campaigns in TV, radio and online media. From a negative perspective the massive news stream created confusion and even panic among some citizens. The delayed vaccine purchasing (vaccines arrived to Estonia only in December 2009) by the government led to uncertainty about the response measures.¹¹¹

¹¹¹ Terviseamet. 25.11.2010. Powerpoint presentation: "Gripipandeemia – oppus elus?" Terviseamet, Health Board.

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Finland

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Executive Summary

The present crisis management system in Finland has been developed after the Cold War from the preparedness to overcome extreme situations, a total war included, towards a more peace-time oriented crisis management which is based on a comprehensive security concept. There are still some features in the Finnish concept of maintaining civil protection/security following from that history.

The Finnish civil security system could be characterised by a high degree of decentralisation and divided tasks based on substantial expertise of and competences across levels and issues. This creates particular challenges for achieving coherent situational awareness.

One of the most important dividing lines of civil security threats goes between natural and man-made disasters, on one hand, and active hostilities against the state and society, on the other. In the latter case a crisis situation can include more uncertainties and protracted potential for escalation which can mean new attacks and losses. The management of this type of crisis demands active, flexible leadership and a well-functioning command system. However, crisis management organization and planning of countermeasures should, as far as possible, be based on a common structure, i.e. in the contingency planning according to an "all-hazards" principle. It is useful especially for economic reasons but also for the sake of ensuring efficiency.

A number of Finnish government resolutions define the threat and emergency categories in detail. They signify unanticipated or sudden threats or events in normal time or emergency conditions that can endanger the security of the society or population. Threat scenarios are maintained as part of the state administration's normal prediction and follow-up work and are updated during the time when the strategy and government resolution is reviewed.

The Finnish civil security system has undergone a wave of reforms such as the regionalisation of the rescue services and establishment of the Emergency Management Administration (112) during the past decade and this has affected all sectors of civil security. In this study we describe the major trends and processes which have taken place.

Key Findings

- Centralization of the system. The civil security and crisis management systems in Finland have been developed after the Cold War from the preparedness to overcome extreme situations, a total war included, towards a more peace-time oriented arrangement which is based on a *comprehensive security* concept. There are still some features in the Finnish concept of maintaining civil protection/security following from that history. Today, the Finnish system is exceptionally centralized with multiple command and control centres. Most recently, the government established a Finnish security committee which is hosted by the Ministry of Defence.
- 2. Keeping up "business as usual during emergency conditions". The civil security system is based on the principle where each sector authority conducts their normal tasks and responsibilities during various emergencies or crisis situations. The long-lasting tradition from the past is the principle of strict legality in the administration. Horizontally, every sector has rather independent powers in decision making, and also vertically the possibilities of upper administrative levels to lead directly over the lower levels are restricted by law. This culture of legality in the administration is deep-rooted, and it is rather difficult to change for a flexible and more concentrated or integrated system of civil security arrangements.
- 3. Emphasis on coherent situational awareness is prioritized and heavily invested. The great variety of crisis types and need to make decisions swiftly also in "civil crises" have made it necessary to construct an effective system for maintaining situational awareness. A situation centre has been built for the permanent use of the government, and it is located at the Prime Minister's Office at the Government Council. The situation picture and surveillance data are collected at the situation centres of the above mentioned authorities. The underlying principle is that these centres will further enhance the situational picture of the Government Situation Centre which upholds awareness of the general situation and makes analyses for the prime minister and government. However, this principle needs still to be clarified and elaborated within various sectors of the government.
- 4. Finland is a country at the forefront of multiple civil security reforms. However, the recent vast reforms: regionalization of the rescue services, establishing the Emergency Response Administration (112) and launching the VIRVE Tetra radio network have challenged the civil security system which was inherited from the Cold War era. Difficulties may emerge especially with crises which have inter-sector effects and must be handled without delay.
- 5. Government security network has been launched as a piloting project. Finland has invested in a new advanced and wide reaching government security network called TUVE. There are also nationwide network of command centres equipped with emergency communication systems. In emergency situations (conditions), the Ministry of Interior Regional State Administrative Agencies, and rescue service regions will activate these into use. At the municipal level each administrative unit will also maintain a command centre which can be used during emergencies. The aim of the Government Security Network project (TUVE) has been to plan and implement a dedicated and secure communications network of a high level of preparedness for the government authorities and the other 30,000 security authority users. This includes key state authorities for public order and safety, national

defence, rescue missions and civil defence, such as the defence forces, the police, rescue services, the Border Guard and the emergency response centres.

List of Abbreviations

CBRN	Chemical, Biological, Radiological, Nuclear
ELY	Economic-Environmental Centres
ERC	Emergency Response Centre
ERCA	Emergency Response Centre Administration
FRF	Finnish Rescue Force
ITCM	Information Technology and Crisis Management
MIC	Monitoring and Information Centre
NESA	National Emergency Supply Agency
OSCE	Organization for the Security of Europe
SUPO	Suojelupoliisi (Finnish Security Police)
TUVE	Turvallisuusverkkohanke (Government Security Network)
VAPEPA	Vapaaehtoinen pelastuspalvelu (Voluntary Rescue Service)
VIRVE	Viranomaisverkko (Public Authority Network)

1. Introduction

The most common crises in Finland since the end of World War II have been caused by natural disasters, most notably floods and storms. In addition, there have been some technological disasters and transportation accidents. The sinking of the M/S Estonia in September 1994 is still the most disastrous civil security crisis in Finnish history. The ship with 989 people was en route from Tallinn to Stockholm overnight. She sunk in 50 minutes after taking on water from the opened bow door. The Estonia was in international waters but near Finnish territory, and therefore Finland was responsible for the international rescue operation. In total, 852 persons died. There have also been two school shootings which have been regarded here as acts of terrorism. Table 1 provides an overview of crises between 2000 and 2012 and the number of persons killed, injured and affected, according to the available data.¹¹²

Year/ Month	Crisis description	Crisis category	Damage		
			# of persons killed	# of persons injured	# of persons affected
10/2002	Suspected deliberate act by explosives at shopping centre (Vantaa)	Terrorism	7	80	
03/2004	Transport accident (A head-on collision involving a heavy vehicle combination and a chartered coach in Äänekoski)	Technological disaster	24		15
01/2005	Floods in Helsinki (and Ivalo Kittilä, Lappland)	Natural disaster			125 (400)
11/2007	Polluted water	Technological disaster	1		8,000
11/2007	School shooting (Tuusula)	Terrorism	9	12	60
09/2008	School shooting (Kauhajoki)	Terrorism	10	3	30
07/2010	Storm	Natural disaster		2	6,000
12/2012	Storm	Natural disaster			4,500

Table 1: List of Crises (2000-2010)

¹¹² For quantitative data, see <u>http://www.emdat.be/country-profile</u>. For a qualitative listing of major crises see <u>http://ec.europa.eu/echo/civil protection/civil/vademecum/</u>

Additionally, it should be mentioned that one of most disastrous incident for Finland was the Tsunami in the Indian Ocean, in Boxing Day 2004, because it caused death for 179 Finnish citizens.

The present crisis management system and its objectives concerning civil security have been developed after the Cold War from the preparedness to overcome *extreme situations*, a total war included, towards a more peace-time oriented crisis management which is based on the *comprehensive security concept*. There are still some features in the Finnish concept of maintaining civil protection/security following from that history.

Finland has a somewhat coherent nation-wide definition of crisis situations and *emergency conditions* or other *disturbances affecting the society*.

According to the Preparedness Act 2011, emergency conditions as follows

- An armed attack against Finland.
- A serious threat of armed aggression against Finland.
- A serious threat to the livelihood of the population or the foundations of the national economy.
- A catastrophic disaster.
- A widespread dangerous disease.

Those cases will be defined as emergency conditions if the authorities cannot control the situation with regular powers. It is remarkable that the emergency conditions mentioned above concern only situations which are linked to an armed conflict in or outside Finland, have serious economic effects or are defined as natural or man-made catastrophes. Terrorist attacks or other terrorist activities, even in a large scale, are not mentioned in the list of emergency conditions.¹¹³

An *emergency situation* can be managed with usual administrative measures without special crisis management arrangements, but the same system of alarm and decision making should be used as a basis for preparedness concerning all kinds of crisis and other emergency situations following the *"all hazards"* principle¹¹⁴.

The other long-lasting tradition from the past is the principle of strict legality in the administration. Horizontally, every sector has rather independent powers in decision making, and also vertically the possibilities of upper administrative levels to lead directly over the lower levels are restricted by law. This

¹¹³ The stipulations according to the *Preparedness Act* could be applied before or beside the *State of Defence Act* which gives additional powers for the Government in the defence against an armed aggression.

¹¹⁴ About the concept "all hazards" see e.g. Geary Sikich, *"All Hazards" Crisis Management Planning*, <u>http://206.180.235.135/byauth/sikich/allhz.html</u>

culture of legality in the administration is deep-rooted, and it is rather difficult to change for a flexible and more concentrated or integrated system of civil security arrangements.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Finland is a democratic, parliamentary republic with a one-chamber parliament (in Finnish Eduskunta) for which 200 representatives are elected for four year mandate periods. In accordance with the principle of parliamentarianism, the government must enjoy Parliament's confidence. The Parliament has general powers to accept the government's actions or dismiss ministers.

The *president of Republic* is directly elected by the people for a period of six years and leads foreign policy in accordance with the government. The president is also supreme commander of the Defence Forces.

The *prime minister* leads the *government* and oversees also measures needed for managing crisis situations. Each ministry is responsible for the preparation of matters within the government's mandate and the appropriate functioning of administration in its own administrative sector.

The government directs, supervises and coordinates the securing of functions vital to society. Each *competent ministry* does the same within its respective administrative sector. In order to facilitate preparedness and to instigate activities, all *competent authorities* employ their statutory powers, which are already quite exhaustive in normal conditions.

According to the *state's crisis management model*, the *competent authority* (officials from on-site leader to the ministry level) initiates measures as per its regulations and informs the preparedness organization of its administrative sector. *The Prime Minister's Office* runs the *Government Situation Centre*, which builds on cooperation among ministries and supports government-level management.

The *ministry* empowered by the law to do so leads activities and coordination among ministries, when required. The Prime Minister's Office makes certain that a competent ministry has been designated.

The *permanent secretary* bears primary responsibility for the preparedness of his/her administrative sector as well as for managing the security situation. The measures of different administrative sectors and, when necessary, the business community and NGOs, are coordinated by the *permanent secretaries' meeting*.

The *meeting of the heads of preparedness* supports permanent secretaries with regard to operational activities. The *security chief of the government* (head of the Government Situation Centre) chairs the meetings of the heads of preparedness or they can be chaired by the head of preparedness of the competent ministry, depending of the case in question.

The *Security Committee* is responsible for the longer term planning and preparations of the comprehensive national defence, and therefore, the crisis management model developed for acute crisis situations does not impinge on the role or tasks of the committee.

The operational capabilities of the state leadership as well as the required support organization and systems are maintained through regular table top and live exercises.

In the *Security strategy for society* (Government Resolution 2010)¹¹⁵ the above described scheme has been somewhat elaborated and simple function lines added with possibilities to make more direct contacts from one level to another level of decision making as well as build coordination contacts between authorities. This scheme emphasizes the normal preparation procedures of decisions with several supporting elements.

It is still useful to ask how the Finnish decision-making in crises could be clarified and made as simple as possible. The system containing many alternative procedures and all normal-time administration routines can be much too time-consuming and complicated in a severe crisis situation.

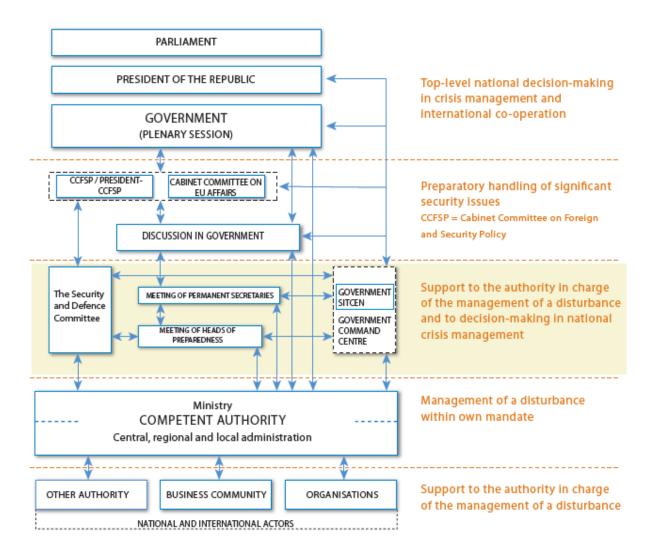
The emergency categories as well as threats and risks to society are described in the security strategy. The threats can be disturbances in normal time or emergency conditions that can severely endanger the security of the society or population. On the basis of the described scenarios, the competent authorities compile *more detailed threat estimates for their own fields of responsibility*. These estimates specify the origin of the threat, the target, the form it takes, its probability, the way it affects the authorities' capability to carry out their tasks as well as response options.¹¹⁶

The civil security system of Finland is decentralised with a rather strict independence of administrative and functional sectors.

¹¹⁵ Ministry of Defence. 2010. *Security strategy for society*. Government resolution 16.12.2010. Available from: <u>http://www.defmin.fi/en/publications/strategy_documents/the_security_strategy_for_society</u>

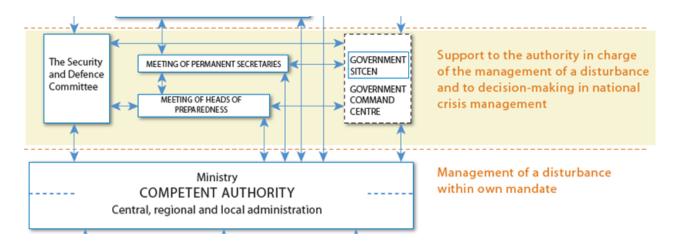
¹¹⁶ See Annexes 2 (Threat models) and 3 (Possible disturbance and emergency situations) of the *Government Resolution* 16.12.2010. They list situations of different categories of threat scenarios, and the ministries which are responsible for the management of the actual cases (i.e. a competent ministry and supporting ministries).

Figure 1. Management of crises and emergency situations, according to the *Security strategy for Society 2010*. (Ministry of Defence, 2010)



The present crisis management model as such is clear in theory, and it meets the demands for legality and administrative efficiency, but we have not much experience of its functioning in new types of crises. Some lessons learned from the latest emergency situations and exercises signal that serious difficulties can emerge in surprising, complicated and multidimensional crisis situations, for example in a case of terrorist attacks. The cooperation of the first responders and leaders at the operational-strategic level are seen as crucial prerequisites for successful crisis management in Finland.

Figure 2. The main levels of decision-making according to the *Security strategy for Society 2010*: 1. Operational/strategic responsibility: competent authority. 2. Support and strategic planning: government level institutions (Prime Minister's Office, 2013)



According to the new government resolution on comprehensive security, from 5.December 2012, the arrangements for planning against threats and management of a crisis situation have to be changing somewhat.

2.1.2 Governmental/societal culture

Finland's political culture shows approval rates for democratic values and institutions. Geert Hofstede's grid-group scores point to decentralization, a combination of being an individualistic country with hierarchy for convenience only. There is a strong preference towards informal management and control. Individualism is valued and society is driven by competition and a striving for achievement. Finnish culture has also a tendency towards a short-term orientation with a mutual goal to resolve society's conflicts by compromise and negotiation.¹¹⁷ The World Value Survey for 2005-2007 puts Finland in the group of protestant European countries characterized by an average degree of secular-traditional values and also somewhat lower than other comparable countries in terms of self-expressions values.¹¹⁸

The Finnish civil security system reflects rather conflicting cultural-historical and administrative-political traditions. Finland has been located between Western and Eastern power spheres, i.e. between the western roman Catholic/Protestant and Eastern Orthodox Churches as well as between West-European and Russian cultural-political areas. For a long time, from the 13th century to the year 1809, Finland was a part of the Swedish kingdom. During 1809-1917 Finland was an autonomous grand duchy in the Russian Empire, still with Swedish-originated legislation and culture. The independence of Finland was gained in

¹¹⁷ http://geert-hofstede.com/finland.html

¹¹⁸ For the statistical date see <u>http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_111</u> [last accessed 15 November 2012].

1917 and defended by costly fighting against the Soviet Union along with Germany during the Second World War, from 1939-1944.

The experience taken from the Second World War and Cold War has strongly affected the development of the Finnish crisis management and civil security systems. Security and defence policy have been based on the doctrine of "total defence" which includes both military and civil elements.

Decision making in crisis situations during the Cold War was regulated with instructions by the National Defence Council and legal provisions by the Parliament. In the legislation a strict dichotomy existed between the normal situation and the state of war. War-time conditions were well defined and regulated. The problem was that the decision-making procedures in all kinds of disturbances and crises underneath the level of a war situation were rather vaguely defined and legislated. The basic idea was: "If we have a good preparedness for a total war we can well handle all the less dangerous situations, too, possibly with some improvisation according to the special demands of the actual crisis." Over time the need to develop procedures for the "grey zone" between peace and war became urgent, but it lasted until the end of the Cold War as the new legislation was completed.¹¹⁹

After the Cold War, national security doctrine has been developed more on the basis of the idea of "comprehensive security" with more emphasis on civil security and broader crisis management issues. The all hazards approach has been praised by a number of government documents and recent strategies. In the area of civil security there are several initiatives such as *Finland's Cyber security Strategy 2013* which presents a programme for improving cyber security.¹²⁰ It aims to stimulate and encourage the private sector and companies to take part in protection measures of the vital functions of society (see section 2.4.2.). These attempts are still underway and most likely will require more incentives to succeed in the years to come.

2.2 Legal and constitutional aspects of the civil security system

2.2.1 Statutory basis

The statutory basis of civil security in Finland is fragmented and rests upon distinct bodies of formal legislation at the national (state) level and at the county level. From a functional perspective, the statutory basis is divided into laws for different emergency response services (e.g. police, rescue service, border guard). Finnish civil security could not therefore be described as a one-level system (or institution) but

¹¹⁹ Visuri, P. & Hellenberg, T. 2011. "The Finnish Crisis Management" in *Securing the Air Traffic, Case CBRN Terrorism*. Ed. Timo Hellenberg and Pekka Visuri, Aleksanteri Institute, University of Helsinki, 2011, p. 131.

¹²⁰ Valtioneuvosto. 2013. *Finland's Cyber security Strategy 2013*. Government resolution 24. January 2013.

more like a multi-level organism with a tendency of involving a large number of actors and decision makers.

The need to have a general emergency powers act in the *Constitution* was widely recognized during the 1980s. After a lengthy political and judicial process in 1991, the Parliament passed the *Emergency Powers Act* (1080/1991) simultaneously with the *State of Defence Act* (1083/1991) which replaced the old State of War Act. They specified the conditions which could lead to enhanced authorization of powers in crisis situations, as well as set respectively frames for decision making.

The Emergency Powers Act (1991) aimed to secure the livelihood of the population and economy, to maintain legal order as well as constitutional and human rights, and to safeguard the territorial integrity and independence of Finland in emergency conditions. It could be applied before or beside the State of Defence Act which gives additional powers for the government in the defence against an armed aggression.

Increasing national and international interdependency and the simultaneous societal developments required a new assessment of Finland's security more comprehensively in the early years of the 21st century. A new strategy from the viewpoint of functions vital to guarantee the security of the population and society as well as the freedom of action for the state leadership was created and published in November 2003 under the title *Government Resolution on Securing the Functions Vital to Society*.

The revised strategy and new government resolution in November 2006 took into account the increasing internationalization as well as changes in the security environment and societal structures. Special attention was paid to the consequences of Finland's membership in the European Union.¹²¹

Ministries have been obliged to include all of the measures required by the resolution in their standard operating and financial plans. Each ministry directs its respective administrative sector's preparedness as well as relevant legislative improvements. The activities of the business community and non-governmental organizations (NGOs) were also considered but not exactly articulated or defined, nor have the private entities been given a clear role and mandate in the national exercises or planning, despite all the strategies and political declarations. Public-private partnership takes place but still mainly within multiple working groups and committees, not as such through joint exercises or development projects.

¹²¹ Valtioneuvosto. 2006. *The Strategy for Securing the Functions Vital to Society*. Government Resolution, Helsinki 23.11.2006.

The strategy (resolution) has been compiled from the viewpoint of societal functions that are vital in all situations. It also described the threat scenarios that could jeopardize vital functions, including the most important special situations within each scenario. A ministry primarily responsible for preparedness and situation management has been designated to each special situation in accordance with its mandate. Other ministries support the competent ministry. In order to secure society's vital functions, strategic tasks required by the security environment have been assigned to ministries.

The government ordered a review of the strategy and resolution from 2006, and published a new version as *Security Strategy for Society* in December 2010. There was no need to build quite new preparedness and crisis management systems but rather to elaborate some descriptions and terminology as well as to rethink the adequacy of threat scenarios for present and future conditions in Europe.

The general purpose of the security strategy has been, in line with the objectives of the Finnish security and defence policy, to secure the vital functions of society, which means more detailed: to safeguard the country's independence, preserve security in society and maintain the livelihood of the population. What is missing from this list is the idea of protecting Finnish interests abroad, a statement many European countries such as Italy or Sweden have included in their national strategies during recent years.

The strategy sets out the government's guidelines for ministries. It concretises the government reports on the Finnish security and defence policy and augments other government guidelines concerning various sub-topics of security.

The strategy coordinates the administrative sectors' measures required for preparedness and securing vital functions by defining vital functions of the society and their desired end states, common threat scenarios and associated special situations, including preparedness obligations, the ministries' strategic tasks required for securing functions, including development requirements, and focus areas, the schedule, monitoring arrangements and exercises.

On the one hand, the strategy aims to avoid duplication of development efforts and, on the other hand, to prevent a situation in which capabilities required for securing the vital functions are not developed. Ministries are to direct the preparedness of their administrative sector and related legislative measures on the basis of the resolution.

The government report on *Security and Defence Policy* (2009) proposed that a reassessment of the present comprehensive defence doctrine and the Strategy for Securing the Functions Vital to Society (2006) as well as the Internal Security Programme should be reviewed. The reviewing committee¹²² concluded in 2011 that Finland's preparedness arrangements were in no need of major reform. As the operating environment

¹²² Valtioneuvoston kanslia. 2011. *Preparedness and comprehensive security*. Committee report 28. November 2011: <u>http://vnk.fi/julkaisut/julkaisusarja/julkaisu/en.jsp?oid=344062</u>

and threat scenarios are in a constant evolution process, preparedness had to be based on the broadest security thinking possible, that of *comprehensive security*, and on harnessing the resources of the whole of society. In preparedness, better account should be taken of the stronger role played by the business sector and the significance of nongovernmental organisations. Further steps should be necessary to increase co-operation as the reform of the state regional administration and municipalities has been extensive.

The committee aimed at eliminating overlaps in operations and improving cooperation. Normal statutory powers should be maintained in preparedness and the management of disruptions. Attention was paid by the committee to the development of situation awareness and opportunities to obtain correct, immediate information serving preparedness.

The committee proposed that the operating preconditions of the *Cabinet Committee on Foreign and Security Policy* should be strengthened, while recognising the importance of joint meetings between this Cabinet committee and the president of the Republic. The minister of interior should also become a member of the Cabinet Committee on Foreign and Security Policy.

Government Resolution 5. December 2012 on *comprehensive security*¹²³ defines the concept of comprehensive security and related key concepts, while specifying the responsibility of various branches of government for comprehensive security. The government resolution clarifies the organisation of and responsibilities for comprehensive security, particularly at government level.

Central strategic guidelines on comprehensive security will be laid down in the government's security and defence policy report and in the strategies and programmes specifying it: the Security Strategy for Society, the Internal Security Programme and the government Decision on Safeguarding the Security of Supply.

The Resolution 2012 clarifies the disturbance management model and defines responsibilities, particularly at government and ministry level. It also imposes the establishment of a *security committee* to serve as a permanent cooperation body, in pursuit of proactive preparedness for comprehensive security. The new security committee will be more extensive and broader-based than the current security and defence committee. It will be established at the Ministry of Defence. The committee will be tasked with assisting the government and its ministries in preparations for comprehensive security and in coordinating such preparedness. However, it has no operative duties in acute emergency cases which are to be managed by regular administration with competent authorities (ministries and sector officials).

¹²³ Valtioneuvoston kanslia. 2012. Prime Minister's Office Press release 5. December 2012: *Government resolution clarifies organisation and responsibilities with respect to comprehensive security*: <u>http://vnk.fi/ajankohtaista/tiedotteet/tiedote/en.jsp?oid=371437</u>

Also the ability to form and communicate a cross-administrative, integrated picture of the overall situation should be required. The resolution defines the development guidelines for the government's situational awareness activities and communications. The improved situation centre shall be also further in the Prime Minister's Office.

The functional responsibilities of the key civil security actors are stipulated by a law from 2011, the *Rescue Act*.¹²⁴ The purpose of the act was to improve the safety of people and to reduce the number of accidents. It lays provisions on the duty of individuals, enterprises and other organisations to prevent fires and other accidents, to prepare for accidents and to limit their consequences, as well as to maintain civil defence shelters and take part in the rescue operations.

2.2.2 Political dimension

Executive and political responsibility for civil security provision primarily rests at the local and county level. The actors and their responsibilities in the field of civil security are as follows:¹²⁵

Pursuant to the Constitution (93 §) the president of the Republic conducts Finland's foreign policy in cooperation with the *government* (i.e. more accurately named *State Council*), and acts also as supreme commander of the defence forces.

The *government* is responsible for leading and maintaining domestic civil security arrangements as well as for national preparation of decisions to be made in the European Union, and decides on concomitant Finnish measures, unless the decision requires the approval of Parliament. The *Cabinet Committee on Foreign and Security Policy* prepares decisions for the government meetings if they include important aspects of security and foreign policy.

The *prime minister*, in accordance with section 66 of the Constitution, leads the government and oversees the coordination of the preparation and consideration of matters falling within the government's mandate. Each ministry is responsible for the preparation of matters within the government's mandate and the appropriate functioning of administration in its own administrative sector. Responsibility for ensuring that each administration functions appropriately also covers the steering and monitoring of administration under the ministry.

Important matters of foreign and security policy and other matters concerning Finland's relations with other states, associated significant internal security or total national defence issues and the coordination

¹²⁴ Ministry of the Interior. 2011. Available from: <u>http://www.finlex.fi/fi/laki/alkup/2011/20110379</u>, the Rescue Act in English: <u>http://www.finlex.fi/en/laki/kaannokset/2011/en20110379.pdf</u>

¹²⁵ Valtioneuvoston kanslia. 2011. *Preparedness and comprehensive security*. Committee report 28. November 2011: <u>http://vnk.fi/julkaisut/julkaisusarja/julkaisu/en.jsp?oid=344062</u>

of these measures are handled at the *joint meeting* of the president of the Republic and the Cabinet Committee on Foreign and Security Policy.

The government directs, supervises and coordinates the securing of functions vital to society. Each *competent ministry* does the same within its respective administrative sector. In order to facilitate preparedness and to instigate activities, all *competent authorities* employ their statutory powers, which are already quite exhaustive in normal conditions.

In *emergency conditions* the government may be authorized to use the additional powers provided in the *Preparedness Act* (2011) - earlier "Emergency Powers Act" (1991). The decision to begin using powers pursuant to the *State of Defence Act* is taken by presidential decree, subject to a Parliament decision. Separate provisions are adopted on the powers of the president of the Republic, the prime minister, relevant ministers and the chief of Defence in dealing with military command matters relating to the defence forces.

Government decisions are made either at plenary sessions or within the ministry concerned. The ministries cooperate with each other as necessary, under the leadership of the competent ministry.

In addition, ministries direct the state provincial offices and other subordinate sectors of administration within their respective mandates.

The *Prime Minister's Office* assists the prime minister in the overall management of the government and in coordinating the work of the government and Parliament. The Office coordinates the preparation and consideration of EU-related matters. Similarly, the Office coordinates the dissemination of government information and organizes the general conditions and services for the proper functioning of the government. The Prime Minister's Office is responsible for the government's collective preparedness for emergency conditions. The Office has the Situation Centre which seeks and provides a situational picture and information about domestic and international emergency situations for the staff of the Prime Minister's Office and informational emergency situations for the staff of the Prime Minister's Office and informational emergency situations for the staff of the Prime Minister's Office and informational emergency situations for the staff of the Prime Minister's Office and informational emergency situations for the staff of the Prime Minister's Office and informational emergency situations for the staff of the Prime Minister's Office and information about domestic and international emergency situations for the staff of the Prime Minister's Office and information he state leadership, ministries and other agencies within State Council.

The *permanent state secretaries* have the task of directing and supervising the activities of their respective ministries. They are responsible for preparing the administrative sector's objectives, monitoring their implementation and ensuring the preparedness and security of the sector. The *Meeting of Permanent State Secretaries* and the *Meeting of Heads of Preparedness* are permanent cooperation bodies. They coordinate the administrative sectors' crisis management activities and assist the Prime Minister's Office with regard to the government's common preparedness for emergency conditions. The secretary general of the president of the Republic participates in the meeting of the permanent secretaries. *The Meeting of Preparedness Secretaries* assists the ministerial heads of preparedness.

The Ministry of the Interior has main *responsibility for internal security* including police affairs, border management (Border Guard), maritime search and rescue, and rescue services. The Emergency Response Centre administration provides emergency response centre services throughout Finland, except for the Åland Islands. Emergency response centres receive emergency calls for the rescue, police and social and health services; handle communications relating to the safety of people, property and the environment; and relay the information they receive to the appropriate assisting authorities. The ministry maintains also the *Internal Security Programme* and cooperates with other ministries in the field of civil security.¹²⁶

The Ministry of Defence is responsible for coordination of the *comprehensive national defence* activities as well as administrative issues concerning the *Defence Forces*. *The Security Committee* assists the government and the cabinet Committee on Foreign and Security Policy on matters relating to societal security and national defence. The Security Committee is established by the government and located at the Ministry of Defence, but it has no commanding or coordinating role in actual emergency situations.¹²⁷.

2.2.3 Operational dimension

Four levels share responsibility in Finland for operational crisis management: the state level, the county level, the local/municipal level, and the private/voluntary level. There are no specific civil security agencies in the Finnish counties or municipalities. Operational crisis management responsibility typically rests with several authorities at the counties and independent cities and municipalities. After declaring a state of emergency, the rescue authorities take precautions to protect people and property. These activities of government offices and agencies and production plants are essential to maintain the proper functioning of society.¹²⁸

In addition to the activities of the authorities, civil security measures involve self-preparedness of companies and other organisations, property owners, and citizens. This will be discussed in chapter 2.4.1.

The government as well as regional and local administrations have basic responsibility for ensuring conditions that citizens' livelihood can be secured. There are additionally agencies and officials which are obliged to make preparations for emergency situations concerning availability of strategic material resources and functioning of critical infrastructure. There are also some cases that have occurred in the Baltic Sea region, especially those concerning Finland, that have remarkably affected the development of civil security:

¹²⁶ See the *Ministry of the Interior* websites, 2013: <u>http://www.intermin.fi/en/ministry/mandate_of_the_ministry</u>

¹²⁷ Valtioneuvosto. 2012. *Valtioneuvoston päätös kokonaisturvallisuudesta* (Government resolution on comprehensive security), Prime Minister's Office, 5. December 2012, pp. 6 and 11.

¹²⁸ Pelastustoimi. 2013. *Rescue services in Finland*: <u>http://www.pelastustoimi.fi/en/228511/</u>

Flooding in the northern Baltic Sea in January 2005 occurred in the coastal areas in Finland, Estonia and Russia. In Finland critical moments were in Helsinki and nearby the Loviisa nuclear power plant, but the situation was managed by the civil security authorities quite well. The Estonian government was struggling with response in Haapsalu, Saaremaa and Viimsi. Situational awareness as a whole and communications between the states were also rather vague and incoherent. The flood affected also the Russian coast and the city of St Petersburg. It resulted in a more systemic response, planning and streamlined crisis management systems in Finland and Estonia.¹²⁹

Nokia *water crisis* in 2007 resulted from an accidental leakage of dirty water to the drinking-water supply system. It began on the 28th of November, 2007. There were both political and administrative difficulties to investigate the level of seriousness of this situation. A total of 400,000 litres of only roughly purified waste water poured into the drinking-water system during those three days. It caused one fatality and made 8,000 people ill, from which many have long-lasting health problems. The risks were very high for more casualties. The crisis situation lasted over three weeks. The Finnish Defence Force took over the supply of clean water for a week. The legal process is still going on.¹³⁰

School shootings took place in Finland, in November 2007 in Jokela and then in September 2008 in Kauhajoki. These two incidents caused a severe shock to Finnish society. In Jokela, a high school student shot eight persons and finally himself. Likewise, in Kauhajoki a student shot nine persons and then himself. Both cases have been studied and investigated. It became clear from the Jokela incident that the Finnish response system learned a lesson and was then developed towards a total response mechanism. This was soon tested in Kauhajoki and it turned out to be an efficient way of avoiding timeline gaps and misunderstandings based on versatile early warning information.¹³¹

Hijacking of the M/S Arctic Sea in 2009 was a mysterious incident in the Baltic Sea that began during the night of the 24th of July, 2009. The Russian-Finnish owned and Malta registered ship was en route from Pietarsaari, Finland, towards Bejaija, Algeria. Before arriving to Finland, the ship had been taken for service repair to Kaliningrad, Russia. When the ship was in Swedish territorial waters between Gotland and Öland, it became hijacked. Then it took several days' time before the hijacking was exposed by the media. The ship sailed hijacked through EU waters via the Danish straits and the English Channel to the Atlantic where the Russian Navy at last intercepted it. The case revealed weaknesses in the surveillance and communication arrangements in the Baltic Sea region and the European Community as a whole. It also

¹²⁹ Hellenberg, T., Talvitie, H., Visuri, P., Volanen, R. 2011. *Myrskyn silmässä – Suomi ja uudet kriisit* (WSOYpro 2011), pp. 99-126.

¹³⁰ Ibid. pp.127-143.

¹³¹ Ibid. pp. 145-183.

turned out to be a very controversial case study which has not yet been fully investigated, mainly as a result of bad communications between EU and Russian officials.¹³²

Summer *storms* in 2010 and winter storms in 2011 tested the newly formed regionalization system of rescue services. Strong winds destroyed critical infrastructures such as electricity lines, road networks and telecommunication towers. It took several weeks to mitigate the consequences. The situation occurred at the same time that neighbouring Russia was struggling with all-time high forest fires. This created more stress but was not clearly identified by the Finnish authorities in terms of cross border cooperation.¹³³ The winter/summer storms of 2011 affected especially southern Finland. The electricity grid was in many areas disabled for several days. It resulted in communication problems (cell-phones). There were simultaneously floods but not bad frost. From both incidents there have been investigations but basically the discussion has been concentrating on whether public or private entities should have the major responsibility of maintaining and re-establishing vital functions and infrastructures.

The *Ministry of the Interior Department for Rescue Services* is responsible for steering civil defence planning. This department issues instructions to the authorities on civil defence preparedness and ensures the required collaboration. At regional level, the *regional state administrative agencies* have the same responsibility.

The Ministry of the Interior and regional state administrative agencies may order civil defence managers and other specialist civil defence personnel to participate in civil defence training. State and municipal officeholders are responsible for carrying out civil defence duties associated with their posts, preparing for duties, and for taking part in relevant training.

Regional rescue services collaborate with the municipalities of the region to draft plans for protecting the population. Furthermore, they maintain the readiness of their own organisation for civil defence duties, and ensure self-preparedness for exceptional circumstances. The rescue, first-aid, ambulance service and supply groups needed for civil defence purposes are not set up until an emergency arises.

Command centres equipped with communications links are built during normal conditions. In emergency conditions, the Ministry of the Interior, regional state administrative agencies and rescue service regions will bring these centres into use. Each municipality must also build a command centre that can function during any emergency situation.

¹³² Ibid. pp. 253-274.

¹³³ Ibid. pp. 293-307.

Appropriate ministries direct the various fields of activity for which *regional and local administrations* are responsible. At present, there are no more general regional administrations between the local and central (government) administration levels. The regional state administrative agencies have some sectoral duties and training tasks for emergency situations, but they have no general powers for administration.

The regional administration in Finland is going through a profound change. From the beginning of 2010, a new regional structuring of general administration was started, and simultaneously police and rescue services got a new organisation and command structure. The on-going change of the regional administration affects also the organisation of local rescue services, especially the arrangements of the alarm service.¹³⁴

The *municipalities* play a key role in local preparedness, as it is their specific duty to organize basic services and to safeguard society's vital functions under normal conditions. The municipal managers, together with the municipal boards, direct preparedness in accordance to the law.

Figure 3. Duties of local government (municipalities) in crisis and emergency management¹³⁵ (Valtioneuvoston kanslia, 2011)

Normal duties. Role is emph	r organs consisting of senior elected officials asised in long-term crises.
co-operation between	r verall management of the situation, competent authorities, arrangement ind participation of senior elected
	Management group Co-operation organ of competent authorities. Other specialists may b invited (e.g. police).
Local competent auth Each authority is responsib mandate.	orities le for the management of the situation within its own

¹³⁴ Valtioneuvosto. 2009. *Hallituksen esitykset: HE 59/2009* (Government proposal with backgrounds). In internet: <u>www.finlex.fi/fi/esitykset/he/2009/20090059</u> and *Valtion kriisijohtamisen toteuttaminen alue- ja paikallishallinnossa*. Työryhmän loppuraportti, Valtioneuvoston kanslian julkaisusarja 15/2009.

¹³⁵ Valtioneuvoston kanslia. 2011. *Preparedness and comprehensive security*. Committee report 28. November 2011. Available from: <u>http://vnk.fi/julkaisut/julkaisusarja/julkaisu/en.jsp?oid=344062,p. 57.</u>

Municipalities are jointly responsible for rescue services within regions designated by the government. The country is divided into 22 *rescue service regions*. Regional rescue services manage operations in their respective regions. Voluntary, institutional and industrial fire brigades also participate in the provision of rescue services as agreed between the brigades and the regional rescue services.

With regard to preparing for disturbance and emergency situations, the administrative sector within whose mandate the matter primarily belongs is the competent one. The aim is to maintain unchanged the line of authority for securing society's vital functions, organizations operating in normal conditions as well as the distribution of duties and responsibilities in special situations. Ministries take the development of preparedness legislation into account within their respective administrative sectors. It must be possible to promptly launch the required measures in a prognostic manner, albeit often on scant information. Controlling the situation may necessitate a rapid transfer of additional resources from other administrative sectors, the business community or from elsewhere in society.

The competent ministries bear the responsibility for organizing exercises dealing with emergency situations as well as making the required inter-sector cooperation arrangements and fulfilling obligations related to the EU.

There have been problems in managing surprising emergencies or minor crisis situations, especially so called normal-time disturbances which can emerge rapidly, have many surprise elements and need intersector measures. The tsunami disaster in December 2004 was this kind of situation. It occurred in a very distant country but affected many Finnish citizens and required urgent rescue and evacuation measures.

The lessons-learned from the tsunami catastrophe in 2004 have been taken into account in the preparedness arrangements of the government, Foreign Ministry and rescue services. However, some administrative and operational culture problems still exist in that kind of crisis situation. For example, it is not so easy to get good information from large and severe disasters, especially if they occur in foreign countries. Also the responsible authority may be difficult to be defined in such circumstances. Moreover, responsibilities and cost-sharing between the public and private sectors in conducting rescue missions is still too unclear.

The great variety of crisis types and need to make decisions swiftly also in "civil crises" have made it necessary to construct an effective system for maintaining situational awareness. A situation centre has been built for the permanent use of the government, and it is located at the Prime Minister's Office at the Government Council. There are still the usual military, police and border guard command and control systems as well as air and maritime surveillance arrangements for operational tasks.

The principle of independency of administration sectors concerning crisis management in Finland is well functioning in the contingency planning and in responding to such emergency situations which can be clearly defined and managed by one sector of the state administration. Difficulties may emerge especially with crises which have inter-sector effects and must be handled without delay. The most problematic case would be a terrorist attack against some vital functions of society or critical infrastructures in Finland or in the vicinity. The risk is rather low because of a small probability, but the consequences would be very high. Therefore, this kind of case must be taken into account seriously and the counter-measures shall be prepared according to the threats.

2.2.4 External dimension

Up to now, Finland has not officially requested disaster assistance through regional and international arrangements. Nonetheless, Finland has entered into multiple bilateral agreements on mutual crisis management assistance which cover all neighbouring countries. In addition, Finland has signed related regional and multilateral provisions of the Council of Europe, the EU, NATO, the OSCE and the UN. On the regional level, Finland has signed provisions of the Council of the Baltic Sea States (CBSS), the Nordic Council of Ministers (NCM), the Baltic Development Forum and the Baltic Sea States Subregional Cooperation (BSSSC).

Finland takes part in international relief and rescue operations mainly under agreements signed with its neighbouring countries as well as through the European Union Civil Protection Mechanism (Monitoring and Information Centre, MIC) and on assignments from the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). Finland takes part actively in developing crisis preparedness under NATO's Partnership for Peace programme. Finnish assistance has taken place through the UN's UNDAC team (United Nations Disaster Assessment and Coordination Stand-By Team), or in the EU/MIC team of experts. Since 1993, Finland has maintained the FRF (Finnish Rescue Force) which is a 200 person task force for search and rescue missions in international assignments. A typical FRF team comprises 40 people and their equipment with a capacity of two weeks' self-sustaining operation in a disaster area.¹³⁶

Finland has been relatively careful in offering assistance and aid in civil security crises; a recent example of the Russian forest fires in 2010 showed the traditional careful consideration and respect of formal state agreements and hierarchical proceedings in providing help. The decision to provide assistance overseas is made by the Ministry of Interior at the request of another state or an international organisation. Capacity building, training and other practical tasks for international missions are ensured by the Crisis Management Centre in Kuopio. Once a decision is made to provide assistance, the members of the taskforce will be recruited among regional rescue services staff trained for international missions.

¹³⁶ http://www.pelastustoimi.fi/download/39930_Pelastustoimi_eng.pdf

2.3.1 Expectations

Civil security is a primary function of public agencies, but citizens are expected to contribute and to follow the formal agreements and proceedings. The participation of citizens in civil security duties occurs mostly in local and municipal level organisations. The regional state administrative agencies provide expert assistance to municipalities in matters related to preparedness and the municipality's contingency planning. In addition, the regional state administrative agencies support the competent authorities and, when necessary, coordinate their activities when the authorities are managing security situations in the region.¹³⁷

In order to promote regional preparedness the regional preparedness committees, led by the directorgenerals of the regional state administrative agencies, have been established. These committees have wide representation from all key actors in the region and the regional administration. Such actors include the municipalities, the police and rescue services, the Border Guard, the defence forces, the hospital districts, the emergency response centres and various organisations, such as the Finnish Red Cross.

The organisation's opportunities for cooperation with the regional state administrative agencies and ELY (economic-environmental) Centres are only beginning to take shape in Finland. It is therefore hoped that the transitional period of regional administration reform will soon be brought to a conclusion, with good practices continuing as soon as possible. The Red Cross has continued its cooperation, initiated when the province administration still existed, on preparedness committees and working groups. The preparedness committee provides a viable opportunity for organisations to exchange preparedness-related information with various actors.

There are 15 ELY (economic-environmental) Centres, and their tasks consist of those of the former employment and economic centres, regional environmental centres, road districts and the transport departments and the departments for education and culture in the state provincial offices, as well as the functions of the Finnish Maritime Administration. Within their regions, ELY Centres are responsible for implementation and development tasks related to the environment and natural resources, transport and infrastructure, business and industry (including agriculture), use of labour, immigration, education and culture, on behalf of the respective ministries. ELY Centres are also responsible for the related preparedness and crisis management. The director of the ELY Centre is assisted by a person coordinating preparedness planning (preparedness secretary).

¹³⁷ *Preparedness and comprehensive security*. Committee report 28. November 2011: <u>http://vnk.fi/julkaisut/julkaisusarja/julkaisu/en.jsp?oid=344062</u>

Although the Finnish civil security system has gone through a profound reformation during the past decade, disasters and emergencies are generally no major concern for Finnish citizens compared to other problems. According to Eurobarometer poll 383 for February to March 2012, 24 percent are fairly concerned about natural disasters and only 5 percent are very concerned. Regarding man-made disasters, 45 percent are fairly concerned and 15 percent are very concerned. In terms of terrorist attacks, 23 percent are fairly concerned and 10 percent are very concerned. With this, Finland ranks at the very low end level among EU member states in relation to threat ad hazard perception.¹³⁸ Notably, Finland has the lowest level of hazard perception when it comes to threat of terrorism.

The most threatening risks for Finnish civil security are conditions in which severe weather situations - especially winter storms, flooding in shore areas and cold - combines with disturbances in the electric power-grid. Such a situation can also affect communications, and at worst endanger the safety of nuclear power plants. Harsh critique against services emerged during the winter storms in 2011 because of long disturbances in power supply systems. The affected people were irritated especially because they lacked adequate information on the situation and rescue measures which were going on.

2.3.2 Information

According to the Eurobarometer poll for September-October 2009, 43 percent of the respondents felt informed about disaster preparedness and even 52 percent about disaster response.¹³⁹ This very high level of positive responses (second highest in disaster response and fourth in preparedness) cannot be explained only by available information, but it reflects a high awareness among citizens towards security related issues. It might also reflect the individualistic attitude which stems from the fact that citizens are responsible of their own participation and contribution.

The public authorities at the national, county and municipal levels are responsible for producing and sharing updated information and situational awareness. At the national level, citizens are informed of emergencies over radio channels and TV. This nationwide emergency announcement transmission system is utilised in the event of an immediate threat or manifest risk. In the event of an emergency, people are warned at local level by a sound of the public warning signal. These will be supplemented by mobile alarms in sparsely populated areas.¹⁴⁰

¹³⁸ European Commission. 2012. Eurobarometer. Available from: http://ec.europa.eu/echo/files/eurobarometer/reports/CP.pdf

¹³⁹ European Commission. 2009. Special Eurobarometer. Available from: http://ec.europa.eu/public_opinion/archives/ebs/ebs_328_en.pdf

¹⁴⁰ Pelastusopisto. Rescue Services in Finland; http://www.pelastustoimi.fi/download/39930_Pelastustoimi_eng.pdf

There is also a nationwide network of command centres equipped with emergency communication systems. In emergency situations (conditions), the Ministry of Interior regional state administrative agencies, and the rescue service regions will activate these into use. At the municipal level each administrative unit will also maintain a command centre which can be used during emergencies.

Finland has been divided into emergency response centre (112) areas. These areas are under the command of the Emergency Response Centre Administration (ERCA) which consists of the Emergency Response Centre Agency (HQ), and 3 (former 15) emergency response centres (ERCs) covering the country. The ERCA is monitored and guided by the Ministry of the Interior with the Ministry of Social Affairs and Health. Besides operating as dispatch centres between civil security agencies and actual emergency sites, the ERCs provide information services to other authorities and act as a communication centres.¹⁴¹

The aim of the Government Security Network project (TUVE) has been to plan and implement a dedicated and secure communications network of a high level of preparedness for the government authorities and other 30,000 security authority users. This includes key state authorities for public order and safety, national defence, rescue missions and civil defence, such as the defence forces, the police, rescue services, the Border Guard and the emergency response centres.¹⁴²

The Public Authority Network (VIRVE) is supporting the above mentioned network of command centres and ERCs. It is a tactical-operational tool to enhance collaboration and communication between the various authorities in emergency situations. The VIRVE serves as an internal communication channel for onsite emergency and civil security authorities, cutting the duplicate command and control mechanisms and encourages the civil security authorities to share information and situational data. The main user groups include state and municipal level civil security authorities, such as rescue services, police and social welfare and health authorities, the Border Guard, customs, and the Finnish Defence Forces.

The Crisis Management Initiative (CMI) initiated the Information Technology and Crisis Management (ITCM) project in 2001 to address the identified need to improve information sharing practices and enhance communication systems in emergency situations and crisis management operations. Private entities such as Instrumentointi Oy and IBM Finland produced the first commercial and open version of ITCM, which provides decision-making support and knowledge management in close cooperation with crisis management organisations. This open system was tested successfully by the Finnish civil security authorities during the Coalition Warrior Interoperability Demonstration (CWID) exercise in 2005.¹⁴³

¹⁴¹ Pelastustoimi. 2010. Available from: http://www.pelastustoimi.fi/download/39930_Pelastustoimi_eng.pdf

¹⁴² Ministry of the Interior. 2012. National Platform for Disaster Risk Reduction, http://www.intermin.fi/download/32948_142012.pdf

¹⁴³ Hellenberg Timo; Information Technologies and Decision Support Systems in Civil Protection, Eurobaltic Publications, January 2006, Helsinki.

At the government level, prognostic and real-time information and situation pictures are compiled to support government decision-making and communications. The shaping of a more comprehensive situation picture will be achieved by taking into account and utilizing effectively the authorities' preexisting or future information technology environments. Cooperation and planning that serves the compilation of the situation picture has been improved among the different sectors of administration during recent years. The range of instruments for gathering information is widened by, for instance, developing the monitoring of open information sources. There are still many practical difficulties to overcome. National structures tap into the cooperation with the EU's situation centres, in the first place the *Monitoring and Information Centre* (MIC), and sector officials, e.g. FRONTEX concerning the situation on the external borders of the EU (See chapter 4).

The Government Situation Centre, which relies on cooperation among ministries and is run by the Prime Minister's Office, is organized and shall be reinforced according to the actual needs so that it can support government-level civilian crisis management (government, Cabinet Committee on Foreign and Security Policy, meeting of permanent secretaries, meeting of heads of preparedness) in all security situations. The present arrangement of the situation centre with a permanent staff has been in effect from September 2007. It is working continually (in 24/7 principle) with security police professionals and keeps contact with other situation centres in Finland (e.g. Foreign, Interior and Defence ministries) as well as to EU authorities in Brussels. The situation centre follows also other information sources, international news services, TV and internet news etc.¹⁴⁴ According to the government resolution on comprehensive security 2012, the capability of the situation centre should be improved markedly from 2013 onwards.¹⁴⁵

The *ministries' situation centres* are operative even in normal conditions and their staff must regularly participate in exercises. As premises are being developed, particular attention is paid to rapidly emerging situations which may demand enlarging the situation centres without delay to command centres. *The Government Situation Centre* upholds awareness of the general situation and makes analyses for prime minister and government. It can also alarm the other situation centres and relevant operational instances and specialists in an emerging crisis situation. If needed the Government Situation Centre shall be enlarged and then build a part of *government's crisis command centre*.

2.3.3 Education

In Finland, the main responsibility for civil security education lies with the Ministry of the Interior and its rescue department. Inter-ministerial permanent and regularly meeting coordination units (chiefs of the Preparedness Institution, among others) also exist to ensure that the exchange of information between the

¹⁴⁴ Timo Härkönen, *Tilannekuvatoiminta, valmiuspäälliköt*, PM Valtioneuvoston kanslia 7.3.2008.

¹⁴⁵ Valtioneuvoston kanslia. 2012. Prime Minister's Office Press release 5. December 2012: *Government resolution clarifies organisation and responsibilities with respect to comprehensive security*: <u>http://vnk.fi/ajankohtaista/tiedotteet/tiedote/en.jsp?oid=371437</u>

authorities of different fields of civil protection, usually coordinated by the Ministry of Interior, occurs in a seamless fashion. The ministry's rescue department is however a rather small unit, though it is responsible for rescue administration and coordination. The provincial (regional) level has responsibility for its own area. The five provinces are also expected to organise cooperation between the various regional administrations and military commands. In practice, however, the municipalities bear the main operational responsibility. The municipal fire brigades, in cooperation with other functionary fields such as the police, the frontier guard, the defence forces, health, aviation and the radiation authorities take responsibility for firefighting and other rescue operations.¹⁴⁶

Other educational activities are mainly conducted by the Ministry of the Interior's Emergency Services College in Kuopio. The college provides basic vocational training in the field of civil security and some further training in rescue services, preparedness training for emergency conditions, and other training related to rescue services. Basically all vocational qualifications in Finland are awarded by the Emergency Services College which makes the Finnish system centralized in terms of civil security education. In addition, the Ministry of the Interior has assigned certain training duties to the Finnish National Rescue Association (SPEK). It organises training for voluntary and part-time fire brigade members and facilitates some further training for private persons and non-governmental organisations, as well as safety training for governmental offices and businesses.¹⁴⁷

National campaigns of the civil security issues are implemented in cooperation with the Ministry of the Interior Department of Rescue Services, municipalities, schools, regional rescue services and rescue sector NGOs which for instance include the 112 theme day, the Nou Hätä! Campaign for 7th-9th grade students and the Pellekaija Pum campaign for children aged between five and nine. Some other campaigns include accident theme day and a campaign aiming to prevent accidents at home. The purpose of these campaigns is to enhance preparedness and coherent response if needed.¹⁴⁸

Finland also takes part in a wide range of civil security and crisis management research and other educational projects in Europe. Besides the nationwide university network for security studies there are multiple private actors and NGOs taking part in this field. The Finnish civil security research could be characterized as open and decentralized as there are no specific research institutions in this field, apart from the private corporations. There is neither a clear "ownership" among the governmental institutions when it comes to promoting and funding civil security research and education.

¹⁴⁶ Pursiainen, C. Hedin, S. and Hellenberg, T. 2005. *Civil Protection Systems in the Baltic Sea Region, Towards Integration in Civil Protection Training*, Eurobaltic Publications, 2005.

 ¹⁴⁷ Pelastustoimi. 2010. Available from: http://www.pelastustoimi.fi/download/39930_Pelastustoimi_eng.pdf
 ¹⁴⁸ Ministry of the Interior. 2012. National Platform for Disaster Risk Reduction, http://www.intermin.fi/download/32948 142012.pdf

The common ground is laid by the National Security Research Coordinator which is based at the Ministry of Defence. This liaison office aims to enhance the Finnish participation in the EU Framework programme and other essential financial instruments. In the foreseeable future there is an ever closer relationship between civil security studies and the traditional defence studies in Finland. This is also the result of the ongoing integration process between US Homeland Security studies and the EU Security research in general.¹⁴⁹

Finland has a National Security Research Strategy which is a broadly based and holistic initiative to cover both safety and security aspects of civil security research and education. It covers key aspects such as the citizens role in safety and security, the future perspectives of the Finnish security environment, the vulnerability of the critical infrastructures (and vital functions of society) and the leadership of the national security.

The National Security Research Strategy follows the European Security Research & Innovation Agenda and aims to meet the goals of the European Security Research Advisory Board (ESRAB). The Finnish civil security studies are challenged by the ongoing evolution of the operational environment and the integration of external security and internal safety. There are also some positive aspects (growing financial resources e.g.) in the growing civil-military cooperation which are directly affecting the civil security studies and education in Finland. However, there are still challenges such as a heterogenic research community and decentralized coordination of civil security studies. Also the connections between "demand" (authorities) and "supply" (researchers) of the security studies is not systematic and there remains a lack of coherent coordination.¹⁵⁰

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/no-profit organisations/NGOs

The Finnish civil security system is heavily based on voluntary and non-profit relief organizations at all levels and spheres of civil security. This is a growing trend while the civil security agencies are struggling with their budgetary and financial issues. At the moment, there are many ad hoc and people-to-people based arrangements which have either been substituted for are complementing the official civil security services across the country. In future, these volunteers' activities in support of authorities are aimed to be made official by means of written contracts. In this way, issues such as personnel changes would not

¹⁴⁹ Martelius, J. 2010; Kansallisen turvallisuustutkimuksen päivä, 10.6.2020, http://www.minedu.fi/export/sites/default/OPM/Tapahtumakalenteri/2010/06/Kansallinen_Turvallisuustutkimukse n_pxivx_2010/Juha_Martelius.pdf

¹³⁰ Martelius, J. 2010; Kansallisen turvallisuustutkimuksen päivä, 10.6.2020, http://www.minedu.fi/export/sites/default/OPM/Tapahtumakalenteri/2010/06/Kansallinen_Turvallisuustutkimukse n_pxivx_2010/Juha_Martelius.pdf

endanger the position of volunteers in preparedness activities. Under normal conditions, the preparedness committee is responsible for coordinating regional contingency planning between various authorities. Coordination of preparedness is aimed to be based on risk analyses, drawn up for each region, and threat assessments of accidents. During disturbances and emergency conditions, the preparedness committees can be convened to discuss the resolution of a crisis or disturbance. Nevertheless, the regional administrative authorities have no role in actual (operational) crisis management, with the exception of the previously mentioned co-ordination task and some other duties under their responsibility, as laid down in special legislation. Regional state administrative agencies transmit information in support of operative, political and administrative decision-making by the municipalities, regional administration, other central government functions of the ministries and competent authorities within the region.

In Finland contractual fire brigades, used by some municipalities instead of municipal ones, usually refer to voluntary fire brigades, or semi-commercial fire brigades in some factories. They play a significant role in the Finnish civil security system, not only in traditional fire and rescue services. They are organized in the form of private associations which complement the operational capacity of the permanent rescue services. According to the European Commission Vademecum for Civil Protection, the number of voluntary and part-time rescue practitioners is 14,300 in 635 voluntary fire brigades while there are 5,000 full-time employees in the professional rescue service departments.¹⁵¹

Military fire brigades also exist, and they may assist the municipalities if needed. In general, voluntary fire brigade activity, working alongside the municipal fire brigades, constitutes an important part of the Finnish rescue system. In addition, many other voluntary organisations participate in civil protection activities in one way or another, and in so doing cooperate closely with the authorities. The private entities have penetrated in the civil security field mainly in respect of ambulance transport, where they have a major role in Finland.

This regional aspect is emphasised in contingency and security planning conducted in cooperation between NGOs and the authorities. For instance, the boundaries of the Finnish Red Cross districts currently encompass different municipalities than regional boundaries. As a result of the regional-level aggregation of key authorities such as the police and rescue services, in the planning of preparedness activities the districts' operational areas do not enable efficient co-operation with the authorities. The objective of the Finnish Red Cross is to help those who need it most both in Finland and abroad. The volunteer work and aid activities of the Red Cross are coordinated at the national level by the Headquarters. Its responsibilities include development of the organisation's operations, cooperation with

¹⁵¹ European Commission. 2012. Vademecum – Civil Protection. Available from: http://ec.europa.eu/echo/civil_protection/civil/vademecum/fi/2-fi.html

authorities, national campaigns and international aid. In addition, the headquarters is responsible for the official comments of the Finnish Red Cross and pursues the promotion of the organisation's values in Finnish decision-making.¹⁵²

In addition, voluntary rescue dogs are used as an active reserve in normal conditions to support the police in search missions through the Voluntary Rescue Service (VAPEPA). Rescue dogs are also an essential part of Finland's international rescue service capacity. The storms of summer 2010 showed that these dogs are already part of the ordinary Finnish civil security system.

2.4.2 Role of profit-oriented organisations

Finland has a long tradition of engaging the private sector and profit-oriented entities to both the safety and security structures at all levels of planning, implementation and maintenance of the civil security system. The *private sector in the civil security* area covers activities performed by businesses, bodies under public law and organisations as well as various services and expert activities provided by the private security sector. The *private security sector* covers guarding services, security steward services, security services and security check services. The private security services must have a licence. The powers of guards are laid down in the *Private Security Services Act*. Provisions on the whole private security sector are contained in a number of acts. This has led to ambiguity and conflicting interpretations between the different elements of law. The Ministry of the Interior is currently reforming legislation on the private security sector.

The *Government Resolution* of 5 December 2012 emphasizes that cooperation with the private entities and private sector will be further enhanced in Finland. This will be concretized by inviting private sector representatives to the newly formed Security Committee for four year terms. This means that operators and owners of critical infrastructure are not only seen as information providers but more as equal partners in creating and maintaining national preparedness.¹⁵³ When the role of the private sector is considered more broadly in maintaining and developing the civil security system in Finland, it is unavoidable that while the public budgets are facing shrinkage, the outsourcing of the preparedness and maintenance operations of the civil security system will further increase and provide possibilities for the role of the private sector. So far, the private sector (forest industries in particular) has had a role in peripheral regions and rural municipalities in providing essential complementary fire and rescue service capacities.

The key administration in channelling the participation of the profit-oriented organisations to the civil security activities is the National Emergency Supply Agency (NESA). It has principal duties in conducting main preparatory work for the national security of supply. It is responsible for all planning and operative

¹⁵² Finnish Red Cross 2013. Available from: http://www.redcross.fi/node/1556/what-finnish-red-cross

¹⁵³ Valtioneuvoston kanslia. Prime Minister's Office 5. December 2012: Government resolution, 12

activities for the purpose of maintaining and developing the country's security of supply. The objective is to safeguard economic activities necessary for the population's livelihood, the national economy and national defence during emergency situations and serious disturbances to normal life. Today the core activity is to secure the functioning of technical systems, especially the critical information and communication systems.¹⁵⁴ The NESA is also a key governmental organisation in engaging the private sector actors in the total defence and comprehensive security policy. It maintains several working parties and enhances the national partnership with the private sector and NGOs¹⁵⁵.

New requirements are to be covered by the private sector and profit-oriented entities in the fields of cyber security. The new cyber security centre (CERT-FI unit)¹⁵⁶ is placed within the Finnish Communications Regulatory Authority (FICORA), which is regarded as a more neutral place than the police or the Defence Forces.¹⁵⁷ The *Finland's Cyber security Strategy 2013* presents a programme for improving the cyber security *with* the private sector.¹⁵⁸ According to the guidelines of *the strategy* a national cyber strategy will be developed and implemented in close cooperation with private corporations. The implementation of the strategic guidelines will strengthen public - private cooperation, which is regarded as a forte of the Finnish security community. Such collaboration can best serve the entire society and support the actors who provide its vital functions.

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Political inquiries

The Finnish Parliament (Eduskunta) cannot exercise political control and surveillance in matters of crisis response and disaster management. This is a result of the Finnish political system in which the respective authorities hold an independent role and their objectivity is highly protected by law. The investigations and committee hearings held in the field of civil security have concerned the role of police and the Finnish

¹⁵⁴ Huoltovarmuuskeskus (NESA): <u>http://www.huoltovarmuus.fi/</u>

¹⁵⁵ NESA. 2013. Available from: <u>http://www.nesa.fi/organisation/national-emergency-supply-agency/</u>

¹⁵⁶ Finnish Communications Regulatory Authority. 2013. Available from: <u>http://www.cert.fi/en/index.html</u>

¹⁵⁷ Helsingin Sanomat. 2012."Finland plans to set up national cyber security centre", *Helsingin Sanomat* 11.10.2012.

¹⁵⁸ Valtioneuvosto. 2013. *Finland's Cyber security Strategy 2013*. Government resolution 24. January 2013.

Security Police (SUPO) about the difficulties related to the administrative reform they have undergone during recent years.¹⁵⁹

Although, the South-East Asian tsunami, in December 2004 was a distant catastrophe in the Indian Ocean, near by the Indonesian coast, it involved many thousands of European citizens. For example 571 Swedish, 552 German and 179 Finnish citizens died. It revealed faults in the Finnish crisis management system, particularly in rapid rescue response and situational awareness across the administrative boundaries. In January 2005, the government appointed a commission of inquiry into the Asian earthquake/tsunami disaster. The Ministry of Justice presented the matter to the government. The inquiries were made both at the political and professional levels and the final reporting chaired by former President Ahtisaari¹⁶⁰ published as Government Resolution 2006.¹⁶¹

Professional inquiries

There have been many professional inquiries about recent emergencies and accidents in Finland. These are often conducted by the civil security agencies themselves using external experts and evaluators. The Safety Investigation Authority investigates all major civil security emergencies and accidents regardless of their nature as well as all aviation, maritime and rail accidents and their incidents. The purpose of the investigation of accidents is to improve safety and prevent future accidents. The flow of events during the accident, its causes and results as well as the rescue operation are dealt with in an investigation. A professional inquiry and report is prepared on the results of the investigation. The report also presents the recommendations, which are based on the conclusions of the investigation. The Safety Investigation Authority takes care of the readiness to conduct investigations and of the development of accident investigation, publication of the reports and international cooperation are handled by the Board. In Finland the Safety Investigation Authority is located within the Ministry of Justice.¹⁶² The most recent inquiries have dealt with an ultralight aircraft accident in Rääkkylä on 11 April 2012, risk of runway collision between two airliners at Helsinki-Vantaa aerodrome on 29 December 2011 and in-flight fuel leak in a passenger aircraft on 15 January 2011.¹⁶³

There are also some professional volunteer based inquiries such as the EU DG JHL funded *Project Poseidon* – *Preventing Terrorism in the Baltic Sea Region* in 2008 which studied maritime terrorism, especially the

¹⁵⁹ Eduskunta. 1999. Parliament's rules of procedure, 17 December 1999 (40/2000); http://web.eduskunta.fi/dman/Document.phx?documentId=yt31112122225889&cmd=download

¹⁶⁰ http://valtioneuvosto.fi/ajankohtaista/tiedotteet/tiedote/en.jsp?oid=93885

¹⁶¹ Hellenberg, T., Talvitie, H., Volanen, R., Visuri, P. 2011. *Myrskyn silmässä – Suomi ja uudet kriisit* (WSOYpro 2011).

 ¹⁶² Onnettomuustutkintakeskus. 2013 OTKES. Available from: http://www.turvallisuustutkinta.fi/en/Etusivu/OTKES
 ¹⁶³ Onnettomuustutkintakeskus. 2013. Ajankohtaista. Availale from: http://www.turvallisuustutkinta.fi/en/Etusivu/Ajankohtaista

case of a violent takeover of a passenger ship en route from Helsinki to Stockholm. In the *Project Aether – Air Passenger Transport Safety in case of CBRN terrorism* in 2009-2010, the lessons-learned from Poseidon were applied to preventing and countering terrorism which can threaten air transport. The additional specification in this case was dealing with the threat of chemical, biological, radiological or nuclear (CBRN) materials as a means of international terrorism. In both studies it was found that there are some clear difficulties to define which sector should manage the civil security mechanism in this kind of complex and multidimensional situation. In the case in which terrorists use CBRN materials the special difficulty is, firstly, determining what is really going on, and then, where to get the needed technical means for rapid mitigation. Therefore an integrated crisis management system should be available.¹⁶⁴

3.1.2 Limits to national capacities

To date, Finland has not required any international assistance nor any cross-border assistance. Some civil security capacity short-comings have been compensated by the Finnish Defence Forces, but always under civilian control. Moreover, Finland has not officially declared a state of emergency, although the government has prepared and trained for multiple potential threat scenarios over the years. A "threat" here means a general description of disturbances in the security environment which, should they materialize, could jeopardize the security of society, the livelihood of the population or the sovereignty of the state. These kinds of situations fall between the threats against individuals and global threats. Because of existing interdependency between the threat levels, no clear boundary lines can be defined.

The current mechanism for the declaration of disaster alerts at local and county levels has been sufficient. Some national capacity short-comings may come up in the future due to the result that while the security environment has been changing the official threat scenarios have not since the earlier resolutions (2003 and 2006). However, some details and headings have been amended to better respond to the current and changing security environment. It is important for the development arrangements for civil security that threats against society's vital functions may arise individually or several may emerge simultaneously. The origins, exact targets and objectives of such threats have been difficult to predict. It has been equally hard for local and municipal level civil security authorities to anticipate their scope, and whether or not their consequences might transfer from one of the levels mentioned above to another. Threat probability estimates (and their indicators) also vary between rescue and other civil security regions. Even extensive preparedness is not enough to anticipate or prevent all threats. Ultimately, a new assessment system capable of predicting and monitoring them is required in Finland. This system should be able to analyse security trends, compile scenarios and detect even weak signals concerning changes in the security environment.

¹⁶⁴ Hellenberg, T. and Visuri, P. 2011. eds. *Securing the Air Traffic, Case CBRN Terrorism*. Aleksanteri Institute, University of Helsinki, 2011.

3.2 Efficiency

In 2012, the overall expenditures within the domestic civil security measures are approximately 1.3 billion euro. This is the total amount of expenditures which covers also the administrative sectors in Finland. For the rescue services the state and regional expenditure is 400¹⁶⁵ million euro. In the year 2012 the police expenditures were 699 million euro. The Border Guard was managed with 221 million euro. The Emergency Response Centres were managed with 58 million euro.¹⁶⁶

The Finnish civil security system is based on the principle that an authority responsible for the measures or mission is responsible for the costs of rescue services. The state may, for a special reason, fund the operations from state funds. The Finnish Fire Protection Fund is managed independently of the budget and administrated and monitored by the Ministry of the Interior. It annually grants assistance which amounts to some 9 million euro for projects associated with fire prevention and rescue services. The fund provides assistance to rescue service organisations, municipalities and rescue service regions. The usual activities are training and education, research projects and technical development.

Regional rescue services have both full-time and part-time personnel. Voluntary, institutional and industrial fire brigades participate in the provision of rescue services as agreed between the brigades and the rescue service region. In total, regional rescue services have approximately 5,000 full-time employees and approximately 14,300 part-time employees and voluntary fire brigade members. There are 635 voluntary fire brigades and 153 industrial fire brigades in Finland.¹⁶⁷

The full-time rescue service personnel are in charge of the rescue-service-related duties of the authorities, such as fire inspections and civil defence plans. Contract fire brigades' duties are determined in accordance with local needs. Fire brigades can carry out all duties conventionally handled by fire brigades or specialise in certain areas on the basis of the risks and special characteristics of the region.

Statistics on rescue services show that yearly circa 100,000 rescue operations have been managed. The annual expenditure on state and regional rescue services amounts to approximately EUR 400 million.¹⁶⁸

For emergency (war time) situations there are reserved some 2,500 persons which could serve as the basis for enlarged civil defence units of a total of 21,000 people. From this number, some 7,500 persons are trained for civil defence or civil protection duties in emergency situations. At the moment, there are over

¹⁶⁵ SPEK. 2013. Study of SPEK 2013. Available from: <u>http://www.spek.fi/news/Laaja-analyysi-suomalaisesta-pelastustoimesta-on-valmistunut/14699/74499900-6251-4373-8ee4-c3dca3492185</u>

¹⁶⁶ Valtioneuvosto. 2012. Sisäasiainministeriön budjettiehdotus 2012. Available from: http://valtioneuvosto.fi/ajankohtaista/tiedotteet/tiedote/fi.jsp.print?oid=335561

¹⁶⁷ Ministry of the Interior, 2013. Department for Rescue Services: <u>http://www.pelastustoimi.fi/en/26715/</u>

¹⁶⁸ Ministry of the Interior. 2013. Statistics. Available from: <u>http://www.pelastustoimi.fi/en/statistics/</u>

40,000 civil defence shelters which can house almost four million people in Finland. Most of the shelters, about 85 percent, are built from reinforced concrete and they are located in residential and business buildings.¹⁶⁹ Property owners spend some EUR 40 million each year on building civil defence shelters.

The police employ about 10,900 people, of whom 7,800 are police officers. This means that in Finland there is one police officer per 681 citizens. The police receive most of their funding from the state budget. The total costs of police operations in 2009 amounted to EUR 697.8 million, of which salaries accounted for 80 percent.¹⁷⁰

Regional police cooperation has been active especially in the European and Baltic Sea regional framework. An example of an agreement which serves as the basis for regional cooperation in the EU is the Prüm agreement. Finland is part of it.¹⁷¹

The Finnish Defence Force employs some 15,000 soldiers and civilians, and trains a further 25,000 conscripts and 25,000 reservists annually. Finland's maximum wartime capacity is 350,000, including the Army, Navy and Air Force. The Defence Force's task of supporting other authorities is prescribed by law. Under normal conditions, executive assistance of the Defence Forces is usually related to maintaining law and order or to rescue operations. Executive assistance can also be given to another country in connection with a terrorist attack, natural disaster, catastrophe or other similar event.

Under exceptional conditions, the Defence Forces can support, for example, the police in protecting nationally important targets. The Finnish Defence Forces typically provide the police and the rescue authorities with equipment, staff and transport capacity as well as expertise with professional staff equipped for the task. 400–500 cases of executive assistance are carried out per year, with the most common cases being explosive ordnance disposal, sealing off and searching areas, traffic direction, carrying out dives and supplying equipment. These are everyday activities that are most commonly carried out in cooperation at a local level, for example, between a garrison and the local police.

 ¹⁶⁹ Ministry of the Interior. 2013. Preparedness and Civil Defence. Available from: http://www.intermin.fi/en/security/preparedness and civil defence
 ¹⁷⁰ Poliisi. 2013. Available from: http://www.poliisi.fi/english/index.htm

¹⁷¹ Valtioneuvoston asetus (Government decree) 7.6.2007 valtioiden rajat ylittävän yhteistyön tehostamisesta erityisesti terrorismin, rajat ylittävän rikollisuuden ja laittoman muuttoliikkeen torjumiseksi tehdyn sopimuksen (ns. Prümin sopimus) voimaansaattamisesta. On the Prüm decision: <u>http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/police-cooperation/prum-decision/index_en.htm</u>

The resources for civil security can be generally estimated as sufficient. There are still problems which should be studied, for example concerning complex nuclear power plant disasters as mentioned in an inter-agency civil protection work-shop¹⁷² in September 2012 in Helsinki. They are linked with managing crises which have inter-sector effects and need to be handled rapidly. The most problematic cases in Finland would be a terrorist attack against or accident in nuclear power plants. The risks of those kinds of incidents are rather low because of a small probability, but the consequences would be very fatal. Therefore, they cannot be studied in Finland on the basis of national experience, but they are included in the new comprehensive security concept in the government resolution from December 2012.

3.3 Legitimacy

3.3.1 Political support

The legitimacy of the comprehensive national defence concept and defence system has been good. Also the other civil protection organisations and arrangements enjoy a high acceptance among the people.

The central authority for civil protection is the government which is supported by the Parliament. The level of situation management and coordination is determined by the seriousness and the extent of the situation. The state leadership may also launch the required measures.

When the prime minister so decides or the competent minister proposes it, civil security matters can be brought before the *government* to be dealt with in the manner agreed on with the prime minister. Decisions required by the situation are made at the *government plenary session*, by introduction of the *competent ministry* or some other *competent authority*.

The crisis management system takes into account the obligations imposed on the member states by the EU's emergency and crisis coordination arrangements. Ministries are responsible for issues relating to the EU within their respective mandates. The function of the government secretariat for EU Affairs is to coordinate preparation and handling of issues relating to the European Union.

¹⁷² Seminar organized by STUK (Radiation and Nuclear Safety Authority) in Helsinki, September 2012.

3.3.2 Legal support

According to the Constitution the Parliament has powers to prescribe laws and supervise the government's policy activities. The most important laws concerning crisis management and civil security duties are the *Constitution* and the *Preparedness Act 2011*¹⁷³.

The Preparedness Act 2011 aims to secure the livelihood of the population and economy, to maintain legal order and constitutional and human rights, and to safeguard the territorial integrity and independence of Finland in emergency conditions. It can be applied before or beside the *State of Defence Act* (1991) which gives additional powers for the government in the defence against an armed aggression.

The present law on rescue services (in Finnish *Pelastuslaki*) is quite new, from April 2011 (effective from 1. July 2011).¹⁷⁴ It stipulates responsibilities for rescue services concerning fire-fighting and response in different accident cases, preparedness and mitigation as well as duties for civil protection in emergency situations, war conditions included. The law on rescue services gives the rescue leaders vast powers for measures needed in a disaster or accident response situation, e.g. forced evacuations from a dangerous place or area. It is also an obligation of every citizen to assist in rescue duties if the leader on the site deems it necessary.

Disturbances or emergency situations which jeopardize society and population can rapidly turn out to be a crisis with surprises, high risks, potential for escalation and lack of time for decision making. Such a situation can no more be handled with normal administrative routines; instead, it needs special methods but not necessarily an improvised ad hoc leadership or additional powers by the emergency legislation.

3.3.3 Popular trust and support

In Finland the civil security/civil protection measures are well legitimated as they are based in law and controlled by the Parliament, and the arrangements are deeply involved in the society. Also the need for international cooperation is accepted by public opinion as long as it is in line with the parliamentary proceedings.

Popular trust and support to civil security mechanisms and actors in Finland is relatively high. One of the main reasons could be that preparedness for various disturbances and emergency situations is a key component in each administrative sector's overall preparedness arrangements. Preparedness encompasses all measures required to ensure that duties can be discharged as smoothly as possible in all security situations. Such measures include, inter alia, contingency planning, advance preparations and

¹⁷³ Valmiuslaki 29.12.2011/1552 (Preparedness Act 2011).

¹⁷⁴ Pelastuslaki 29.4.2011/379. Available from: <u>http://www.finlex.fi/fi/laki/ajantasa/2011/20110379</u>

preparedness exercises with private sector and civil society as a whole. This increases the popular trust and support towards the public authorities.

Preparedness is based on threat scenarios as well as on the key tasks required to manage emergency situations. The tasks include information gathering, the maintenance of a situation picture, making forecasts, prevention measures and maintaining preparedness for crisis management. The threat environment, preparedness as well as the management of an emergency situation must also be examined from a geographical perspective. A global crisis and, especially, a crisis within the EU, may rapidly influence or alter the policies and decision-making in Finland. Conversely, a crisis affecting Finland may escalate into a European or global crisis. Furthermore, it is increasingly common for Finnish organizations and citizens to operate or dwell in areas more crisis-prone than Finland.

4. Finnish Civil Security in the EU Context

In the *European Union* threats may involve member states in different ways and also affect Finnish society. Preparedness systems shall observe the factors which pose a danger to the population and society even in normal conditions. The relative importance of threats varies from country to country. Terrorism is the most serious threat cited in the *European Security Strategy* as well as in the largest European countries. In Finland terrorism is not regarded as a potential threat per se but more likely a possible asymmetric threat against targets of other nations, possessing property, businesses or other assets in Finnish territory.

Finland as an EU Member State is responsible for managing emergencies on its territories and for deciding whether external assistance is needed. Since disasters are often of a cross-border nature, they might require multilateral and coordinated responses.

In the Internal Security Strategy of the EU, November 2010, five strategic objectives are emphasized:

- Disruption of international criminal networks
- Prevention of terrorism and addressing radicalisation and recruitment
- Raising the levels of security for citizens and businesses in cyberspace
- Strengthening security through border management
- Increasing Europe's resilience to crises and disasters.¹⁷⁵

The solidarity clause in the *Treaty of the European Union* introduces a legal obligation on the member states to assist each other when an EU state is the object of a terrorist attack or a natural or man-made

¹⁷⁵ European Commission. 2010. The Internal Security Strategy, November 2010. Available from: <u>http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/internal-security/internal-security-</u> <u>strategy/index_en.htm</u>

disaster. The EU emergency and crisis coordination arrangements (EU-CCA) defines rules for interactions between EU institutions and affected EU states during a crisis, while the integrated EU arrangements for crisis management with cross-border effects (EU-ICMA) facilitate practical cooperation between EU states.¹⁷⁶

At Commission level, the rapid alert system ARGUS brings together all relevant Commission services to coordinate efforts, evaluate the best options for action and decide on the appropriate response measures during an emergency.

The Finnish contacts to the European Union's crisis management organisation have been maintained by sector authorities and the Government Situation Centre. The latter has direct communication line to the EU Council's situation centres (EU Situation Room and EU Intelligence Analysis Centre) and Commission's *Monitoring and Information Centre* (MIC) which can alert the EU crisis coordination arrangements and the Community mechanism for facilitating reinforced cooperation in civil protection via ARGUS communication system.

The emergency and crisis coordination arrangements (CCA) have been a cross-sector crisis management function on the political level which would and could be activated in case of a large crisis situation affecting several nationalities and European interests.¹⁷⁷ In the transition phase after the Lisbon Treaty in 2009 there has been some confusion on how the new, integrated crisis management mechanism (in the EU external action services) should work regarding EU's internal emergencies. The integration of the handling of external and internal has met difficulties resulting mostly from cultural differences.¹⁷⁸

Finland has participated fully in the EU crisis management functions, both in practical and in research activities.

5. Conclusion

The civil security and crisis management systems in Finland have been developed after the Cold War from the preparedness to overcome extreme situations, a total war included, towards more peace-time oriented arrangements which are based on the comprehensive security concept. There are still some features in the Finnish concept of maintaining civil protection/security following from that history.

¹⁷⁶ European Commission. 2013. Crisis management. Available from: <u>http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/crisis-and-terrorism/crisis-management/index_en.htm</u>

¹⁷⁷ Kjellén, S. 2007. Survey of EU warning systems, Krisberedskapsmyndigheten 5.9.2007, p. 9.

¹⁷⁸ Rettman, A. 2010. "EU diplomats to benefit from new intelligence hub", *EUobserver*. 22.2.2010. Available from: <u>http://euobserver.com/9/29519</u>

The Finnish civil security system could be characterised by a high degree of decentralisation and divided tasks based on substantial expertise in and competences across levels and issues. This creates particular challenges for coherent situational awareness.

The principle of strict legality in the administration is a long-lasting tradition from the past. Horizontally, every sector has rather independent powers in decision making, and also vertically the possibilities of upper administrative levels to lead directly over the lower levels are restricted by law. This culture of legality in the administration is deep-rooted, and it is rather difficult to change for a flexible and more concentrated or integrated system of civil security arrangements.

The civil security system is based on the principle where each sector authority conducts their normal tasks and responsibilities during various emergencies or crisis situations. The most important first responders in civil security issues are municipalities and regional rescue services.

The government has responsibility for coordination of sector authorities' measures in preparedness and operational functions. The main civil security manager is the Ministry of the Interior with its strategic-operational sectors: rescue services, Criminal Police and SUPO, and the Border Guard. The other ministries have civil security duties, too.

An *emergency situation* can be managed with the usual administrative measures without special crisis management arrangements, but the same system of alarm and decision making should be used as a basis for preparedness concerning all kinds of crises and other emergency situations following the "all-hazards" principle.

The great variety of crisis types and need to make decisions swiftly also in "civil crises" have made it necessary to construct an effective system for maintaining situational awareness. A situation centre has been built for the permanent use of the government, and it is located at the Prime Minister's Office.

The situation picture and surveillance data are collected to the situation centres of the above mentioned authorities. The underlying principle is that these centres will further enhance the situational picture of the Government Situation Centre which upholds awareness of the general situation and makes analyses for the prime minister and government. However, this principle still needs to be clarified and elaborated within various sectors of the government.

In Finland, civil security/civil protection measures are well legitimated as they are based in the law and controlled by Parliament, and the arrangements are deeply involved in society. The central authority for civil protection is the government which is supported by Parliament. Also the need for international cooperation is accepted by public opinion as long as it is in line with parliamentary proceedings.

The legitimacy of the comprehensive national defence concept and defence system has been good. Also the other civil security/protection organisations and arrangements enjoy a high acceptance among the people. This is a remarkable resource for civil security also in the present conditions of decreasing budgets and financing.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 FINLAND

1	Introduction	Scoring instruction	Score	Source	Comments
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	In 1991 the Parliament passed the Emergency Powers Act (1080/1991) simultaneousl y with the State of Defence Act (1083/1991) which replaced the old State of War Act (See 2.2.1).	somewhat coherent nation-wide definition of crisis situations and emergency conditions. The emergency conditions defined in

I	
	threat of wa
	and requiring
	immediate
	action for the
	increase o
	the defensive
	readiness o
	Finland, a
	well as othe
	specific
	conditions
	outside
	Finland
	having
	comparable
	effect, if the
	may pose a
	grave dange
	to the
	foundations
	of nationa
	existence and
	well-being
	(amendment
	2000).
	(4) A seriou
	threat to the
	livelihood o
	the
	population o
	the
	foundations
	of the
	national
	economy
	brought
	about b
	hampered o
	interrupted
	import o
	indispensable
	fuels and
	other energy
	raw material
	and goods o
	by
	comparable
	serious
	disruption o
	international
	trade.

					(5) A catastrophe.
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2		
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No=0In exceptional situations = 1Regularly = 2	1		
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1		
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1		
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1		
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2		
2.1.1.d	Is the political system a consociational or a majoritarian democracy?		1		
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down=1Bottom-up=2Both = 3-	3		
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		33	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		63	http://geert- hofstede.com /countries.ht ml	

ii	Geert Hofstede country national cultural score - MAS			http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		59	http://geert- hofstede.com /countries.ht ml	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		41	http://geert- hofstede.com /countries.ht ml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0.82	http://www. worldvaluess urvey.org/	Year 2006
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		1.12	http://www. worldvaluess urvey.org/	Year 2006
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3		Security strategy for society. Government resolution 2010: http://www.d efmin.fi/en/p ublications/st rategy_docu ments/the_se curity_strateg y_for_society	
2.2.1.b	When was the last major reform in the civil security field undertaken?	-	2013	Establishmen t of the Security Committee (Interagency)	

				strategy.
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	_	1	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		1	
2.2.2	Political dimension			
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?		3	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?		1	
2.2.3	Operational dimension			
2.2.3.a	Is there a specialised agency for crisis response at the national level?		0	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?		0	If we exclude standard Police, Rescue Service and Emergency Response Administratio n 112.
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	2	Basically could be both answers. Depends heavily about the sector and type of exercise.
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number	N/A	Several exercise at each sector, not any at the nationa

2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	4	level involving all possible authorities. As above. This need to be confirmed to the final version from relevant
				authorities.
2.2.4	External dimension			
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	1	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	10	Hard to answer as the agreements are done directly between sectoral agencies with their counterparts.
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	10	
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"		0	
2.3	State-citizens relations			
2.3.1	Expectations			
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).		2	

		and/or insurance) = 2		
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3	
2.3.2.c	Does the government have a central website with updated information on crisis events?		2	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?		2	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?		3	
2.3.3	Education			
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		0	

2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited	3	
		public outreach = 2 To members and wide- spread training programmes for general population = 3		
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	1	
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		1	
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	300 mill. euros	This is total figure for security studies and R&D.
2.4	Role of private sector			
2.4.1	Role of societal/ non-profit organisations			
2.4.1 2.4.1.a	Role of societal/ non-profit organisations Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?		1	
	organisations Do societal/non-profit actors play an official/legally mandated	Yes = 1	1	
2.4.1.a	organisationsDosocietal/non-profitactorsplay an official/legally mandatedrole in EXCEPTIONAL crises?Dosocietal/non-profitactorsplay an official/legally mandatedrole in the REGULAR provision ofcivil security?Roleofprofit-oriented	Yes = 1 No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of		
2.4.1.a 2.4.1.b	organisations Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises? Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	Yes = 1 No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2 No = 0		
2.4.1.a 2.4.1.b 2.4.2	organisationsDosocietal/non-profitplay an official/legally mandatedrole in EXCEPTIONAL crises?Dosocietal/non-profitactorsplay an official/legally mandatedrole in the REGULAR provision ofcivil security?Role of profit-orientedorganisationsDo for-profit/private actors playan official/legally mandated role	Yes = 1 No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2 No = 0 Yes = 1	1	

				specific problems with data)
3.1	Effectiveness			
3.1.2	Limits to national capacities			
3.1.2.a	How many times has external assistance been received during a crisis?		0	
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA		
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA	done	
3.3	Legitimacy			
3.3.1	Political support			
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	5	Establishmen t of the Emergency Response Regions, Regionalisati on of the Rescue Services, County level response system AVI and the establishmen t of the Police Board. One could add also establishmen t of the Government Council centric decision making

3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.	10		mechanism after the South East Asian Tsunami experience.
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	-	1		Tsunami committee led by President Martti Ahtisaari
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?		0		
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	0		
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	N/A		This needs much more research and difficult to answer at this stage.
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?		1		
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	72	Special Eurobaromet er 371 (2011)	

3.3.3.b 3.3.3.c	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism? Do official actors maintain registers for volunteers in crisis	for "Agree" and "Tend to agree" No = 0	76	Special Eurobaromet er 371 (2011)	
3.3.3.d	management? If yes to above, list number if accessible	Register the number per 1000 capita for 2011	N/A		
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector?	Register the number per 1000 capita for 2011.	N/A		
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?			http://ec.eur opa.eu/echo/ files/policies/ disaster resp onse/EUCPM _activations_ since_010120 07.pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011		http://ec.eur opa.eu/echo/ files/policies/ disaster_resp onse/EUCPM _activations_ since_010120 07.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-	Register the number for the 2009-2010 training cycle	27	Hollis, Simon (2010). National Participation	

4.e	2010 training cycle? How many EU-led civil	Register the number for	6	in EU Civil Protection. Swedish National Defence College. <u>http://ec.eur</u>	
	protection simulation exercises did your country participate in between 2002-12?	2002-2012		opa.eu/echo/ policies/prev ention prepa redness/prep aredness en. htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	0	http://ec.eur opa.eu/regio nal policy/th efunds/doc/i nterventions since 2002. doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012		http://ec.eur opa.eu/regio nal policy/th efunds/doc/i nterventions since 2002. doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	33	Special Eurobaromet er 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	79	Special Eurobaromet er 383 (2012)	

Annex II: H1N1 in Finland

The health organizations also in Finland observed the threat of H1N1 ("Swine Flu") warnings carefully during the 2009. The political-strategic responsibility rested on the *Ministry of Social Affairs and Health*¹⁷⁹ and the operational responsibility especially on the *National Institute for Health and Welfare* which was quite a new organisation, established in early December 2008. It has also released public and professional information on the situation concerning H1N1.¹⁸⁰

The preparedness arrangements were made according to *the National preparedness plan for an influenza pandemic* from 2007.¹⁸¹ The preparedness plan has been accepted in the Ministry of Social Affairs and Health management group and in the government meetings of the heads of preparedness. The purpose of the preparedness plan has been to set up guidelines for flu pandemic preparedness at all administrative levels of healthcare and to support preparations in other administrative sectors. Management relations during a pandemic are determined in accordance with the government model for government civilian crisis management. At the municipal level, the organ responsible for prevention of communicable diseases plays a central role in pandemic preparedness and during a pandemic. The hospital district physicians responsible for communicable diseases act as experts in planning at the regional and local levels.

The National Institute for Health and Welfare has compiled on its website topical information on swine flu or influenza A(H1N1) virus, its symptoms and treatment, the vaccine against swine flu, risk groups, the epidemic situation in Finland, as well as instructions for health care professionals and tourists.¹⁸² The process of preparedness and countering the actual cases of swine flu in Finland began in the end of April 2009 when the *World Health Organization* (WHO) had raised the pandemic alert level to phase five, after it was determined that the H1N1 virus has adapted itself sufficiently to become easily transmittable between humans and after the virus was confirmed to have spread to two countries in the same WHO region. Raising the pandemic threat level one phase higher meant that Finland should continue to implement its national pandemic preparedness plan. Accordingly, the hospitals and health centres prepared for a growth in the patient numbers and checked their preparedness plans. The central administration reinforced the coordination of leadership and prepared for using the stockpiled drugs. The Ministry of Social Affairs and Health gave instructions to doctors and pharmacies, which aimed to ensure that the antiviral drugs were prescribed only for active cases.¹⁸³

¹⁸² STM. 2013. Preparedness for an A(H1N1)v influenza epidemic (swine flu): <u>http://www.stm.fi/en/h1n1</u>

 ¹⁷⁹STM. 2013. Available from: <u>http://www.stm.fi/en/frontpage;jsessionid=6da691455eef3af1ed5ecc53f439</u>
 ¹⁸⁰THL. 2013. Available from: <u>http://www.thl.fi/en_US/web/en/pressrelease?id=33516</u>

¹⁸¹ STM, 2007. National preparedness plan for an influenza pandemic. Helsinki 2007. Publications of the Ministry of Social Affairs and Health: <u>http://www.stm.fi/julkaisut/nayta/-/_julkaisu/1071419#en</u>

¹⁸³ STM. 2013. <u>http://www.stm.fi/en/pressreleases/pressrelease/-/view/1407238</u>

The first laboratory confirmed cases of influenza A(H1N1) were discovered in Finland on 12 May 2009. The patients were two young adults from the greater Helsinki area who returned from Mexico on the same flight. It was also announced that the production of pre-pandemic influenza A(H1N1) vaccine was about to begin. The *Ministry of Social Affairs and Health* and the *National Emergency Supply Agency* had already a week before authorized the *National Institute for Health and Welfare* (THL) to submit a purchase offer for pre-pandemic vaccine. The purchase provided the first dose of vaccine for all persons permanently resident in Finland in case the H1N1 virus caused a pandemic. Once the vaccine was ready, it would take from 4 to 6 months to get the vaccine in Finland.

The vaccine purchase was carried out under the previous agreement concerning the H5N1 vaccine (bird flu vaccine). The total cost of the purchase was EUR 5.2 million. As a result, Finland had in store pre-pandemic vaccine for both H5N1 and H1N1 pandemics. Pre-pandemic vaccine was produced in advance of a pandemic. It was based on a virus strain which was believed to cause a pandemic either in an un-mutated or mutated form. When the pandemic breaks out the virus can already have mutated which may diminish the protective efficacy of the vaccine.

Vaccines were considered the best way to prevent fatalities and serious illnesses during an influenza pandemic. For sufficient protection, the pre-pandemic vaccine should be complemented with at least one dose of a pandemic-specific vaccine. The Ministry of Social Affairs and Health had earlier decided to purchase the pandemic-specific influenza A(H1N1) vaccine as soon as it was available.

The pandemic-specific vaccine can be manufactured only after a pandemic has begun, when the structure of the virus is ascertained. The Ministry had authorized THL to sign agreements with two vaccine manufactures for the pandemic-specific vaccine. The vaccine would then be available within around six months of the pandemic outbreak.¹⁸⁴

By early July 2009 a total of 62 cases of influenza A(H1N1) were confirmed in Finland. In four cases the infection was contracted in Finland from family members returning from abroad. Also in Europe the number of cases increased rapidly. The symptoms seemed to be milder than expected and the severity of the illness was similar to seasonal influenza. The containment phase measures were still continued. Suspected cases of influenza A(H1N1) were confirmed with laboratory tests and all the confirmed infections were treated with antiviral drugs.

In the following few weeks the number of cases increased quickly. Finland had to consider moving to the treatment phase already during the summer of 2009. It was believed that high-risk people were including pregnant women, people with chronic heart and lung disease as well as people with cancer. Travellers returning from the United Kingdom, Mexico, the United States, Canada, South and Central America (especially Argentina and Chile), Australia, New Zealand, Hong Kong, Thailand, the Philippines, Malaysia, and Singapore were still advised to observe their health closely for about a week after returning from travel.

The Ministry of Social Affairs and Health and National Institute for Health and Welfare informed on 26 November 2009 that the entire population would be vaccinated against swine influenza. Vaccinations of healthy people over 24 years old were to commence at the turn of the year. By then, enough vaccines would arrive in Finland. The first groups to be vaccinated included two million people and around one million had already been vaccinated. The vaccine was free and voluntary. The idea was that vaccinating the entire population would guard against the next swine flu wave. Vaccinating the entire population had probably little impact on the on-going first wave of the epidemic.

Finland had (in the end of November 2009) received around one million doses of vaccine, and 236,000 doses more were due to arrive in a week. At the moment municipalities were vaccinating small children and school children. Over 64-year-olds belonging to the high-risk groups were to be vaccinated before commencing the vaccination of the healthy adult population.

No serious or unexpected adverse reactions to the swine flu vaccine had been detected in Finland. Local reactions, such as pain where the injection was given, were common. Typical side effects included also muscle aches, joint pains, headache and fever; slightly over 10 percent of people who have been vaccinated experienced these. The symptoms passed in a day or two.

The peak of the swine flu epidemic had been reached almost everywhere in Finland. In the northern parts of the country, the epidemic was already subsiding. A total of 6,122 influenza A(H1N1) infections were diagnosed in Finland. Since not all infections had been confirmed in the laboratory, the real number of infections was manifold. For the majority of those who had fallen ill, the disease was relatively mild and resembled common seasonal influenza. A total of 16 swine flu related deaths were reported in Finland.

Reports by the *State Provincial Offices* indicated that the social and health care system had on average managed well with the increased need for services due to the epidemic. Municipalities and joint municipal boards had adjusted their service system to the epidemic in accordance with contingency plans. The situation was in control regarding, for example, staff, hospital beds, medicines, and health care materials.

Finland received by February 2010 already 4.2 million doses of the swine flu vaccine. The rest of the vaccines, a total of 1.1 million doses, were arriving in a few weeks. The swine flu situation had remained stable, although infections still occurred. It was believed that the second wave of the swine flu epidemic would probably arrive in Finland the following autumn at the latest. Good vaccination coverage could prevent a new outbreak of the epidemic. By that point around two million Finns had already been vaccinated. Vaccination against swine flu was still recommended to everyone. Especially persons in the atrisk groups who had not yet been vaccinated were advised to get the vaccine even though at that time the vaccinations were already targeted at the healthy adult population.

The Ministry of Social Affairs and Health recommended that municipalities complete the vaccinations swiftly and flexibly. The special vaccination arrangements could then be dismantled by the end of March 2010, and a return to normality would be possible in health care.

In August 2010 the Ministry of Social Affairs and Health recommended to discontinue the Pandemrix vaccinations, because there had been observed some troubles with it.

The National Institute for Health and Welfare published on 1 February 2011 a progress report of the National Narcolepsy Task Force, according to which the risk of persons aged 4 to 19 years who had been vaccinated with the Pandemrix vaccine to fall ill with narcolepsy had clearly increased in comparison to their unvaccinated peers. The National Institute for Welfare and Health continued to investigate the association between narcolepsy and the vaccine at both national and international levels.

In August 2011, the *Finnish National Narcolepsy Task Force* reported an increased risk of narcolepsy in vaccinated children and adolescents in Finland. By that time, no increased risk in vaccinated adults was observed. Recent surveillance data had revealed that the accumulation of records to medical registers has taken longer in adults than in children. In addition, both the verification of narcolepsy cases and vaccination data had been considerably more difficult in adults than in children.¹⁸⁵

Also in the United States the situation was under surveillance, and it was generally found an increased risk of *narcolepsy* following vaccination with Pandemrix, a monovalent 2009 H1N1 influenza vaccine that was used in several European countries during the H1N1 influenza pandemic. Narcolepsy is a chronic neurological disorder caused by the brain's inability to regulate sleep-wake cycles normally. It was told that the risk was initially found in Finland, and then some other European countries also detected an association. Most recently, scientists at the United Kingdom's (UK) Health Protection Agency (HPA) had found evidence of an association between Pandemrix and narcolepsy in children in England. The findings

¹⁸⁵ THL. 2013. Available from: <u>http://www.thl.fi/en_US/web/en/pressrelease?id=33516</u>

were consistent with studies from Finland and other countries. Pandemrix was not used before 2009, and has not been used since the influenza pandemic season (2009-2010).¹⁸⁶

From 2009 to 2011, 25 adults developed narcolepsy in Finland, 18 of them had received GSK's swine flu shot. Almost all of the cases were in people under the age of 40, and none were seen in anyone over the age of 64. The finding suggests that the risk of developing narcolepsy tails off with age. Finnish researchers put the increased risk of narcolepsy in adults at 1/100,000. In children it is 6/100,000. The Finnish National Institute for Health and Welfare thinks these figures may overestimate the risks, though. If vaccinated people sought treatment for narcolepsy sooner, the risk may be lower than currently thought.¹⁸⁷

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Executive Summary

The 2008 French White Paper on defense and national security identified a number of key threats and vulnerabilities, including natural and industrial disasters, emerging health threats and terrorist attacks. According to the new 2013 White Paper, they remain relevant, all the more so as recent events highlighted the reality of natural, health and technological risks, the scope of which may lead to the disorganization of societies.

Some crises, such as the 1999 storm of the century, the 2001 explosion at the AZF factory (Toulouse) and the 2003 heat wave, specifically contributed to raising awareness, highlighting the complexity of the civil security organization and the necessity to revise it. Law n°2004-811 of 13 August 2004 on modernization of civil security established a more flexible integrated organization, with citizens at the center of this new approach. The ORSEC plan provides the general framework for the civil security response.

The French civil security system involves a plurality of actors characterized by different status (civilian and military professionals, as well as volunteers), explaining the fragmentation of the civil security culture, a situation inherited from the past. If the civil security policy is decided at national level, missions are mainly financed and managed by structures depending on territorial authorities. This multiplicity of actors and authorities contributes to hinder the analysis of budget evolutions and the assessment of cost efficiency.

Since 2008, the capacities of the state for responding to a major crisis have been significantly improved. The objective, reaffirmed in the new White Paper, is to go further. The territorial organization, considered as appropriate, relies on departments and on defence and security zones, the latter still having to be strengthened. The organization for the response to major internal and external civil security crises already takes into account European and international dimensions.

France is involved in numerous bilateral and multilateral cooperation and mutual assistance agreements and initiatives involving a civil security dimension. The French expertise is internationally recognized in the field of civil security, as the country is involved both in prevention and response actions. It has developed cooperation programmes with a number of Eastern European, Caucasian and Mediterranean countries, and, in recent years, has significantly increased its cooperation with other countries in Africa, Asia, Latin America, as well as in the Middle-East. At European level, outside its interventions in the framework of bilateral agreements, France actively participates in the EU civil protection mechanism, offering and providing assistance on a regular basis. It also participates in exchanges of experts and research programmes in the field of civil security. However, to go further, it is important to assess what are the expectations authorities and first-responders regarding the role of the European Union in the field of civil security.

Key Findings

1. Although France is now a decentralized country, the state remains the main actor of the civil security system. In case of large scale events, the prefect heads the different actors involved in crisis management. He/she has both a political and an operational role, acting as representative of the government. A civil servant, he/she is not elected by the population: his/her legitimacy principally comes from the delegation of the executive power. This situation is about to change as territorial authorities and their means will be better taken into account.

The multilayered architecture is another main feature of the French organization. Four territorial, political and administrative levels play a role during a large scale crisis. This system requires an efficient exchange of information between levels for proper functioning. Several modifications were adopted during the last decades to take into account the lessons learned and to increase efficiency. The strengthening of the defence and security zones illustrates the capacity for structural change.

The French civil security system is also characterized by a multiplicity of actors involved, actors displaying different status and cultures. To deal with this diversity, an efficient coordination is not only a political but also a permanent requirement. The system relies primarily on the intervention of first-responders. However, when their resources are insufficient, military forces as well as accredited NGOs can be called upon to support them. Voluntary workers have a major role during the restoration phase. Outside the crisis period, they also provide education and training to the population. However the process for obtaining an official agreement has been more selective since 2004, and financial support granted by the state has decreased in recent years.

2. Ultimately, the French civil security system puts its emphasis on planning. Each level draws up numerous plans. Planning thus constitutes the cornerstone of the French crisis management organization. The process of plan production is largely based on a top-down approach.

During the last period, efforts were made to improve both the flexibility of the system and, above all, the involvement of the citizens. The objective is now to reinforce the capacity of individuals and communities to cope with the consequences of major events. Initiatives dedicated to the promotion of this kind of culture have been launched. But the state does not really provide for this effort: territorial authorities and the civil society (i.e. associations and non-profit organizations) take on a large part of these initiatives. Recent evolution of the French civil security system is thus characterized by a contradiction: the state gives broad orientations and sometimes imposes new obligations but does not assume the organisational and financial burden of these choices.

Political authorities want to improve the civil security system but must deal with the objective of public expenditure reduction. In this context, reflections have recently been initiated on public-private

partnership contract methods. Another solution could be the reinforcement of pooling and sharing, especially between civil services and military forces.

3. France contributes actively in the EU civil protection mechanism. The review of this mechanism is one of the propositions in the 2013 French White paper on defence and national security. More globally, France advocates for greater coherence between the different EU sectoral policies in the field of security (including crisis management, the fight against terrorism, the continuity of activity, etc.), but considers this objective could be achieved without modifying the EU legal framework. In addition to the European framework, it also still relies on bilateral, trilateral or multilateral cooperation and mutual assistance agreements in the field of security. France activated international and European cooperation structures several times in the last years, both for transmission of information and for requests of assistance.

List of Abbreviations

ACROPOL	Automatisation des Communications Radiotéléphoniques Opérationnelles de POLice
ANTARES	Adaptation Nationale des Transmissions aux Risques et aux Secours (National Adaptation of
ANTARES	Transmissions to Risks and Assistance)
CBRN-E	Chemical, Biological, Radiological, Nuclear and Explosives
CIC	Comité Interministériel de Crise (Inter-ministerial committee)
COGIC	Centre Opérationnel de Gestion Interministérielle de Crise (Inter-ministerial Operational Crisis
	Management Centre)
COD	Centre Opérationnel Départemental (Departemental Operations Centre)
COZ	Centre Opérationnel de Zone (Zonal Operations Centre)
DCSD	Direction de la cooperation de sécurité et de défense (Direction for Security and Defence
	Cooperation)
DDRM	Dossier Départemental des Risques Majeurs (Major Risks Departmental File)
DICRIM	Document d'Information Communal sur les Risques Majeurs (Major Risks Communal Information
	Document)
DGSCGC	Direction générale de la sécurité civile et de la gestion des crises (General Directorate for Civil
	Protection and Crisis Management)
ENSOSP	Ecole Nationale Supérieure des Officiers de Sapeurs-Pompiers (French Academy for Fire, Rescue and
	Civil Protection Officers)
EUCPT	European Union Civil Protection Team
EUFFTR	European Union Forest Fire Tactical Reserve.
FNPC	Fédération Nationale de Protection Civile (National Federation of Civil Protection)
IRSN	Institut de Radioprotection et de Sûreté Nucléaire (Institute for Radioprotection and Nuclear Safety)
JRC	Joint Research Centre
MIC	Monitoring and Information Centre (EU)
ORSEC	Organisation de la Réponse de SEcurité Civile (Organisation of the civil security response)
PCS	Plan Communal de Sauvegarde (Communal Protection Plan)
PCO	Poste de Commandement Opérationnel (Operations Command Post)
POI	Plan d'Opération Interne (Internal Operation Plan)
PS	Parti Socialiste (Socialist Party)
SDIS	Service Départemental d'Incendie et de Secours (Departmental Fire and Emergency Service)
SGDSN	Secrétariat Général de la Défense et de la Sécurité Nationale (General Secretariat For Defence and
	National Security)
SGZDSP	Secrétariat général de la zone de défense et de sécurité de Paris (General Secretariat of the Paris
	Defence and Security Zone)
UMP	Union pour un Mouvement Populaire (Union for a Popular Movement)

1. Introduction

There is no unique definition and understanding of what "crisis" means and what it encompasses. As was underlined in a 2011 report from a joint public-private working group which involved representatives from seven ministries, including Interior, Defence and European and Foreign Affairs, this word is widely used by private actors, including medias, as well as by public authorities, to characterize major accidents, disasters or even emergencies. This report stressed the importance of having a common meaning with regards to the implementation of public policies, but also to avoid misunderstandings among citizens. Political authorities or their delegates, the prefects, are responsible for deciding if an event should be addressed as a crisis. The socio-political context can thus have an impact on the characterization of an event as a crisis.

Planning relies on the identification of risks and threats. As the European Security Strategy does (EU's High Representative for the Common Foreign and Security Policy 2003), the French White Paper on Defence and National Security of 2008 identified several key threats and vulnerabilities, including natural catastrophes, both industrial disasters and technological risks, emerging health threats, new and robust espionage activities, major attacks against information systems, major criminal networks, terrorism, but also ballistic and missile threats, as well as weapons of mass destruction (Commission du Livre blanc 2008). The rising number of French citizens living abroad is also an issue taken into account. Besides, four new security parameters were highlighted: a growing interconnection between threats and risks resulting from globalization, continuity between domestic and foreign security, developments having an impact on military operations, and the possibility of sudden strategic disruptions.

Since 1987, each citizen has been legally entitled to be informed about major natural and technological risks he may be affected by, according to the Environment Code (Code de l'Environnement).¹⁸⁸ Nine main natural risks have been identified for France - floods, earthquakes, volcanic eruptions, landslides, avalanches, forest fires, storms, tornadoes, hurricanes, as well as four technological risks – nuclear, industrial, dangerous hazards transport, dam rupture (Ministère de l'Ecologie et du développement durable, 2004). Major risks are considered to be characterized by a low frequency associated with serious potential consequences, meaning large numbers of victims, large-scale damages to property and the environment.¹⁸⁹ The Ministry of Ecology, Sustainable Development and Energy proposes a classification based on levels of seriousness of damage (see table 1).

Table 1: Categories according to levels of seriousness

Category	Human Damage	Material Damage
0 Incident	No injuries	Less than 0,3 M€
1 Accident	1 or more injured	Between 0,3 M€ and 3 M€

¹⁸⁸ A code is a single document compiling the main provisions related to a specific issue.

¹⁸⁹ Ministère de l'Écologie et du Développement durable, *Les risques majeurs. Guide général*, 2004, p. 3 (in French).

2	Serious accident	1to 9 deaths	Between 3 M€ and 30 M€
3	Very serious accident	10 to 99 deaths	Between 30 M€ and 300 M€
4	Disaster	100 to 999 deaths	Between 300 M€ and 3 000 M€
5	Major disaster	1,000 deaths or more	3 000 M€ or more

Source: Ministère de l'Écologie et du Développement durable 2004, p.3.

The majority of crises in France fall under the category of natural disasters, with forest fires, floods and storms common (See Table 2). Some crises specifically contributed to raising awareness and led to an improvement of prevention, preparedness and response policies and measures, and thus of the civil security system itself. They norably include the storm of the century in 1999, the explosion at the AZF factory in Toulouse in 2001, and the heat wave of 2003. For example, the latter induced the development of the French Syndromic Surveillance Programme.

Table 2: Major crises having involved a civil security response, France, 2000-2012

			Damage		
Year/ month	Crisis description	Crisis category	# of persons killed	# of persons injured	# of persons affected and other consequences
2000	The Concorde crash	Transportation accident	113	6	
2001	Explosion at AZF	Industrial accident	31	More than 3,000	1,300 firms and 25,550 houses and flats affected, 1,200 families relocated in emergency
2002	Fire in a Paris-Munich train (in Nancy)	Transportation accident	12	8	
2002	Floods in the Gard	Natural disaster	24	?	420 communes affected, 1.2 billion euros of damages (estimation) Level of seriousness: 4
2003	Heat wave	Natural disaster	~ 15,000 (comparatively high death rate)	?	Level of seriousness: 5
2003	Floods	Natural disaster	7	?	More than 2,000 companies affected, 1.5 billion euros of damages (estimation) Level of seriousness: 4
2004	Tsunami in South-East Asia	Natural disaster	95	?	
2005- 2006	Chikungunya outbreak in Reunion	Infectious disease	?	~ 244,000 affected	At least 35% of the population of the island affected
2009	Klaus storm	Natural disaster	12	?	5 billion euros of damages (estimation)

	1		I	1	
					Level of seriousness: 5
2009	H1N1 pandemic	Infectious	312	1,334	More than 600 million
		disease		serious	euros (estimation)
				cases	
2010	Xynthia storm	Natural	53	79	1.2 billion euros of
		disaster			damages (estimation)
					Level of seriousness: 5
2010	Floods in the Var	Natural	23 (and 2	?	More than 1,000
		disaster	missing		companies affected, 700
			persons)		million euros of damages
					(estimation)
					Level of seriousness: 4
2011	Floods in the Var	Natural	4	?	Between 500 and 800
		disaster			million euros
					Level of seriousness: 4
2012	Toulouse and	Terrorist	7	0	
	Montauban shootings	attack			

Source: The International Disaster Database/Emdat (<u>www.emdat.be</u>); CATastrophes NATurelles.net; (<u>www.catnat.net</u>); *Fédération nationale des victimes d'attentats et d'accidents collectifs* (<u>www.fenvac.org</u>); *Portail interministériel de prévention des risques majeurs* (<u>www.risques.gouv.fr</u>); (*Ministère de l'Ecologie, du Développement durable, des Transports et du Logement - Direction Générale de la Prévention des Risques* 2011); (INVS 2008).

Note: "Natural disasters" listed above are those categorized as "disaster" or "major disaster" (categories 4 and 5).

France has an all-hazard approach, governed by the Organisation de la Réponse de SEcurité Civile (ORSEC) plan. Crisis management is first of all a civilian operation, with a direct contribution of armed forces to civil security through three civil security military units placed under the authority of the Ministry of Interior. Besides, as stipulated in Article 2 of Law n°2004-811 of 13 August 2004 on the modernization of civil security, the armed forces can be requested to help, especially if public means are limited, inadequate, unavailable or non-existent. Both the French White Papers of 2008 and 2013 advocate an integrated organization for crisis management and detail a strategy involving both civil and military means¹⁹⁰.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

The Constitution of 4 October 1958 (La Constitution du 4 octobre 1958), written and rigid, provides the institutional basis for France's current political system, the Fifth Republic. It was revised on twenty-two occasions (Le Conseil constitutionnel). Some of these revisions have significantly altered the nature of the institutional regime. France differs from most modern democracies as it uses a two-round election system

¹⁹⁰ Since 2008, the coordination mechanism between the civilian structure of crisis management and the military command has been strenghtened, but without going so far as a true integrated approach with members of the armed forces involved being placed under the authority of the prefect.

instead of a one-round system.¹⁹¹ Minor political movements have thus little chance of being elected without entering into an alliance with one of the major parties.

The institutions borrow classic elements from both the parliamentary and the presidential systems. The parliamentary part is characterized by the existence of a government headed by a prime minister. Elected by direct universal suffrage, he/she emerges from the National Assembly, one of the two chambers, and is accountable for his/her actions before deputies. The prime minister belongs to the majority party in the National Assembly. But the prime minister is also appointed by the president of the Republic, who is himself elected by direct universal vote and has thus a higher political legitimacy. The president presides over the Council of Ministers. He has a major role in defence (as commander-in-chief of the armed forces) and foreign policies and his pre-eminence in the conduct of national policy, outside periods of political cohabitation, has no equivalent in other parliamentary systems. He determines the main direction of policies to be pursued by the government. The French system sets a high value on the separation of powers, but the president can still pronounce the dissolution of the National Assembly. A motion of censure can provoke the collapse of the government, but the process is complex and requires that the motion be adopted by an absolute majority of deputies.

The French Republic is a unitary state. Although France initially had a centralised administrative structure, it implements a decentralization process ("déconcentration"). At various levels, a representative of the state acts as a guarantee for its effectiveness and offers the advantages of being present 'on the ground'. Local branches of central ministries are directly controlled by civil servants – the prefects ("*préfets*"). The decentralization policy involves delegation if the minister's decision-making powers to the prefects (i.e. prefects of the department and regional prefects) of the minister's decision-making powers in many areas. France also implemented a devolution policy ("décentralisation"): by successive waves, many functions of the state were directly transferred to local government bodies ("Territorial authorities"¹⁹²) in order to ensure a better balance of powers across the nation. With the constitutional reform adopted in 2003, Article 1 of the Constitution now reads: "the organization of the state is decentralized". The devolution policy was coupled with the development of contractual policies, i.e. agreements in the form of contracts between the state and local and regional authorities to implement various sectoral policies and finance public investments.

¹⁹¹ The elections of the president and of deputies involve two rounds: a candidate can be elected on the first round by an absolute majority of votes cast. The second round is a run-off between the two candidates who secured the higher numbers of votes during the first round (presidential election) or between candidates who secured more than 12.5 % of the votes in the first round (deputy election).

¹⁹² Territorial authorities are French administrative structures, separate from the state administration, which have responsibility for the interests of the population in a defined territory (definition from the National institute of Statistics and Economic Studies).

France has a four-tiered administrative structure (Assemblée nationale 2012): the state consists of 26 regions ("*régions*"),¹⁹³ each being comprised of between 2 and 6 departments (96 "*départments*" in all). They are divided into municipalities (around 36,000 "*communes*") (Code général des Collectivités territoriales).¹⁹⁴ Locally based representatives of the state (i.e. prefects of the department and regional prefects) are not involved in the work of these political and administrative bodies, but they play an advisory and partnership role. Prefects are also responsible for verifying the legality of decisions made by territorial authorities.

Each commune has its own mayor, responsible for every-day public safety and security on the territory of the municipality. He/she is the chief of the different municipality services. In case of disaster, the mayor is the first to step in. He/she engages the communal rescue means, takes decisions in order to safeguard lives (i.e. evacuation), assesses damages and finds shelter for displaced people. He/she is the "emergency operations director" during crises (Code de la Sécurité intérieure).¹⁹⁵ As such, he/she mobilizes public and private resources present on the territory of the municipality, coordinates communication between all actors, and provides information to the population. He/she must also inform the prefect(s) of department and of the defence and security zone.

Proximity is the key concept explaining the mayor's power. Municipality authorities and services are political and administrative actors who best understand the particularities of the local population and territory.

The prefect of department takes control of rescue operations (Direction de la sécurité civile n.d.):

- When more than one municipality is affected by a crisis,
- And/or when municipality means are not sufficient for responding to the crisis,
- And/or when the mayor officially asks for help,
- And/or when the mayor has not taken the relevant decisions to safeguard the population.

The prefect becomes the "emergency operations director" (Code de la Sécurité intérieure). ¹⁹⁶ He/she backs up the mayor by mobilizing and coordinating departmental rescue and disaster response means (fire brigades, constabulary, road management and public transport, transmissions, etc.) when necessary, and by assessing the disaster. Within the territory of its commune, the mayor is still responsible for information, evacuation and sheltering of the population.

¹⁹³ The 26 regions include 4 overseas *départements* (Guadeloupe, Guyane, Martinique, Réunion). France also has 3 overseas territories (New Caledonia, French Polynesia, and Wallis and Futuna), and 2 overseas communities (Mayotte and Saint Pierre-et-Miquelon), which have their own specially adapted legislation in some areas.

¹⁹⁴ Municipalities, departments (along with the four overseas departments), regions (along with the four overseas regions), authorities with a special status, and overseas authorities are territorial authorities.

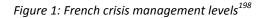
¹⁹⁵ Articles L. 2212-2 and L. 2212-4 of general Code of the Territorial authorities.

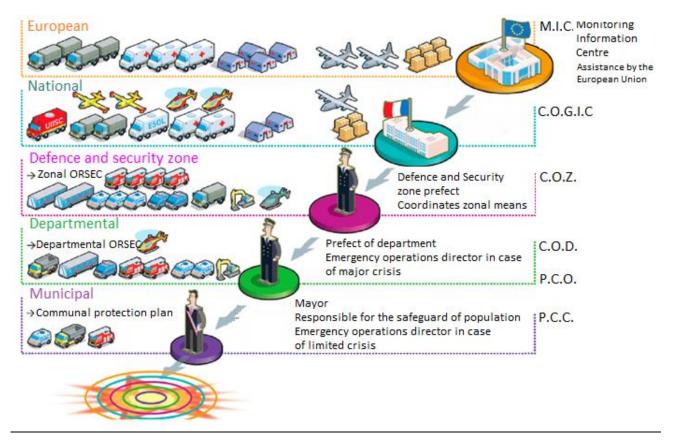
¹⁹⁶ Article 742-2 Code of domestic Security.

When major crises involve several *départements*, the prefect of the Defence and Security Zone can take control of crisis management. In past events, regions proved not to be an efficient level for the management of large-scale crises. Thus, political authorities have decided to reinforce an intermediary level: the Defence and Security Zone.¹⁹⁷ The French metropolitan territory is divided between seven Defence and Security Zones. Zones enable a more relevant distribution of available resources among the different *départements*, thus sparing the national level from having to respond too widely when a large geographical area is affected. A prefect leads this special territorial division.

Each zone-level prefect is responsible for preparing and implementing national security measures, notably those regarding civil security and crisis management, as well as supervising actions from prefects of departments. The seven zone-level prefects have been granted competencies to improve planning and crisis management capacities. Among other missions, they set directions and priorities based on an assessment of risks and potential effects of threats. They are tasked with the translation of governmental planning at the level of the zone and with ensuring an effective implementation at the level of the *department* (see 2.2.3.). They organize operational surveillance and are responsible for co-ordination with military authorities. They also coordinate civil security means and actions, including both public and private means, requisitioning them if necessary.

¹⁹⁷ Four Defence Zones were created in 1950. This level was initialy dedicated to the implementation of non-military measures of national defence. After the Cold War, it was reorganized, its functions modified. With reforms in 2009 and 2010, the name of the level became "Defence and Security Zone".





Source: Ministère de l'Intérieur (Ministry of the Interior) 2009.

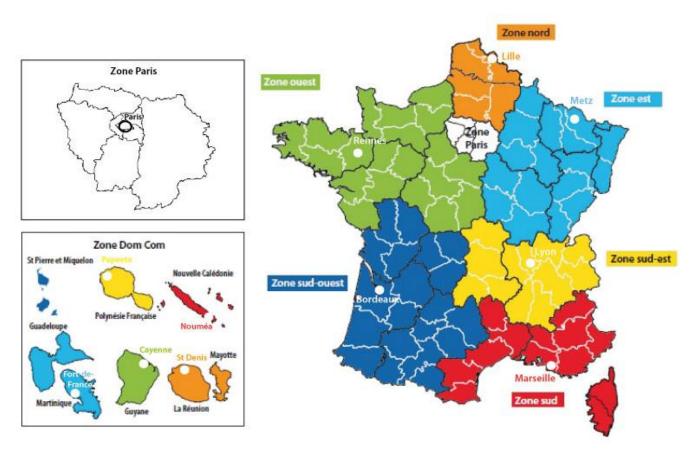
¹⁹⁸ COGIC (*Centre Opérationnel de Gestion Interministérielle de Crise* / inter-ministerial operational crisis management centre): Within the General Directorate for Civil Protection and Crisis Management (DGSCGC) of the Ministry of Interior, COGIC is an inter-ministerial operational centre. It ensures round-the-clock monitoring of large-scale rescue operations and co-ordinates the use of resources – public and private, local and national – in the event of a major incident.

COZ (*Centre Opérationnel de Zone* / Zonal Operations Centre): Inside each Defence and Security Zone, the COZ is an interregional civil security operational co-ordination centre ensuring the co-ordination of the aid and rescue operations under the authority of the zone prefect. It is activated in case of major crisis.

COD (*Centre Opérationnel Départemental* / Departmental Operations Centre) and PCO (*Poste de Commandement Opérationnel* /Operations Command Post): At departmental level, the prefect relies on the COD (which has the same functions as COZ) and the PCO, located in a safe place near the catastrophe area, and in charge of coordinating actions of the various actors in the field.

PCC (*Poste de Commandement Communal* / Communal Command Post) is installed in the hall centre of concerned cities. Its organization is defined by the PCS (Communal Protection Plan).





Source: Ministère de la défense / Ministère de l'Intérieur (Ministry of Defence / Ministry of the Interior).

2.1.2 Government/social culture

With a score of 68, France scores high on Hofstede's scale of *power distance* (Hofstede n.d.). The French population constitutes a society in which inequality is accepted. Thus, many services of the civil security system are founded on a hierarchical (even pyramidal) structure. At each level, this system relies on a "leader" (mayor, prefect, minister) – who often has little contact with actors on the ground. The power is centralized and, for large scale events, the executive is responsible for the response. Territorial authorities (regions and departments) can provide capacities, but not lead actions. The prefect plays this role, acting on behalf of the government. He is thus granted numerous dedicated powers.

At 86, France has one of the highest scores on the Hofstede's *uncertainty avoidance* Index. Like other countries of Latin culture, the acceptance of uncertainty is very poor. The security system is consequently based on the precise identification of risks. At the different levels (municipality, department, region), the services must provide documents inventorying and assessing the different kinds of risks (natural, industrial, etc.) that may affect the territory. The French security system also puts emphasis on planning work. Mayors, as well as prefects of department and of the defence and security zone draw up safeguard plans, emergency plans, contingency plans, etc. Some authors thus describe an "obsession" (Lagadec,

2009) Seeking to address the whole spectrum of crisis situations, the different services involved in the security system produce too many different plans.

At 71, France scores high on the Hofstede's *individualistic* index. French people favor individual and private opinions, taking care of themselves and of their immediate family rather than belonging to a group. This cultural feature is linked with poor confidence in public authorities (i.e. the Parliament and the government), the Catholic Church, political movements, trade unions and several administrations (Brechon, 2009). But the World Values Survey results show that individualism should be distinguished from individualization (World Values Survey). French people refuse to be bound by tradition or order, and want to be convinced before acting. They want to be self-directing individuals, able to choose between different political, religious and cultural values and discourses. This explains that individuals can nevertheless be mobilized for purposes and causes perceived as important. The French civil security system thus mobilizes a large number of civilian volunteers, especially in fire brigades and non-profit organizations.

According to Hofstede's model, France is a short-term oriented society. This means a great respect for tradition as well as a need for norms and absolute truth as guidelines. As mentioned, plans and procedures are very important in the civil security system. Despite these tools, the culture of many services is largely characterized by a focus on daily activities (Haut Comité Français pour la Défense Civile, 2008).¹⁹⁹ Long term analyses, especially evaluation of the consequences of economical, urban and social changes, are not produced. The French civil security system is also characterized by a multiplicity of actors, with different status (military, professional and volunteer) and a segmented culture – a situation inherited from the past.

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The Code of Domestic Security was created in 2012, with the objective to clarify laws relating to domestic security²⁰⁰. According to Article L.112-1 of this code, civil security addresses "risks prevention whatever their nature, information, warning of populations, as well as protection of persons, possessions and environment against accidents, disasters and catastrophes, by implementing relevant measures and means under the responsibility of the state, territorial authorities and other public or private persons".

The Organization of Civil Security Response (*Organisation de la Réponse de Sécurité Civile,* ORSEC) plan is the basis of inter-services organization for the management of major events. Providing the general framework of the civil security response, inventorying public and private resources which can be mobilized, listing the training and exercises required for the preparation for a crisis, and describing the

¹⁹⁹ In 2002, Lagadec already described "A cultural weakness in terms of anticipation" (Lagadec, 2002).

²⁰⁰ It compiles the different laws and statutory documents dealing with domestic security and encompasses all provisions about civil security, even if some of these provisions introduced by Law n°2004-811 are also integrated into other codes such as the Code of Defense.

operational structures to be used during the crisis.²⁰¹ The ORSEC plan was first published in February 1952 and has since been considerably remodeled and adapted to take into account evolutions of society and threats. The first legal framework for the organization of civil security was provided by a specific law in 1987. Seeking to better address risks and threats, a multiplicity of tailored plans was adopted which proved in the end counter-productive. The 1999 storm of the century highlighted the complexity of this organization and the need for a revision. Law n°2004-811 of 13 August 2004 on modernization of civil security established a more flexible integrated organization, with citizens at the center of this new approach.²⁰² If this law is the cornerstone of the French civil security system, principles, structures and the division of responsibilities between the actors responsible for crisis management are specified in the different codes (Code of Domestic Security, Defence Code and general Code of the Territorial Authorities). Besides, decree n°2010-224 of 4 March 2010 has granted broader competencies to prefects in order to improve planning and crisis management capacities and to reinforce the zone level.

2.2.2 Political dimension

The General Secretariat for Defence and National Security (SGDSN), under the authority of the prime minister and working closely with the president of the French Republic's office, ensures the coordination of the national security policy among ministries and governmental agencies, encompassing both domestic and external security affairs. It is thus in charge of risks and threats assessments, planning and finally interministerial coordination in terms of preparation, prevention, and response to major threats, be they natural, accidental or intentional. Each ministry is in turn responsible within its area of competence for preparation and implementation of incumbent civil security and defence measures (Article L.1141-1, Defence Code).

In case of a serious crisis, the president of the Republic and the prime minister take charge of political and strategic actions. The Ministry of Interior is responsible for the operational conduct of crisis management operations and for activating, if required, the inter-ministerial crisis committee (CIC)²⁰³. The CIC is divided into three sub-components, tasked respectively with proposing strategic decisions, assessing situations (by the synthesis of information coming from the different national and local operational centres) and devising crisis communications. Answering the need for an integrated response and better coordination to deal with major crises involving various ministries but also external partners, CIC is activated by the prime minister and gathers all relevant ministries in case of a major crisis occurring on the national territory or

²⁰¹ ORSEC is the name of the plan and of the emergency organization used when the plan is implemented.

²⁰² If the "ORSEC" name was kept, the content and the objectives of the plan were modified. Before 2004, the ORSEC plan was at the top of the plans pyramid. For each risk, a dedicated plan was created. But when a major crisis occured, the ORSEC was triggered. Nowadays, the ORSEC plan is a basis used for all emergency situations.

²⁰³ Which is headed by the Sub-directorate of Planning and crises management of the General Directorate for Civil Protection and Crisis Management.

when French interests and the security of citizens are at stake.²⁰⁴ Three operational crisis centres are under the authority of the Ministry of Interior, respectively within the national gendarmerie, police and civil security services (COGIC), and act by delegation or are directly triggered for less important crises. Other ministries (Health, Defence, Foreign affairs, etc.) and the prime minister's services have their own operational crises management centres. The CIC is responsible for the transmission of decisions from the political level to all these operational centres and those at the level of zones and *département*-level. These decisions are translated into general effects to be achieved.

Within the crisis management system, there are two kinds of decision-making actors (with different status): prefects are civil servants, representatives of the government, and mayors are political authorities elected by the population²⁰⁵. Prefects and mayors are very old institutions in the French political and administrative system. The Defence and Security Zone is less well-known because of the recent modification of the scope of its missions, and all the more so that its attributions are limited outside of a crisis event.

Several provisions exist and lay the framework for addressing exceptional situations. In the event of imminent danger arising from serious disturbances of public order or from events which by virtue of their nature and severity are deemed to be public disasters, Act n°55-385 of 3 April 1955 authorizes the council of ministers to proclaim by decree a state of emergency. Civil authorities are granted extended powers.²⁰⁶ With the state of emergency and the state of siege, prorogation beyond twelve days may only be authorized by law. Article 16 of the French Constitution also authorizes the president of the Republic, after consultation of the prime minister, presidents of the assemblies, and Constitutional Council, to take measures required by circumstances, "[w]hen the institutions of the Republic, the independence of the nation, the integrity of its territory or the fulfillment of its international commitments are under serious and immediate threat, and when the proper functioning of the constitutional public powers is interrupted".²⁰⁷ Constitution Act n°2008-724 of 23 July 2008 brought democratic control on duration.²⁰⁸

²⁰⁴ Premier Ministre, Circulaire relative à l'organisation gouvernementale pour la gestion des crises majeures, n° 5567/SG du 2 janvier 2012 (in French).

²⁰⁵ Prefects and mayors have both a political and an operational role (see 2.1.1 Administrative tradition regarding the executive responsibility of these actors).

²⁰⁶ Besides, the state of siege can be proclaimed, for the whole territory or part of it, after deliberation of the Council, by virtue of Article 36 of the 1958 French Constitution, in case of imminent peril resulting either from a foreign war or an armed insurrection. Police powers are then transferred from civil authorities to military authorities, if military authorities rule this transfer necessary.

²⁰⁷ Constitution du 4 octobre 1958, article 16 (in French).

²⁰⁸ After 30 days of exercising exceptional powers, the president of the National Assembly, the president of the Senate, 60 members of the National Assembly or 60 senators can appeal to the Constitutional Council. It will then assess whether the conditions still apply and its decision will be publicly announced. After 60 days and at any moment thereafter, the Council carries out such an assessment.

2.2.3 Operational dimension

The civil security system involves not only first-responders such as firefighters, medical emergency professionals, and law enforcement officers, but also all public and private actors who may potentially be implicated in a crisis.

The General Directorate for Civil Protection and Crisis Management (DGSCGC) was created by decree n°2011-988 of 23 August 2011, with a ministerial order specifying its organization and missions. The Directorate for Civil Security (DSC), which preceded this new structure, was established as late as 1975 and became autonomous in 1986, a few months after the Chernobyl disaster. Its powers had been progressively limited since 2008, with notably transfer of crisis planning to the Directorate of National Security Planning (*Direction de planification de sécurité nationale* – DPSN), then of inter-ministerial crisis management from COGIC to the CIC (except for civil security crisis). Acknowledging the drawbacks resulting from disconnecting operational conduct and planning, the creation of the DGSCGC met two requirements, thus concurring to recognize the importance of civil security within security forces: reestablishing the link between operational conduct and planning, and sending a strong signal to firefighters as the DGSCGC is on the same administrative level as the General Directorate of the National Police (DGPN) and the General Directorate of the National Gendarmerie (DGGN), but also includes a fire brigade directorate (Viret 2012). This General Directorate is now one of the most important directorates of the ministry, encompassing fire brigades²⁰⁹, civil security military units²¹⁰, and military firemen units (but not the medical emergency services which is located within the Ministry of Health²¹¹).

The French civil security system relies on 248,300 firefighters (as of January 2012), with the involvement of the support of around 250,000 volunteers from various associations. Civil security personnel include bomb-disposal experts, as well as Canadair, liaison and observation planes, and helicopters pilots and flight engineers²¹².

The Paris Fire Brigade and Marseille Marine Fire Battalion are under military status. Besides, the Ministry of Defence contributes directly to the civil security system with three civil security military units posted within the Ministry of Interior, their headquarters being within the DGSCGC²¹³. Moreover, armed forces can provide support and assistance in cases when public means are limited, inadequate, unavailable, or non-existent, but only upon administrative or legal requisition, and, in specific case, if there is a request for

²⁰⁹ Departmental fire and emergency services / Services départementaux d'incendie et de secours – SDIS.

²¹⁰ Units of Instruction and Intervention of Civil Protection / Unités d'Instruction et d'Intervention de la Sécurité Civile – UIISC.

²¹¹ The Ministry of Health supervises urgent health services (*Services d'Aide Médicale d'Urgence* – SAMU), and mobile emergency and re animation services (*Services Mobiles d'urgence et de réanimation* – SMUR).

²¹² Around 460 people operate and service a fleet of 26 airplanes and 39 helicopters.

²¹³ 300 out of around 1,500 servicemen are on call daily, ready to go in three hours. They can be called up in case of any natural, technological or health disaster, on the national territory or abroad.

support. Administrative requisition can be used for maintenance of law and order, public security in emergency situations, action against terrorism, as well as in case of a major crisis on the national territory.

The ORSEC plan describes the operational framework used during crises: the chain of command, alert and public information tools, the communication system between actors involved in crisis management, and pre-identified specific missions. It encompasses generic measures which can apply to all kinds of situations, as well as specific measures focusing on risks identified beforehand. Each actor must integrate at its own level missions devolving upon them. ORSEC includes a number of plans required by regulations²¹⁴. At the zonal and departmental levels, the plans include an inventory of effective public and private means to face up to catastrophic events.²¹⁵

Terrorism is taken into account with Vigipirate, a dedicated governmental plan of vigilance, prevention and protection. Other plans (named "Pirate plans"), including the CBRN Plan, complement Vigipirate.

The SGDSN, which also organizes large-scale exercises, is responsible for planning work at national level. Risk assessment and analysis is also a key component of all these plans. A dedicated governmental website identifies and maps risks by departments (www.risques.gouv.fr). In case of a crisis, the mayor is usually in charge of coordinating aid and rescue operations. If the crisis may affect several districts or exceed local rescue capacities, the prefect of department can trigger the ORSEC plan, and heads the crisis management organization.²¹⁶ If it may affect several departments or exceed departmental rescue capacities, the prefect for the defence and security zone, or even the government, is then responsible for the coordination of ORSEC plan. Within Paris and the departments of the inner suburbs, the prefect of police is always in charge of operational conduct but can delegate it to department prefects.

The Departmental Operations Centre (COD, see Section 2.1.1.), activated by the prefect of department, is a joint structure bringing together representatives of main actors involved in crisis management (police, firefighters, gendarmerie, private companies managing critical infrastructures, etc.). Each actor, *via* his

²¹⁴ For example:

[⇒] Special Intervention Plans (PCI), to address risks linked to specific infrastructures such as nuclear power plants, oil and chemical plants, dams, infrastructures associated with hazardous materials transportation, and biosafety level 4 (BSL4) laboratories;

[⇒] Safeguard Plans at district levels (PCS), mandatory for some districts subject to major risks but recommended for all;

[⇒] Internal Operation Plans (POI), for some classified or specific infrastructures or upon prefect's decision;

[⇒] Intervention and Security Plans (PIS), for some operators of road or rail infrastructures;

[⇒] White Plans, crisis response plan for each public and private health institutions to deal with a mass influx of patients or victims or in the case of an exceptional health crisis situation;

_⇔ Etc.

²¹⁵ Each department and zone must develop an ORSEC plan adapted to its particularities.

²¹⁶ Above mentioned, prefect becomes notably emergency operations director.

representative, informs the COD of the situation evolution²¹⁷. From all these inputs, the COD produces on a regular basis an evaluation of the field situation for the prefect, and eventually the Zonal Operations Centre (COZ) and COGIC. If required, the monitoring of the situation also includes data from specialized actors.²¹⁸

The DGSCGC has four operational and logistical support centres (*Établissements de soutien operationnel et logistique* – ESOL), which provide logistical and material support in the event of emergency. Their staffs are especially able to reinforce the services helping the population with emergency shelters, power supplies and water purification systems.

Considering communication, the 2004 law on modernization of civil security initiated the modernization of the national information systems used by civil security actors, aiming at improving interoperability of communication networks used by civil security actors through the development of a joint national infrastructure for transmissions supporting the ANTARES service.²¹⁹ This major challenge is still an on-going process. Difficulties include investment costs for departments, but also technical problems regarding adaptation for the aerial fleet and requirement for relays in each department. Difficulties include investments, but also technical problems in terms of adaptation for the aerial fleet and requirement.

²¹⁷ Beside, each departmental fire and emergency service (SDIS) has a call centre dedicated to emergency calls (Alert processing centre / *Centre de traitement d'alerte* – CTA). During the crisis, this structure often transmits an analysis of evolution of the calls (kinds of people demand, increase or decrease, etc.).

²¹⁸ As Météo France, the central service for hydrometeorology and flood forecasting (*Service Central d'Hydrométéorologie et d'appui à la prévision des inondations* – SCHAPI), the Institute for Radioprotection and Nuclear Safety (*Institut de Radioprotection et de Sûreté Nucléaire* – IRSN), and the Institute for Public Health Surveillance (*Institut de Veille Sanitaire* - InVES).

All these actors have a representative within the COD and the COZ or are a permanent link with. They could provide forecast of the future developments.

²¹⁹ Antares, acronym for « Adaptation Nationale des Transmissions Aux Risques Et aux Secours » (National Adaptation of Transmissions to Risks and Rescue).

2.2.4 External dimension

The organization for the response to major internal and external civil security crises takes into account the European and international dimensions (see Figures 3 and 4).

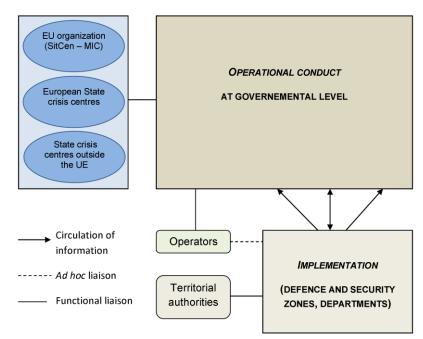
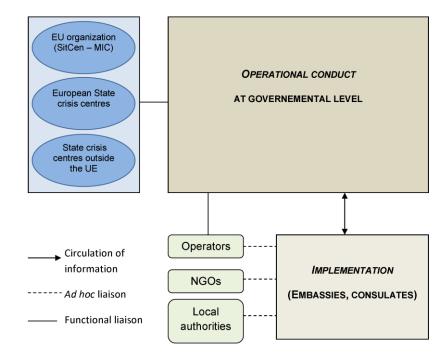


Figure 3: Governmental organization for the conduct of internal crises

Source: Adapted from Circular n°5567/SG on the governmental organization for the management of major crises (Le Premier Ministre 2012).

Figure 4: Governmental organization for the conduct of external crises



Source: Adapted from Circular n°5567/SG on the governmental organization for the management of major crises (Le Premier Ministre 2012).

Many bilateral and multilateral cooperation and mutual assistance agreements involving a civil security dimension have been adopted since the 1950s. France has bilateral agreements with more than 40 countries on all five continents. They involve cooperation and mutual assistance, as well as, for some of them, collaboration in the field of disaster prevention and information exchange.

France has signed bilateral agreements with most of the neighbouring countries of the metropolitan territory, i.e. Belgium, Germany, Switzerland, Spain, Italy, Luxemburg, and Monaco. An agreement on technical cooperation and mutual assistance in the field of civil security is currently being negotiated with the last one, Andorra. They mostly address disasters and major accidents.²²⁰ France and Germany also cooperate in the field of civil security research, with a 2009 agreement between the French National Research Agency (ANR) and the German Federal Ministry of Education and Research (BMBF) (Pécresse, 2009).

Besides, France also takes part in civil security activities according to regional and multilateral initiatives and agreements, for example through the EU civil protection mechanism or in the context of NATO or UN memberships. Considering overseas departments and territories, France has signed the ACS (Association of Caribbean States) agreement for regional cooperation in case of natural disasters and the Franz agreement between France, Australia and New Zealand which organizes cooperation of emergency assistance in case of natural disasters (Secrétariat permanent pour la Pacifique 2004).

Promoting civil security abroad is a mission devolved to a specific structure within the DGSCGC which is tasked with the organization and supervision of all training, audit, and promoting activities in the field of civil security. More than 400 training actions dealing with civil protection and crisis management are organized each year. France has been developing cooperation programmes with Eastern European, Caucasian and Mediterranean countries. The DGSCGC participates for example in the *EuroMed System for reduction, prevention and management of natural and man-made disasters* (PPRD South) and has been developing since 2009 the civil protection part of the Union for Mediterranean project. In recent years, it also has significantly increased its cooperation with other countries in Africa, Asia, Latin America, and in the Middle-East (Kihl, 2013).²²¹

With more than 170 embassies worldwide, France has the second largest network after the American network and has thus capacities to assess national situations. To be able to strengthen the network of "civil protection" cooperation and meet demands from other countries, the Direction for Security and Defence Cooperation (DCSD) of the Ministry of Foreign Affairs also adopted a three-year action plan (2012-

²²⁰ The agreements with Luxemburg addresses the issue of mutual assistance between fire and rescue services, and of information exchange in case of an incident or accident with potential radiological consequences.

²²¹ For example, the DGSCGC provides supports to the Russian Ministry of Emergency Situations for the organization of the Sotchi Olympic games and is involved in training actions in Latin American countries in the context of the preparation of the Olympic games in Rio de Janeiro.

2014). The DCSD relies on internal security attachés and some French civil protection experts who can be assisted by firefighters sent on temporary missions. Moreover, the crisis centre (CDC) of the ministry is competent in case of a humanitarian crisis or of a crisis involving the security of French citizens abroad (Barbot, et al 2013).

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

With the adoption of the Law on Modernization of Civil Security (August 2004), French political authorities expressed that civil security is not only a matter for the state and other public bodies but also for citizens. The law created an obligation for citizens: article 4 specifies that "Every person contributes by its behavior to the civil security. According to the situations with which he is confront and depending on their capacities, he sees to the warning of emergency services and adopts the first required measures".

One of the objectives of this law was to establish conditions for a responsible involvement of citizens as actors in the civil security arena. But the text only created two "poor" mechanisms: 1/raising awareness of young people during high school and Defence and Citizenship Day;²²² 2/ an inter-ministerial internet website presenting national major risks and behaviors to adopt in case of crisis. The law also created the Communal Civil Security Reserve, a new tool for mobilizing citizens designed to provide support and assistance for local populations²²³.

The 2008 French White Paper on Defence and National Security developed the same idea: the citizen must be a real national security – and especially civil security – actor. With the introduction of the notion of resilience, authors focused on the empowerment of population. But no new tools were created for insuring the implementation of this principle.

For French people, unemployment, poverty, and consequences of the economic crisis are the current major sources of fear.²²⁴ Since 1988, economic and social issues are at the top of the list of concerns, probably because of the direct consequences on their life. Eurobarometer 383 (2012) shows that the French population is not listed amongst European populationss characterized by the highest levels of concern regarding different kinds of disasters (natural, made-man and terrorist attacks). At the beginning

²²² A 2007 study showed that the educational system has not spent enough time for information about security and defence of young people (Balmond (L), dir., *L'enseignement de defense : bilan et perspectives*, Les documents du C2SD, n° 92, 2007 – in French).

²²³ This reserve is charged with assisting the mayor in crisis situations. It can be involved in actions for preparing and informing local people, as well as in restarting activities in post-accident situations. It takes action solely within the scope of the mayor's sphere of competence and in no way aims to substitute for or compete with public rescue or emergency services. It is placed under the mayor's authority. People can join the reserve on a voluntary basis.

²²⁴ Baromètre IRSN, La perception des risques et de la sécurité par les Français, 2012, part 1.

of the 2000s, French people were anxious about pollution and climate change. But environmental issues now appear to be of less importance.

Terrorist attacks and nuclear disasters are the threats the public perceive as most worrisome for the country. French people also place food risks, chemical risks, and influenza on the list of problematic issues. But, as mentioned above, they are nowadays more concerned about economic difficulties and daily security.

Notwithstanding the state's aim to enhance resilience at the individual level, citizens themselves have high expectations concerning the role and responsibility of the state during crises.

Associative movements are very important in French social life, often acting on behalf of or making up public administrations. Citizens can (mainly) take part in the civil security system:

- ⇒ As volunteers within firefighting brigades; ²²⁵
- As volunteers within the reserve corps²²⁶. They can be mobilized when facing a situation of exception exceeding the usual capacities. In 2011, Parliament voted in a law for facilitating the use of these corps during a large crisis; ²²⁷
- As volunteers within non-profit organizations recognized by the Ministry of Interior (See 2.4.1.
 Role of societal/non-profit organisations/NGOs).

2.3.2 Information

Since 1987, the Environment Code specifies that each citizen is legally entitled to be informed about major natural and technological risks he may be affected by. In France, the right to general information on major risks applies. Law no.2003-699 of 30 July 2003 - relating to prevention of technological and natural risks and damage repair - reaffirms the concept of preventive information and gives mayors new obligations. It also contains numerous provisions designed to develop a better understanding of the risks for populations exposed, in order to adopt appropriate actions. Each citizen must be aware of their vulnerability to risks

²²⁵ Law n°2011-851 of 20 July, 2011 on the engagement of voluntary firefighters and its legal framework.

⁷⁸ percent of the 250,000 French firefighters are volunteers (195,000). Professionals and volunteers have the same missions. From 2000 to 2011, the number of volunteers has slightly decreased. In 2011, political authorities voted a dedicated Law for the preservation of the special status of volunteers, in order to stop this trend.

²²⁶ France has several kinds of civilian and military reserve corps. In case of an event, the above mentioned Communal Civil Security Reserve supports first responders and firefighters for secondary missions (observation of rivers and dykes, directing people to safe places, snow clearing, etc). Around 260 communities have a Communal Civil Security Reserve (in all 2,300 people). The Civil National Police Reserve gathers around 4,000 people (most of them former policemen). The Health Reserve Corps (around 290 people) can be called in order to strengthen medical and social care structures.

The operational military reserves are the most important reserve corps (around 30,000 people). There were created to reinforce and complement the regular forces primarily in their operational commitments, including on the national territory. The national gendarmerie has its own reserve (around 17,000 people).

²²⁷ Law n° 2011-892 of 28 July, 2011 facilitating use of military and civilian reserves in case of a major crisis.

and be able to assess it, in order to reduce it as much as possible. At the national level, to promote a culture of risks and better inform the population, the government launched a specific inter-ministerial portal dedicated to major risks.²²⁸ The objective is to inform, in real-time, citizens about current developments relating to risks and threats, as well as to explain how to prepare and react, providing them with the possibility to identify the risks that may affect them, depending on their location. This portal is linked to "vigilance" websites, especially those of Météo-France and Vigicrues,²²⁹ and provides several guides. It's also linked to the websites of all the French departments and major cities. Thus people may access the documents describing major risks at the local levels (Major risks departmental file / *Dossier Départemenal des Risques Majeurs* – DDRM, and Major risks communal information document / *Document d'Information Communal sur les Risques Majeurs* – DICRIM).

Another website is dedicated to the prevention of major hazards: <u>www.prim.net</u>. It was created by the Ministry of Ecology and Sustainable development, a federation of communes, and several associations. It makes the information about major hazards available to the public, with complete files on hazards, the identification of the major hazards in each French local authority area, natural disaster declarations and, on the Cartorisques Interface, a map of events as well as the plans for the prevention of natural disasters (PPRN) (Ministère de l'Ecologie, du développement durable, des transports et du logement, 2011). This website provides a database on the legal framework (laws and decrees), useful for mayors, and a "digital catalogue" providing different kinds of documents (guides, mementos, institutional documents, methodologies, etc.).

At the local level, mayors and prefects' services are responsible for the diffusion of information about risks and behaviors citizens must adopt in case of crises. Thus information on major hazards and their consequences for people, their property and the environment is available at council offices in every town and village and, often, on the Internet. Each department's prefecture must edit a document (DDRM) that includes the enumeration and description of the major risks to which the department is exposed, the identification of the foreseeable consequences for the people, the goods and the environment, the chronology of past events, and an inventory of the generally envisaged measures for prevention, protection and safeguard by the public authorities in the department to limit the effects of them.²³⁰ The prefect must transmit to the mayors of concerned towns the DDRM which will be available to the prefecture and the town hall²³¹. The DDRM is updated within a time which cannot exceed five years. The DICRIM is a document produced by the mayor. It describes natural and technological risks which may affect the town's population, as well as prevention, protection and maintenance measures and the means

²²⁸ http://www.risques.gouv.fr/

²²⁹ These websites use interactive maps showing precipitations and floods level.

²³⁰ Article R125-11 of the environment Code.

²³¹ The document must be available on the website of the prefecture.

of alert.²³² A description of risks and instructions to respect in case of an event must be posted within campsites, buildings welcoming more than 50 people and residences.

Law n°2003-699 of 30 July 2003 on the prevention of technological and natural risks as well as on compensations strengthened the provision of safety information and created different local, departmental and national coordinating bodies. It also requires that purchasers or tenants of any property, whether built or not, situated in an unsafe area and/or within the perimeter of a plan for the prevention of natural or technological hazards, have to be informed about risks.

Specific information on technological hazards is also to be made available to citizens. Under Article 13 of the European Seveso II Directive, owners of upper tier sites are obliged to provide information for the local population. Although coordinated by the state, the production of this information is entirely financed by the generator of the hazard and should be re-issued every five years. (Ministère de l'Ecologie, du développement durable, des transports et du logement, 2011).

Considering the specific issue of terrorism, the level of alert is posted in state offices and in a number of public places.

During a crisis, political authorities, or the prefect, are responsible for communication. However, they usually have to deal with the consequences of contradictory messages from so-called experts solicited by the media or disseminated on the Internet. Strategies of communication have thus been developed, taking into account the specificity of the Internet. Some plans include pre-formatted messages based on scenarios, with a pre-established tempo.

Regarding alerting of a population in case of a crisis, available means of alert can vary from one district to another. A renewal of the current system was required, as the current sound system, adopted at the beginning of the Cold War and intended to raise an alert in case of aerial raids, is deemed obsolete. The national alert network will soon be replaced by a new system for alerting and information of the population which will be tested in 2013 and operational in 2017. This evolution will also come with efforts to inform and train people to be able to recognize the meaning of each signal. In the long run, the diffusion of messages on mobile phones will complete this system.

According to the Special Eurobarometer 328 (2009),²³³ only 21 percent of French citizens feel they are very well informed or fairly well informed on crisis preparedness, while 37 percent feel they are very well informed or fairly well informed on disaster preparedness.

²³² Articles R125-9 to R125-14.

²³³ http://ec.europa.eu/public opinion/archives/ebs/ebs 328 en.pdf

2.3.3 Education

The French Academy for Fire, Rescue and Civil Protection Officers (ENSOSP) is, among other missions, responsible for the initial and lifelong or vocational training of volunteer and professional firefighter officers, as well as for the training and formation of local authorities' representatives, civil protection and government officers, industrial and international experts.²³⁴ Outside civil security associations providing first aid training, it is worth mentioning the French High Committee for Civil Defence (HCFDC), a nonprofit organization. Addressing global security and societal resilience, it represents an exchange platform bringing together elected members, citizens associations, experts, industries and critical infrastructure operators. It organizes activities such as symposiums, debates in the French Senate, Webinars, training courses and awards.

Considering spreading of information to citizens, the two websites mentioned in the previous chapter contain education tools. <u>www.prim.net</u> also includes a news section presenting information about local and national education and awareness events and campaigns. If the state sometimes supports these initiatives (conferences, formations, etc.), they are generally organized by NGOs, universities, and territorial authorities.

Since 2004, making schoolchildren aware of major hazards is officially part of the Education Code. It is part of the curriculum in both primary and secondary schools and is tested. As part of the measures agreed in the International Strategy for Disaster Reduction (SIPC-ISDR), a body created by the UN in 2000, each second Wednesday in October is devoted to various local awareness initiatives. In 2004, a circular created a network of academic coordinators on major risks (*Réseau des coordonnateurs académiques aux risques majeurs/education* – Rmé). The network is placed under administrative authority of the Ministry of Ecology and Sustainable Development with help from the Ministry of National Education for pedagogical issues. It is used to promote a culture of risk awareness among teachers and students²³⁵.

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

In France, voluntary involvement can encompass both free voluntary work and remunerated engagement. Voluntary workers in the civil security field are involved through associations with a civil security agreement, communal reserve corps, or "forest fires" voluntary work. There are around 200,000 volunteers, including around 70,000 active operational volunteers. For 2010, it was estimated that

²³⁴ Created 34 years ago, ENSOSP is a national public institution under the responsibility of the Ministry of interior.

²³⁵ Each rector of academies appoints a coordinator who leads a team composed of mentors and trainers coming from several state services. These people (policemen, firefighters, members of medical emergency services, etc.) help school directors and teachers when they want to organize an awareness event. This system depends highly on the will and the activity of coordinators of the Rmé network, school directors and teachers.

volunteers devoted 3 million hours to operational involvement. The most important are the French Red Cross (around 53,000 volunteers), the National Federation of Civil Protection (around 32,000 volunteers) and the French Federation of Safeguard and First-aid (around 33,000 volunteers). These organizations help firefighters and medical units on the field. Investment efforts consented by civil security associations for equipment amount to about 200 million euros.

Their missions can encompass: rescue operations, support to disaster victims, supervision of voluntary workers during support missions to disaster victims, and provisional rescue measures. This includes for example first-aid, and psychological support and transport (for injuries). Volunteers also have a major role during the restoration phase, distributing food and water, and organizing shelters.

Since 2004, the Ministry of Interior process of recognition is more selective (interview, 4 February 2013). The non-profit organizations must prove that their volunteers are skilled and trained. Their units and cells must have various equipment required by the ministry. Conditions to be complied with are more and more constraining. The ministry publishes a list of associations which have received an authorization for civil security missions (Ministère de l'Intérieur 2013).²³⁶ The 2012 supplementary budget act granted 287,775 euros to associations exercising civil security missions, including 170,775 euros for the associations that have been granted a civil security authorization. Some subsidies also come from specific funds at the discretion of parliamentarians (263,500 euros in 2012), and from territorial authorities.

Civil security associations suffer from a number of vulnerabilities, including in terms of governance, as well as for recruiting and retaining volunteers. Moreover, despite their major contribution to national resilience, public authorities display a relative lack of knowledge, interest and recognition (interview, 4 February 2013).

2.4.2 Role of profit-oriented organisations

According to Article R512-29 of the Code of Environment (Code de l'Environnement), the owner of specific installations and facilities must develop an *internal operation plan* (Plan d'Opération Interne – POI). It defines the rules, intervention methods and necessary resources that an owner must implement to protect personnel, population and the environment.²³⁷ The POI is established by the owner under his responsibility. Its purpose is to organize the response in case of a disaster and, in particular, it has to detail the implementation of resources and equipment. The plan describes the emergency measures incumbent upon the owner under the control of the police force authority (the prefect or the mayor), in particular as regards public alert, the services, the dealers and concerned municipalities. In case of an event, the owner

²³⁶ Currently, 17 associations have received a civil security agreement, 13 of them having an agreement at national level, i.e. to take part in operations on the entire national territory (1 March 2013).

²³⁷ Especially SEVESO facilities.

activates the plan and leads the rescue actors. He/she is authorized to stop vehicular and pedestrian traffic near the facility, and to carry out the first evacuations.

The realization of POI exercises must be effective, in order to check reliability and to fill potential gaps.

In case of a major crisis, the council of ministers may decide to use the national security service (*Service de sécurité nationale*).²³⁸ This procedure is intended to provide continuity of operations, ensuring that the state, territorial authorities, enterprises and facilities continue to perform activities that contribute to national security. When the government decides to deploy the national security service, some personnel are legally forced to remain in service or to take up their posts. They cannot use their right to withdrawal.

Especially in the IIe-de-France region, public-private partnerships are devekioed in the field of crisis management (interview, 15 February 2013). The expertise of private professional actors and their ability to provide specific capacities are recognized (i.e breakdown lorries, refrigerated lorries). Professionals are deemed as more efficient than associations of voluntary workers. The problem lies with the payment of such provision of services (which entity has to pay?).

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

This section overviews the results of inquiries pertaining to five disasters, the consequences of which challenged public authorities and gave incentives to improve surveillance, alert, prevention and response systems: the AZF accident (2001), the 2003 heat wave, the Xynthia storm (2010) and floods in the Var region (2010 and 2011).

The AZF accident, 2001

Following the accident at the AZF chemical plant on 21 September 2001, the public prosecutor launched a judicial investigation for *"involuntary homicides and injuries"*. An internal investigation was also launched (V. de S., 2012).

Additionally, taking into account the traumatic impact and the risks involved, a Parliamentary commission of inquiry "on safety in industrial infrastructures and research centres and the protection of people and environment in case of a major industrial accident" was established on 24 October 2001 (Commission d'enquête sur la sûreté des installations industrielles 2002). It produced a report with 90 proposals for improving industrial safety. This report concluded that better risk studies should be developed, industrial

²³⁸ Articles L2151-1 to L2151-5 of defence Code.

processes should be redefined and feedbacks improved. Strengthening the state's means of control was also identified as necessary. It also focused on human factors, underlining that employees and their representatives should not be kept out of crisis management. Promoting transparency and improving preparation and crisis management were other key points that were stressed.

Regarding crisis management, if the organization and the efficiency of the first-responders were praised, the report specifically pointed out the problems of communication resulting from the damages sustained by the infrastructures. These affected public means of communication, which could have had serious consequences by contributing to panic; however civil security actors remained able to communicate and to have contact with Paris through a secured network. There was nevertheless a lack of interoperability.

This led to the adoption of Law n°2003-699 of 30 July 2003 on prevention of technological and natural risks and reparation of damages. A programme (ANTARES) aiming at developing interoperability of communication means was also launched.

The 2003 heat wave

In 2003, Western Europe was struck by the most severe heat wave since 1950, characterized by an exceptional duration. Nearly 15,000 deaths linked to the heat wave were recorded between the 1st and the 20th of August. This was 75 percent higher than the average mortality rate observed in previous years. A Parliamentary mission of information and then a Parliamentary commission of inquiry were established afterwards to try and assess causes and vulnerabilities which led to such consequences (Commission d'enquête sur les conséquences sanitaires et sociales de la canicule, 2004).

The commission concluded that there had been a deficiency in terms of political management of the crisis, incriminating the predominance of the epidemiological approach within administrations and political authorities. It denounced the conception of the health protection and of public health itself. The document pinpoints a collective responsibility. Awareness of the magnitude of the phenomenon and thus the crisis response were delayed. The commission's report highlighted weaknesses in terms of public health surveillance and alert, communication and coordination between administrations and offices, as well as structural weaknesses of the public health and medico-social system. Dysfunctions within the Ministry of Health were revealed, as well as an excessive compartmentalisation between the public health and social sectors.

The General Directorate for Health consequently adopted a National Heat Wave Plan including measures such as requirements in terms of air-conditioning equipment for hospitals and retirement homes, development of emergency plans for retirement homes, or compilation of recommendations related to the prevention and treatment of heat-related diseases. It relies on five axes: individual identification of persons at risks, protective measures of people at risk in hospitals and nursing and retirement homes, solidarity toward them, alerts based on biometeorological indicators, and information and communication

for the public, professionals and health care (Direction de l'information légale et administrative 2013). In this framework, the National Institute for Public Health Surveillance (InVS) set up in July 2004 a syndromic surveillance system, coupled with an alert system²³⁹. The objective is to give the public authorities a three-day warning, the department prefect declaring an awareness and action level according to alert criteria. Measures such as the broadcasting of preventive messages by the media, visits to vulnerable and isolated people or an increase the offer of care are implemented during alert periods (Fouillet et al 2008).

Xynthia storm (2010)

The Xynthia storm struck the French Atlantic littoral on the night between the 27th and 28th of February 2010. After the event, the French government requested financial assistance from the European Commission. France received 40.6 M€ from the European Union Solidarity Fund and the European Regional Development Fund.

A 2010 report from a joint Parliamentary information mission insists on the collective responsibility, concluding that the French flood preparedness was not adequate and the culture of risk was lacking (Mission commune d'information sur les conséquences de la tempête Xynthia 2010). Despite a noteworthy mobilisation of rescue resources, it underlines a number of weaknesses in terms of forecasting and alert, prevention and protection: lack of assessment of the consequences on the ground, alert messages not explicit enough, lack of communal safeguard plans (PCS), lack of flood prevention plans, urbanization in flood risk areas, and problems regarding the maintenance and governance of flood barriers.

On the 17th of July 2011, taking into account the consequences of Xynthia, the minister for the environment and sustainable development launched the Rapid Submersion Plan (PSR). It aims 1) to control urbanisation; 2) to improve surveillance, forecasting, vigilance, and alert systems; 3) to improve the reliability of construction works and systems dedicated to protection; and 4) to strengthen the culture of risks.

Floods in the Var (2010 and 2011)

On the 15th and 16th of June 2010, floods in the Var resulted from paroxysmal rains which are common to the Mediterranean. They are not exceptional but this phenomenon stood out in terms of intensity. Experts from the General Inspection of Administration and the General Council for Environment and Sustainable Development published in 2010 their report about lessons learned (Pauc et al, 2010). 2,450 people were rescued (1,100 land rescue operations and 1,350 air rescue operations), including 300 who would otherwise have been faced with certain death.

Many victims were caught by sudden rising water levels while they were commuting. Several were apparently at home trying to protect their vehicle. The report notes that the Var prefecture had

²³⁹ It relies on several sources, collecting data from emergency departments, SOS Médecins (private emergency general practitioners service), and city registry offices (about mortality).

undertaken efforts in terms of crisis preparation following the Xynthia storm. It states, however, that there was a discrepancy between the effectiveness of the transmission of alert notifications to mayors and the perception of alert. The impossibility to rely on landline and mobile phone networks as well as the flooding of key operational structures affected the rescue organisation, but implementation of national and zonal means was not delayed thanks to the reactivity of the commanding authority. In this context, contacts through the ANTARES (communication system dedicated to public services involved in civil security) and ACROPOL (police) networks functioned properly and thus were a key element.

Communal safeguard plans (PCS) were used during the rescue operations, but the experts recommend some improvements in order to better take into account floods as these plans tend to focus on forest fires. Considering risk information, it appears that mayors often displayed a lack of knowledge regarding flood-risk areas. The experts also looked into the role of urbanization and raised issues such as non-conforming or illicit constructions. Besides, the report recommends to develop the culture of risk and to improve water governance, highlighting weaknesses in terms of knowledge and organisation of the drainage basin struck by the crisis.

The Var region suffered from floods also in 2011. In 2012, an information report assessing both events was published on behalf of the joint information mission about floods in the Var and in south-eastern France (Mission commune d'information sur les inondations qui se sont produites dans le Var, 2012). Among its findings, as the previous report, it highlights a lack of risk awareness as well as urbanization and governance issues. It concludes that the logic of protection should be integrated in a broader logic of regional planning and development.

Both above-mentioned 2010 events (Xynthia, Var) led to challenge public action regarding prevention and crisis management. In 2012, the Court of Auditors published a thematic report about lessons learned after these floods (Cour des Comptes, 2012). The report concludes that alert and rescue systems were not efficient enough and that the prevention – including risk information and the control of urbanization in atrisk areas – was deficient. It also denounces inconsistencies in the policy ruling the repurchase of at-risk properties, problems regarding the maintenance and governance of flood barriers, as well as a lack of river management. At last, it stresses the necessity to develop a national strategy to address flood risks.

3.1.2 Limits to national capacities

France has several times requested external assistance, including through the EU Civil Protection Mechanism, due to the scale of crises and when national capacities were insufficient. Such a call for assistance occurred in the context of floods and forest fires, as there was especially a requirement respectively for high-capacity pumps and aerial means.

A state of emergency has been declared on one occasion over the last two decades, on 8th November 2005, in the context of a series of riots in French suburbs. It applied to 25 departments or parts of them,

including the whole Île-de-France. Prorogation was then authorized by law. In December, 74 professors and lecturers of law submitted a request for suspension to the Council of State. The council then ruled that maintaining the state of emergency was not "an obvious illegality". It was ended in early January.

3.2 Efficiency

Parliamentary reports and opinions provide insights and analyses about civil security budgets and investments. Reports from the Court of Auditors also analyse the budgetary execution by missions and programmes (Ministère de l'Economie et des finances 2013).

In France, civil security policy is defined at national level, but it is mainly financed and managed by structures depending on territorial authorities. In 2011, the state's expenditures for civil security were close to one billion euro, while territorial authorities spent around 4.7 billion euro.

Missions concurring to civil security involve numerous actors and authorities. This situation explains that an extensive analysis of budgetary evolutions is difficult. The so-called "civil security" mission only represents one part of the state action, as some funds come from the "territorial authorities" programme, also under the responsibility of the Ministry of Interior, as well as from funds from eight other programmes divided between four missions, "Ecology, sustainable development and planning", "health", "agriculture, fishing, food, forest and rural affairs", and "State global and territorial administration". Besides, budgets for the fire brigades (except for Paris and Marseille) come from territorial authorities (Commission des Finances, 2012).

A document (Mission ministérielle Projet annuel de performance 2012) detailing all the means related to this "civil security" mission and allocated to a specific public policy, is annexed to the project for the Law on Finances, as stipulated by the 2001 organic law relating to laws on finances. It includes objectives and indicators of performance for each of the two identified programmes n°161 and 128 (See Tables 2 and 3). The 2011 Financial law allocated for this mission: 459.76 million euros in authorization of commitment and 434.86 million euros on credits.

PROGRAMME 161 – INTER	PROGRAMME 161 – INTERVENTION OF OPERATIONAL SERVICES		
Objective 1	Ensure efficiency of national aerial means for the fight against forest fires by bringing costs under control		
Indicator 1.1	Ratio between maintenance spending on a non-package basis and the total amount of for the maintenance market		
Objective 2	Obtain the highest level of potential of activities and of commitment for the civil security military units		
Indicator 2.1	Level of operational activities for the civil security military units		
Indicator 2.2	Level of operational of operational commitment the civil security military units		
Objective 3	Ensure efficiency of operations of assistance by helicopters, in difficult		

Table 3: Performance objectives and indicators regarding the intervention of operational services (Programme n°161)

	environments	
Indicator 3.1	Average duration for the programmed visit for helicopters (600h or 24 months)	
	Ratio between the number of medicalized missions and the total amount of	
Indicator 3.2	assistance missions	
Objective 4	Reduce stocks of explosive and chemical munitions	
Indicator 4.1	Level of evolution of collected stocks of old munitions (explosive ordnance disposal)	
Objective 5	Adapt cartography of centres according to the operational capacity of the	
	explosive disposal unit to address the terrorist threat	
Indicator 5.1	Interventions on suspect devices outside the timeframe	
Objective 6	Obtain the highest operational capacity for national means	
Indicator 6.1	Operational capacity for national means	
Indicator 6.2	Level of for renewal of the national reserve corps	

Source: http://www.performance-publique.budget.gouv.fr/ressources-documentaires.html

Regarding Programme n°161, a framework for the conduct of performance was set up in 2012, with three action levers. The development of synergies between national means is the first line of action. Then, the adaptation of the repartition of national means on the national territory will better take into account current requirements in terms of location of resources, in a rationalized approach of the budgetary framework. At last, the development of partnerships aims at increasing interrelations between national security actors by promoting sharing and provisions of service, for example for the maintenance of helicopters or for the provision of health care during helicopter interventions thanks to conventions with medical emergency units and fire brigades.

Table 4: Performance objectives and indicators regarding the coordination of assistance means (Programme n°128)

PROGRAMME 128 – C	PROGRAMME 128 – COORDINATION OF ASSISTANCE MEANS		
Objective 1	Optimize the coordination of the implementation of operations for bringing forest fires under control		
Indicator 1.1 Indicator 1.2	Index of mobilization of estimated and curative reinforcement columns during the season fires" campaign Efficiency of the organization for forest protection during the "season fires" campaign		
Objective 2	Harmonize means the fire brigades		
Indicator 2.1	Proportion of ENSOSP activities dedicated to initial and in-service training		
Indicator 2.2	Adhesion level of fire brigades to the Acropôle - Antarès infrastructure		
ource: http://www.performance-publique.budget.gouv.fr/ressources-documentaires.html			

Regarding Programme n°128, among the important investments in terms of early warning and coordination of assistance figures the implementation by the French Alternative Energies and Atomic Energy (CEA) of the national alert centre for tsunamis, in the framework of an inter-ministerial convention (it became operational in 2012) and the new population alert and information system (SAIP). Besides, the number of decontamination units should be increased and the capacities of vehicles for identification and sampling of biological agents should be enhanced. The generalization of the deployment of the ANTARES

communication system is also an objective. The last report also underlines requirements in terms of renewal of national aerial means.

3.3 Legitimacy

3.3.1 Political support

Never has a minister been forced to resign or a government collapsed because of a major disaster, even if prevention and crisis management options have been questioned in many cases. Feedback, including from the 1999 storm of the century, the 2001 AZF explosion and the 2003 heat wave, led to the law on modernization of civil security in 2004. Focusing on the 2003 heat wave, firefighters were the first to denounce the lack of means and human resources. The government in place was attacked for its passivity. ²⁴⁰ The government was obviously not considered responsible for the heat wave; however public opinion expected the public authorities to be able to act efficiently in order to mitigate its consequences. In the aftermath, a specific plan for heat waves was adopted and has since been activated several times, greatly improving prevention and response. The French National Institute for Public Health Surveillance (InVS) also launched an early warning system with the Syndromic Surveillance Programme.

More recently, the consequences of the 2010 Xynthia storm, including an assessment of the organization of preparation and response, were analyzed in a Parliamentary report which proposed recommendations and among them stressed the importance of developing a culture of risk awareness. A proposal for a law on effective management of the risk of marine submersion taking into account the conclusions of this report was adopted at unanimity by the Senate in 2011 (but not by the National Assembly at this stage).

At last, even if this technological disaster did not affect the national territory, it is worth mentioning that the accident at Fukushima has re-generated an animated societal and political debate in France about the future of nuclear energy. The question of how to progressively abandon nuclear energy has been raised. However, 75 percent of the production of electricity depends on it, explaining the challenges this implies and the controversies. In this context, the UMP (Right) has confirmed its support for the nuclear option, with an increase of the part of sustainable energy for 2020. The PS (Left) proposes to reduce the part of nuclear energy in the production of electricity from 75 percent to 50 percent in 2025, to achieve the Evolutionary Power reactor in Flamanville and to close a nuclear plant deemed dangerous. And the Green Party wants to reduce the part of nuclear to 40 percent in 2020 with the objective of opting out of it in 2031.

²⁴⁰ The then-first secretary of the Socialist Party François Hollande stated that there had been a "failure of reaction from the government, no crisis cell, no strong decision and no minister" (Hollande 2003).

3.3.2 Legal support

In the last decade, a growing trend of "judiciarization" has been observed, whatever the nature of the crisis.

After AZF, the public prosecutor launched a judicial investigation for "*involuntary homicides and injuries*". This led to the condemnation in 2012 of the operator of the chemical plant, Total, as well as of its exdirector for "*homicides by imprudence or neglect*" (V. de S. 2012). A discharge in 2009 was explained by the benefit of the doubt, as the origins of the disaster were unknown. However, the Appeals Court judged the accident resulted from an "*accidental chemical reaction*". Total still contests this version and has taken its case to the Appeal Court. As a direct consequence from this penal sentencing, an administrative court of appeal recognized the responsibility of the state in this accident, stating that it was responsible for inspections of classified installations and thus should have detected or sanctioned "visible and persisting failures".

Following Xynthia, some victims or next of kin of deceased persons lodged a complaint for "*involuntary homicides, putting other's life at risk, lack of measures to fight disaster and illegal acquisition of interests*". The urbanization process and the implementation of alert procedures have been incriminated. Besides, the state launched an action in order to buy and destroy houses built in areas liable to flooding, establishing a cartography of dangerous areas. Some private owners, an association of victims and the General Council for Poitou-Charentes submitted a request to the administrative tribunal in order to obtain the withdrawal of the zoning or of the related prefectural order.

On another level, provisions about major health threats in the Public Health Code have raised some ethical concerns, leading the National Consultative Ethics Committee for Health and Life Sciences (CCNE) to underline the risk of extending restrictions on fundamental liberties "beyond what is strictly required to contain the influenza pandemic, either because of a maximalist (and therefore inappropriate) conception of the precautionary principle or as a demagogic concession".

3.3.3 Popular trust and support

At national level, the IRSN (*Institute for radioprotection and Nuclear Safety*) Barometer provides an interesting source of information about risks perception, all the more since it was launched in 1988 (Institut de radioprotection et de sûreté nucléaire 2012).²⁴¹

²⁴¹ Even if the Institute focuses on issues related to nuclear and radioactive substances, public risk perception is considered as an important component of crisis management and thus the questionnaire addresses a broader scope of risks and threats. It has been amended and completed to take into account new risks and threats. The Fukushima accident for example led to the introduction of new questions.

The 2012 Barometer first confirms that socio-economic topics are an increasing priority for French citizens. For the last decade, they have been the main concern, with the notable exception of 2001 and 2002 where insecurity and terrorism became the higher priority, in the aftermath of the attacks in the United States. In terms of ranking of concerns, unemployment is still at the top of the list (40 percent), but entries coming after them have been altered compared to previous years, with the consequences of the financial crisis at roughly the same level (30 percent) as misery and exclusion. Fears regarding nuclear accidents have reached a level they had never been had before (18 percent instead of 8 percent), becoming the fourth priority and translating the impact of Fukushima. At the same time, concerns about environmental risks have noticeably diminished (for example, from 7 to 20 percent between 2004 and 2007, and back to 9 percent in 2011).

According to these polls, when considering the role of scientific experts, a majority of French citizens (87.5 percent) think that giving a wide public access to understandable information on risks is important (the questions focused on installations but results are nonetheless revealing), while a little more than half feel that political decision-makers do not take enough take into account scientific experts. It is also interesting to underline that polls show that more than half of participants consider the following reasons as valuable arguments for potential non-disclosure of the results of a scientific inquiry: scientific uncertainty about results and waiting for decisions following the results of the inquiry (respectively 65.3 percent and 58.4 percent), but also the fight against terrorism and the classification as sensitive information for national security (64.7 percent and 54.5 percent). However, also interesting are the results regarding the truth of information given to citizens regarding a number of situations. A majority of poll participants totally or partially agree that they have confidence in what is said to them for forest fires (77.2 percent), heat waves (77.6 percent) and floods (70.6 percent), but also to a lesser extent terrorism (54.5 percent). However, a majority has no confidence when the following topics are involved: hazardous substance transport (60.7 percent), nuclear power plants (64 percent), chemical plants 66.6 percent), and Chernobyl radioactive fallout in France (77.7 percent).

According to this barometer, a comparison of results across years highlights that public opinion markedly reacts to disasters when media coverage is high. However, this trend usually does not last. These crises, including heat waves and to a lesser extent floods or terrorism, can be associated to strong public policies for risk prevention. By comparison, enduring evolutions are usually linked to issues generating debates and controversies or characterized by destiny. Risks related to chemical installations are in-between, having diminished after an important increase the year following the AZF explosion but still remaining at a higher level than before this explosion.

A complementary source of information on the perception about public health risks is provided by the *"Observatoire des risques sanitaires"* (Observatoire des risques sanitaires 2010). In France, scandals

associated with public health (i.e. contaminated blood, growth factors, Chernobyl fallout in France, or dioxin) have undermined confidence in public authorities regarding the management of public health crises. More recently, a communication perceived as excessive during the avian flu episode, especially concerning vaccination, has also left its toll. Comparing to the 2007 survey (before that episode), the last survey, in 2010, mostly shows that political authorities are not considered as very reliable sources of information in case of a public health crisis²⁴². 45 percent expressed the opinion that they thought the government overreacted. Researchers and scientists are considered as the most reliable source of information (from 56 percent in 2007 to 66 percent), followed by associations (from 33 percent to 51 percent), thus translating to an increasing legitimacy of the civil society.

4. French Civil Security in the EU Context

French citizens tend to consider that the government should deal with economic and social issues, but that international issues and those having an impact on the choices of society for the future should be handled jointly with the EU institutions (Standard Eurobarometer 2010).

According to the Eurobarometer Special Report 383 (2012), 46 percent of French citizens are aware that the EU coordinates civil protection inside and outside its borders, which is above the European average level (38 percent), while 43 percent totally agree and 39 percent tend to agree that a coordinated EU action is more effective than an action led by an individual country. Overall, 49 percent totally agree and 43 percent tend to agree that the EU needs a civil protection policy as major disasters can have cross-border effects (Eurobarometer, 2012).

Regarding information issues, polls show that only 17 percent of French citizens feel well informed, while respectively 56 percent and 26 percent think they are not very well informed or not informed at all. TV, the Internet and the press would be the information sources of choice to obtain more information about EU civil security policy (65 percent, 58 percent and 41 percent) (Eurobarometer, 2012).

The DGSCGC from the Ministry of Interior is the EU point of contact for France. As mentioned in the 2012 circular relating to the governmental organization for major crisis management, the external dimension of crisis management is taken into account in planning. This is accomplished through the Inter-ministerial Committee, with a key role for the COGIC in the Ministry of Interior for civil security matters, as well as through the crisis centre of the Ministry of Foreign and European Affairs which ensures coordination between other states and multilateral institutions such as the European Union, NATO and the United

²⁴² Political authorities include the European Union, a reliable source of information for 12 percent of participants (marking a slight increase since 2007, as it was only 7 percent), the government for 6 percent (also 6 percent in 2007), local political authorities for 4 percent (3 percent in 2007) and parliamentarians for 2 percent (0 percent in 2007).

Nations. The crisis centre of the ministry of Health (CORRUSS) is the point of contact for the World Health Organization (WHO), but also for the European Early Warning and Response System.

The circular clarifies the CIC role regarding the European level, specifying it has to propose the activation of the Solidarity Clause if necessary, take part in the development of European common positions to address crises, provide European institutions with information which can have an incidence in deliberations, liaise with activated European mechanisms of crisis management, and gather elements of communication drafted at European level.

France activated the MIC several times in the last previous years, either for transmission of information or for requests of assistance:

- → On 4 February 2009, France informed other countries that the north of the country was struck by extreme winds and heavy rains;
- In July 2009, the country sent a request for assistance, and more precisely for forest fire modules, to fight against forest fires in Corsica, as all national aerial resources were mobilized in mainland and Corsica. The European Union Forest Fire Tactical Reserve was activated (EUFFTR);
- ⇒ In August 2010, due to numerous forest fires in the south of France, the MIC activated the EUFFTR following a request for assistance, as all national aerial means were already committed;
- ➡ On 13 January 2011, France sent an early warning message to alert about tropical storm VANIA breathing in the islands of New-Caledonia. This situation was monitored by MIC and forecast checked with the JRC.

France contributes actively in the EU Civil Protection Mechanism, offering and providing assistance on a regular basis. France has 170 experts who are trained for the European mechanism, not all of them within the DGSCGC. France can provide either team leaders or experts who will be part of teams.

Date of activation	Crisis type and country	Request for assistance / Action or Contribution
27.11.2008	Terrorism attack in India	CCA alert has been issued by FR Presidency. FR activated the Mechanism and requested Medevac for European citizens One French expert (with a Swedish expert) facilitated the mission coordination. France proposed to send an A310 plane, which was accepted.
16.01.2009	Floods in Fidji	France provided financial assistance (with other countries).
23.01.2009	Storm in France	Information message by France.
06.04.2009	Earthquake in l'Aquila, Italy	One French technical expert in the MIC team.
08.07.2009	Forest fires in France	Request for assistance (for aerial forest fire modules).
23.07.2009	Forest fires in France	Request for assistance

Table 5: Request and provision of assistance by France, 2007-2012

28.07.2009	Forest fires in Albania	(for aerial forest fire modules). France offered one forest fire expert.
03.08.2010	Forest fires In the Russian Federation	Provision of assistance by France (among other countries).
13.08.2009	Typhoon in Taiwan	One French expert in the MIC assessment and coordination team.
22.08.2009	Forest fires in Greece	France offered two canadairs which were accepted
30.08.2010	Forest fires in France	Request for assistance and for the activation of the EUFFTR.
22.08.2009	Floods in Burkina Faso	One French expert.
30.09.2009	Earthquake in Indonesia	One French expert in the MIC assessment and coordination team.
31.10.2009	Severe respiratory infection (H1N1) in Ukraine	One French expert in the MIC assessment and coordination team.
07.01.2010	Floods in Albania	France sent 11 water pumps.
13.01.2010	Earthquake in Haiti	Provision of assistance by France, including USAR teams, field hospitals, advanced medical posts,etc (among 25 European countries)
01.03.2010	Chile eartquake	France provided water purification, tents, seismologic equipments, medical equipments.
19.05.2010	Floods in Poland	France provided a four p. team.
27.05.2010	Gulf of Mexico oil spill, request by the United States	France provided a containment boom.
25.06.2010	Gulf of Mexico oil spill, request by Cuba	France nominated an expert.
06.08.2010	Floods in Pakistan	France provided assistance.
04.10.2010	Speleologic Relief	Request for assistance (additional specialists)
07.10.2010	Alkali sludge incident in Hungary	One French expert.
13.10.2010	Floods in Benin	One French expert.
21.10.2010	Haiti cholera outbreak / hurricane Tomas	France provided 208 rolls of tarpaulins (10tons) an 100 foldable beds (1.3 tons). France requested co- financing of 50% of the transport. France also provided three tones of medicines and medical equipments.
02.12.2010	Forest fires in Israel	France provided 2 Canadairs and 1 Dash 8, 2 Canadairs and 5 firefighting specialists.
08.12.2010	Floods in Montenegro	France provided 4 generators,12 motor pumps,16 tents of 27 m2, 50 tents of 16 m2, 520 kitchen kits
13.01.2011	Storm, Tropical cyclone Vania in New Caledonia	Early warning message.
23.02.2011	Civil unrest in Libya	France sent a team composed of civil protection ar MoFA experts at the border between Egypt and Libya.
01.03.2011	Rapatriation of Tunisian citizens, request by Tunisia (during Libyan unrest)	France provided means of transport
11.03.2011	Earthquake in Japan	France provided 150 tons of assistance (food, wate medicines, radiological devices), experts through th EUCPT.
20.06.2011	Puyehue Volcano in Argentina	One French expert about air quality.
25.08.2011	Forest fires in Greece	COM activated the PA project ACR5 managed by France, which deployed two planes at one point.
13.09.2011	Floods in Pakistan	France provided 410 tents, 115,200 aquatabs, 15 pumps, 48 plastic sheets, 1,080 blankets, 336 kitch sets, 20 water tanks, 1,800 jerricans, 1,2 tons of medicines.
14.10.2011	Floods in Southeast Asia	One French expert.
26.10.2011	Earthquake in Turkey	France provided tents, with a request for EU co- financing for transport.
30.10.2011	Fire on the Reunion Island	Request for assistance. France sent 170 firefighter and 2 Dash 8 on site to reinforce local response.
20.01.2012	Marine pollution after the Concordia ship	French expert in the EU observer team.

	Republic of Congo	in EUCPT and a structural engineer.
17.04.2012	Syrian refugees in Turkey	France provided 75 family tents, 600 blankets, and 216 kitchen sets.
27.04.2012	Flash floods in Comoros Island	One French expert.
03.09.2012	Forest fires in Portugal	MIC requested FR for the activation of ACR5 project France sent 2 planes.
12.09.2012	Syrian refugees	Financial assistance.
16.12.2012	Tropical cyclone Evan in New Caledonia	Request for assistance. France planned to send a first assessment team from the New Caledonia, and we a second team of 4 people from Paris to Noumea (New Caledonia) on 16.12. No specific follow-up for the EUCPM.

Source: European Community Civil Protection Mechanism: Activations overview 01.01.2007-31-12-2011, available at http://ec.europa.eu/echo/files/policies/disaster_response/EUCPM_activations_since_01012007.pdf

France also participates in exchanges of experts and research programmes in the field of civil security. It also organizes or takes part in large-scale European exercises²⁴³.

The European protection civil mechanism is perceived as functioning well, with a good reactivity, even if there are some questions about the capacities it can provide (e.g. Is there a listing of capacities at European level?) (Interview, 4 February 2013).

Regarding the issue of European coordination, from a French perspective, the aim is not to seek the harmonization of means and of the European response. The objectives are 1) to develop capacities to exchange data and information on what Member States plan to do and what they intend to communicate, 2) to exchange information and adopt joint elements for communication, and 3) to coordinate common strategies (Interview, 4 March 2013).

A European approach could provide an added value for specific issues. Thus, when considering what potential benefits the European Union could bring in the field of civil security and crisis management, the following points could be of interest:

- ⇒ The development of a strategic risk assessment at European level ;
- \Rightarrow The sharing of means and the possibility of group purchasing ;
- ⇒ The sharing of best practices and lessons learned.

The question of the visibility of the European Union when it is involved in crisis response is also considered of importance.

Considering the involvement of volunteers and NGOs, the potential impact of EU regulations dealing with the notion of work time for volunteers is a cause of concern, as they could contribute to affect and hinder the system in place (Interview, 4 February 2013).

²⁴³ The DGSCGC will for example be in charge of heading the next 2013 exercise URBAN CREATS about terrorismrelated incidents.

5. Conclusion

Although France is now a decentralized country, the state remains the main actor of the civil security system. In case of large scale events, the prefect heads the different actors involved in crisis management. He/she has both a political and an operational role, acting as representative of the government. Being a civil servant, he/she is not elected by the population: his/her legitimacy principally comes from the delegation of the executive power. Territorial authorities, especially regions and *départements*, provide means and allocate financial resources to fire brigades and associations involved in the civil security system. However they have no effective role within this system. This situation – a heritage of a long political and administrative tradition of centralization – is about to change. Since the publication of the 2008 French White Paper on Defence and National Security, a better integration of these authorities is under study²⁴⁴.

The multilayered architecture is another main feature of the French organization. Four territorial, political and administrative levels play a role during a large scale crisis. This system – which requires an efficient exchange of information between levels for proper functioning – is also a heritage of the past. Several modifications were adopted during the last decades to take into account the lessons learned and to increase the efficiency. The strengthening of defence and security illustrates the capacity for structural change.

The French civil security system is also characterized by the multiplicity of actors involved, actors displaying different status and cultures. To deal with this diversity, an efficient coordination is not only a political leitmotiv but also a permanent requirement. In the aftermath of the major events that have occurred since 1999, reports recurrently highlighted the failures and risks relating to this issue, especially those linked to a lack of communication and coordination between the different administrations.

At last, the French civil security system puts the emphasis on the planning work. Each level draws up numerous plans (safeguard plans, emergency plans, contingency plans, etc.). Planning thus constitutes the cornerstone of the French crisis management organization. The process of plan production is largely based on a top-down approach. This production – some authors describe an "obsession" – is probably linked to a weak acceptance of the risk and uncertainty, as well as to the fragmentation of the system.

During the last period, efforts were made to improve both the flexibility of the system and, above all, the involvement of the citizens. The objective is now to reinforce the capacity of individuals and communities to cope with the consequences of major events. Post-crisis scientific works, political reports and administrative reports underlined the weakness of the French culture of risk. Initiatives dedicated to the

²⁴⁴ Including through the training of territorial public servants to crisis management, a representation more systematic of territorial authorities within the zonal and departmental operations centres, a higher involvement of territorial authorities during the planning process, etc.

promotion of this kind of culture have been launched (such as the training of teachers, the development of educational tools, a more systematic information stream to the public – especially students – about risks and behaviours during a crisis, etc.). But the state does not really provide for this effort: territorial authorities and the civil society (i.e. associations and non-profit organizations) take on a large part of these initiatives. Recent evolutions of the French civil security system are thus characterized by a contradiction: the state gives broad orientations and sometimes imposes new obligations, but does not assume the organisational and financial burden of these choices.

The evolution of the state-associations' relationship is one example of this paradox. France has an important non-profit sector involved in civil security. Voluntary workers provide in the field complementary means for public rescue services. They have a major role during the restoration phase. Outside the crisis period, they also provide education and training to the population. But the process for obtaining an official agreement has become more selective since 2004, with conditions becoming more and more constraining. And the financial support granted by the state has decreased in the last years.

The state of French public finances probably explains this paradox. Political authorities want to improve the civil security system, but must deal with the objective of public expenditure reduction. In this context, public-private partnerships could be a promising solution²⁴⁵. Another solution could be the reinforcement of pooling and sharing, especially between civil services and military forces.

The external dimension of crisis management is taken into account in planning. France activated international and European cooperation structures several times in the last years, either for transmission of information and for requests of assistance. It contributes actively in the EU civil protection mechanism, offering and providing assistance on a regular basis. The review of this mechanism is one of the 2013 White Paper propositions. More globally, France advocates for greater coherence between the different EU sectoral policies in the field of security (including the crisis management, the fight against terrorism, the continuity of activity, etc.), but considers this objective could be achieved without modifying the EU legal framework. In addition to the European framework, it also still relies on bilateral, trilateral or multilateral cooperation and mutual assistance agreements in the field of security.

²⁴⁵ Reflections have recently been initiated on public-private partnership contract methods.

Annex I: Coded Data



1	Introduction	Scoring instruction	Score	Source	Commen ts (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	0		
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	Circulaire n°5567 du 2 janvier 2012 relative à l'organisation gouvernementale pour la gestion des crises majeures	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1	Circulaire n°5567 du 2 janvier 2012 relative à l'organisation gouvernementale pour la gestion des crises majeures	On special requirem ent of the civil authority
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functio nal threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	http://www.risques.gouv.fr/risques- majeurs/comprendre-laction-de-letat-et-de-ses- partenaires-1/comment-se-prepare-letat-face	
2	Analytical dimensions	Scoring instruction	Score	Source	Commen ts (in case of specific problems with data)
2.1	Cultural and historical aspects				

2.1. 1	Administrative tradition				
2.1. 1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1		
2.1. 1.b	Is the political system parliamentary or presidential?	Parliamentar y system = 1 Presidential system = 2	1		
2.1. 1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	1		
2.1. 1.d	Is the political system a consociational or a majoritarian democracy?	Consociation al democracy = 1 Majoritarian democracy = 2	2		
2.1. 1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	1		
2.1. 2	Culture				
2.1. 2.a.i	Geert Hofstede country national cultural score - DPI		68	http://geert-hofstede.com/countries.html	
2.1. 2.a.i i	Geert Hofstede country national cultural score - IDV		71	http://geert-hofstede.com/countries.html	
2.1. 2.a.i ii	Geert Hofstede country national cultural score - MAS		43	http://geert-hofstede.com/countries.html	
2.1. 2.a.i v	Geert Hofstede country national cultural score - UAI		86	http://geert-hofstede.com/countries.html	
2.1. 2.a. v	Geert Hofstede country national cultural score - LTO		39	http://geert-hofstede.com/countries.html	
2.1. 2.b	World Value Survey's national score on dimension 1 - traditional vs.		0.63	http://www.worldvaluessurvey.org/	Year 2006

	secular				
2.1. 2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		1.13	http://www.worldvaluessurvey.org/	Year 2006
2.2	Legal & constitutional aspects				
2.2. 1	Statutory basis				
2.2. 1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	1	Law n°2004-811 on modernization of civil security	
2.2. 1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2004	Law n°2004-811 on modernization of civil security	
2.2. 1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	Law n°2004-811 on modernization of civil security	
2.2. 1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1	1	Law n°55-385 of 3 April 1955	

place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?				event of a major health threat requiring emergen cy action, the Ministrer for Health may by order with justificati ons and in the interest of public health, prescribe measures proportio nate to the risk incurred and appropria te to circumsta nces of time and venue, in order to prevent and limit the conseque nces of the possible
Political				
	A++h			
On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3		http://www.senat.fr/rap/a12-154-20/a12-154- 201.pdf	
	the state to call for a state of disaster (facilitated operational coordination mechanism)? Political dimension On what level of government does executive responsibility for civil security FIRST AND	the state to call for a state of disaster (facilitated operational coordination mechanism)? Political dimension On what level of government does executive responsibility for civil security FIRST AND = 2	Political Image: state of disaster (facilitated operational coordination mechanism)? Image: state of disaster (facilitated operational coordination mechanism)? Political Image: state of disaster (facilitated operational coordination mechanism)? Image: state of disaster (facilitated operational coordination mechanism)? Political Image: state of disaster (facilitated operational coordination mechanism)? Image: state of disaster (facilitated operational coordination mechanism)? Political Image: state of disaster (facilitated operational coordination mechanism)? Image: state of disaster (facilitated operational coordination for disaster (facilitated operational coordination mechanism)? Political Image: state of disaster (facilitated operational coordination for disaster (facilitated operational coordinational coordination for disaster (facilitated operational coordination for disaster (facilitated operatic) for disaster (facilitated operation for disaster (facilitated	the state to call for a state of disaster (facilitated operational coordination mechanism)? Image: State st

2.2. 2.b	On what level of government	At the national level	1	http://www.senat.fr/rap/a12-154-20/a12-154- 201.pdf	
	does policy	= 1			
	formulation for	At the			
	civil security	regional level			
	FIRST AND	= 2			
	FOREMOST	At the local			
	rest?	level = 3			
2.2.	Operational				
3	dimension				
2.2.	Is there a	No = 0	1		General
3.a	specialised	Yes = 1			Directora
	agency for crisis				te for
	response at the				Civil
	national level?				Protectio
					n and
					Crisis
					Manage
					ment
					(DGSCGC
2.2.	Are there	No = 0	0		1
3.b	specialised	Yes = 1			
	agencies for				
	crisis response				
	at the regional				
	level?				
2.2.	Is the exercise	No = 0	1		
3.c	system	By law = 1		security, Exercices de sécurité civile (2008)	
	formalised by	By executive		www.interieur.gouv.fr/content/download//m	
	law or executive	mandate = 2		emento%20exo%20SC.pdf	
	mandate?				
2.2.	How many	Register the	16	http://www.sgdsn.gouv.fr/site_rubrique107.ht	4 so-
2.2. 3.d	major exercises	number	10	ml	called
5.u	with a national	number			"major
	dimension have				exercises
	been organised				"
	in the period				organise
	2008-2012?				d by the
					General
					Secretari
					at for
					Defence
					and
					National
					Security
					(SGDSN)
					per year.
					Besides,
					there is a
					series of
					national
			-		exercises.
2.2.	How many	Register the	?		No data.
3.e	major exercises with an	number			
	international				
	memational				

	dimension have been organised				
	in the period 2008-2012				
2.2. 4	External dimension				
4 2.2. 4.a	Aimension Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	0	www.legifrance.fr/	(Metropo litan France). An agreeme nt between France and Andorra on technical cooperati on and mutual assistanc e in the field of civil security is currently being negotiate d. Agreeme nts with all other neighbou ring countries
2.2. 4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	More than 30	http://basedoc.diplomatie.gouv.fr/	
2.2. 4.c	How many regional/multila teral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is	Register the number.	4	http://basedoc.diplomatie.gouv.fr/	Research criteria (in French): "catastro phe", "assistan ce", "urgence ", "assistan ce",

2.2. 4.d	the country part of? Has the country received assistance from partner/neighb ouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000- 2012?"	No = 0 One or two times = 1 More than two times = 3	3		"sécurité civile", "protecti on civile"
2.3	State-citizens relations				
2.3.	Expectations				
1 2.3.	Do citizone have	Not formally	1	Law n°2004-811 on modernization of civil	
1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibiliti es for disaster management (e.g. mandatory civil service and/or insurance) = 2	Ţ	Law n°2004-811 on modernization of civil security	
2.3. 2	Information				
2.3. 2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	Ministerial order of 23 March 2007 relating to technical characteristics of national warning signal	
2.3. 2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national	3	Decree n°2005-1269 of 12 October 2005 relating to the national alert code and the obligations of the radio and television services and of holders of other means of communication to the public	

		levels = 3			
2.3. 2.c	Does the government have a central website with updated information on crisis events?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3	www.risques.gouv.fr Websites from prefectures and town councils	
2.3. 2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	0	http://www.irma- grenoble.com/05documentation/04dossiers_art icles.php?id_DTart=121&id_DT=13&PHPSESSID= 35a0f6d6518af5b6545ad4f81d055bf0	Informati on through websites. Social networks are not yet fully considere d as means of informati on and alert, even if some local authoriti es have started using them.
2.3. 2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	2	www.risques.gouv.fr	Mobile applicatio n available for www.risq ues.gouv. fr. Besides, the new alert system (SAIP) will also allow authoriti es at all levels to send messages

2.3.	Education				through cell- broadcas ting (among other means of informati on and alert).
3	Education				
2.3. 3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1	1	Law n°2004-811 on modernization of civil security	Includes raising awarenes s in the field of risk preventio n, informati on about the missions of emergen cy services, basic first aid training and general safety rules)
2.3. 3.b.	Do societal/volunta ry actors offer civil emergency training?	No = 0 To members/pro fessional = 1 To members and limited public outreach = 2 To member ands wide- spread training programmes for general population = 3	2	http://eduscol.education.fr/cid47502/loi-n- 2004-811-du-13-aout-2004-de-modernisation- de-la-securite-civile-extraits.html	
2.3. 3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0	1		Preventio n messages . e.g. in case of heatwave s and against

		once per year) = 2			viral winter diseases.
2.3. 3.d	Does the government provide for a budget for sponsoring research/techn ological developments on civil security/crisis management?	No = 0 Yes = 1	1	http://www.agence-nationale- recherche.fr/programmes-de-recherche/appel- detail/concepts-systemes-et-outils-pour-la- securite-globale-csosg-2013/	Concepts , Systems and Tools for Global Security (CSOSG) from the National Research Agency (ANR). Not exhaustiv e, as other program mes may offer funding for projects which may have a civil security dimensio n.
2.3. 3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	9 M€	For CSOSG 2012 (ANR)	See remark above.
2.4	Role of private sector				
2.4. 1	Role of societal/ non- profit organisations				
2.4. 1.a	Do societal/non- profit actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	Inspection Générale de l'Administration (2012). Le bénévolat de sécurité civile.	
2.4. 1.b	Do societal/non- profit actors play an official/legally	No = 0, In parts of civil security (e.g. emergency medicine) =1	1	Inspection Générale de l'Administration (2012). Le bénévolat de sécurité civile.	

2.4. 2 2.4. 2.a	mandated role in the REGULAR provision of civil security? Role of profit- oriented organisations Do for- profit/private actors play an official/legally	In (almost) all aspects of civil security = 2 No = 0 Yes = 1	1	Law n°2004-811 on modernization of civil security	
	mandated role in EXCEPTIONAL crises?				
2.4. 2.b	Do for- profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	1	Interview n°2.	
3	Quality measures	Scoring instruction	Score	Source	Commen ts (in case of specific problems with data)
3.1	Effectiveness				uutuj
3.1. 2	Limits to national capacities				
3.1. 2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	?		No consolida ted data.
	How many	Register the	0		

	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/di saster or data is not accessible at this level, note NA	1	Decree n°2005-1386 of 8 November 2005 implementing Law n°55-385 of 3 April 1955, Decree n°2005-1387 of 8 November 2005 relating to the implementation of Law n°55-385 of 3 April 1955	
3.3	Legitimacy				
3.3.	Political				
1 3.3.	support How many	Register the	1	Law n°2004-811 on modernization of civil	
1.a	major reforms have been undertaken?	number for 2000-2012.		security	
3.3. 1.b	How many major national political debates on crisis management structures or performance have taken place (2000- 12)?	Register the number for 2000-2012.	At least 7		
3.3. 1.c	How many formal and politically instituted inquiries/comm ittees on civil security have been undertaken at the national level?	Register the number for 2000-2012.	At least 13	www.assemblee-parlementaire.fr	Based on informati on reports from the Senate and the National Assembly (from permane nt committe es, commissi ons of inquiry and joint missions of informati on) on civil security or following a specific

				crisis (annual reports on civil security for the project of financial law - produced by the Law commissi on and the Finance commissi on - are not included)
3.3. 1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0	
3.3.	Legal support			
2 3.3. 2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	?	No data.
3.3. 2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0	

3.3. 2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None = 0 Partial (legally defined leeway for operational crisis management) = 1 Extensive (e.g. no civilian jurisdiction over military actors in crisis management) = 2	0		Remark: legal liability protectio ns for public health professio nals in case of major emergen Cy threats (Public Health Code).
3.3.	Popular trust				
3 3.3.	and support	Record the	24	Constal Europerenter 274 (2014)	
3.3. 3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	sum percentage for "Agree" and "Tend to agree"	34	Special Eurobarometer 371 (2011)	
3.3. 3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	56	Special Eurobarometer 371 (2011)	
3.3. 3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	1		
3.3. 3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	?		No data available.
3.3. 3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector?	Register the number per 1000 capita for 2011.	3.8	Ministry of Interior http://www.interieur.gouv.fr/Le-ministere/La- Securite-civile	

4	Civil security in the EU context	Scoring instruction	Score	Source	Commen ts (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be complet ed by UI/IFHS	http://ec.europa.eu/echo/files/policies/disaster _response/EUCPM_activations_since_01012007 .pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be complet ed by UI/IFHS	http://ec.europa.eu/echo/files/policies/disaster response/EUCPM activations since 01012007 .pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009- 2010 training cycle	65	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU- led civil protection simulation exercises did your country participate in between 2002- 12?	Register the number for 2002-2012	15	http://ec.europa.eu/echo/policies/prevention_ preparedness/preparedness_en.htm	
4.f	How many times has the country received financial support	Register the number for 2002-Sept 2012	6	http://ec.europa.eu/regional_policy/thefunds/d oc/interventions_since_2002.doc	

4.g	through the EU's Solidarity Fund (SF) due to natural disasters (2002- Sept. 2012)? How much aid has the country been granted through the SF due to natural disasters (2002- 2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	203.7	http://ec.europa.eu/regional_policy/thefunds/d oc/interventions_since_2002.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	46	Special Eurobarometer 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	82	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in France

Elements about the French framework relevant in the context of a pandemic threat

In the context of the global SARS outbreak and influenza pandemic threats, as well as of bioterrorism fears in the wake of the 2001 anthrax letters and following hoaxes, preparing the public health system for major health threats rose as a key challenge. Law n°2004-806 of 9 August 2004 on public health policy (Loi n°2004-806 du 9 août 2004 relative à la politique de santé publique), afterwards amended and completed by Law n°2007-294 of 5 March 2007 on the preparation of the health system to deal with large-scale health threats (Loi n° 2007-294 du 5 mars 2007 relative à la préparation du système de santé à des menaces sanitaires de grande ampleur), created a new chapter focusing on serious public health threats in the Public Health Code. According to Article L.3131-1 of the Public Health Code, "in the event of a major health hazard requiring emergency action, in particular a possible epidemic, the Ministry of Health may, by order with justification and in the interest of public health, prescribe measures proportionate to the risk incurred and appropriate to circumstances of time and venue, in order to prevent and limit the consequences of possible threats on the health of population". The minister has the authority to empower the territorially competent state representative to take all measures required for the implementation of the above-mentioned provisions.

Information and communication are key components of all crisis plans and all crisis centres include a communication team. The H5N1 crisis marked a turning point, as the importance of involving media in the crisis management process was recognized. This approach was new in France, contrary to what was already implemented in the United States. A working group about "Media and avian pandemic" was convened in October 2006 by the Ministry of Health. Some exercises now involve a simulated media pressure: during the game, communication experts assume the role of journalists, trying to put crisis managers under pressure.

Assessment about the H1N1 pandemic flu in France

The first cases were detected on 1 May 2009 and the flu started to spread during the summer months. The pandemic wave occurred at the end of October and lasted ten weeks. In mainland France, the proportion of infected people was estimated to have been between 13 and 24 percent. Mortality apparently remained limited. However, the profile of severe cases and of deaths was modified, as victims were mainly under 65 years of age (Vaux et *al*, 2010). In April 2010, 312 deaths and 1334 severe cases had been registered, mostly young adults.

The H1N1 crisis represented a test for the new joint crisis management organization driven by the Ministry of interior. The new architecture was adopted following the 2008 French White Paper on defence and national security (Commission du Livre blanc 2008).

Several official reports offer insights and analyses about the management of pandemic flu at the French level. They notably include a study from the Court of Auditors on the use of funds mobilized for the fight against the H1N1 pandemic flu, followed by an information report by the Senate Social Affairs Committee (Commission des Affaires socials, 2011), as well as a report from the inquiry commission about the way the mass vaccination was planned, explained and managed (Commission d'enquête sur la manière dont a été programmée, expliquée et gérée la campagne de vaccination contre la grippe A(H1N1), 2010). Observations are globally converging. The reports highlight a number of issues and deficiencies, and offer some recommendations to improve the prevention and response system. In this respect, the inquiry commission proposes for example to promote a better coordination among European Union Member States in the field of health crisis management, including through the adoption of a joint strategy for the purchase of vaccines. This coordination was indeed considered as too limited.

To calibrate the preparation and response measures, the government funded its decision on the precautionary principle, as there were few certitudes and taking for granted that the population wanted to have the best protection available. However, this policy generated a public debate and criticisms. The national pandemic plan was designed as a "toolbox". The implementation of measures was afterwards deemed as too constraining, lacking flexibility and adaptability. In this context, the Court of Auditors suggests in its report to stop linking the implementation of measures and WHO pandemic alert levels. Among other remarks that were also underlined figure the financial issues, that were not sufficiently taken into account in the plan, and the necessity to strengthen the vaccination part.

Following the national reviews led by parliamentary institutions, it proved necessary to update the national pandemic plan in order to improve the national preparedness and response strategy. The reviewing process started in November 2010, under the direction of the SGDSN working closely with the Ministry of Health and other governmental departments. A post-pandemic plan was published.

According to a survey about determinants of acceptance among French adults, the level of education and recommendations from health professionals were essential for individual acceptance (Schwarzinger, 2010). However, as in many other countries, only a limited part of the population, i.e. about 5.36 million people (less than 8.5 percent of the total population), was vaccinated at the end of the vaccination campaign. More than 3.5 million doses of vaccine were discarded. According to estimates, the global cost of the vaccination exceeded 600 million euro (including compensation for health professionals in the vaccination centres), which was less than what was previously expected even if it remains substantial. The purchase negotiations with pharmaceutical industries proved difficult, as there were few margins. After the crisis, as many vaccines had not been employed, cancellations of contracts (50 million of vaccine doses) were expensive (Commission des Affaires socials, 2011).

Heath professionals, especially independent medical doctors and nurses, were dissatisfied with the management of the crisis, considering that they were not enough involved by public authorities in the preparation process by public authorities and that the organization of the vaccination campaign was not adapted. Resorting to vaccination centres instead of relying more on existing structures and health professionals such as general practitioners was at the end not considered the best option.

Governmental communication showed some weaknesses, with a multiplicity of interventions and messages from various sources. And yet, it had been identified as a key element in the aftermath of previous health crises. Communication relied too heavily on traditional instruments, while it would have been appropriate to use more innovative means. The authorities did not adopt an efficient action to deal with rumors launched on the Internet and competing with the official communication. Furthermore, some information proved conflicting, generating doubts about the safety of vaccines and the necessity of vaccination.

The overall social impact of this crisis remained moderate, even if the decisions regarding vaccination generated a social debate. In the longer term, the issue is to assess the consequences of this event. In the field of public health, French citizens tend to consider public authorities messages with caution, relying on other sources of information. Vaccine mistrust has spread, reinforced by the H1N1 campaign, and all the more so that the French National Agency for Medicines and Health Products Safety recognized an association between H1N1 vaccine and narcolepsi (Olivier, 2013). It will be an increasing challenge. Moreover, a lingering lack of understanding between health professionals and public authorities may have an impact on the management of future crises.

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Interviews

FNPC, Paris, 4 February 2013 (Interview)SGZDSP, Paris, 15 February 2013 (Interview)

DGSCGC, Asnières, 4 March 2013 (Interview) DGSCGC, Asnières, 4 March 2013 (Interview) SGDSN, Paris, 3 June 2013 (Interview)

Germany

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Executive Summary

The German civil security system is characterised by a high degree of decentralisation and divided operational and legislative competences across levels and issue areas, which can create coordination and communication problems during cross-regional crises. Crisis management and disaster response are primary tasks of the states and districts while a genuine leading role of the federal level is foreseen only for the case of wartime civil protection. The domestic role of the military remains limited, not least due to Germany's historic experience. However, Germany's civil security system boasts a high level of professional expertise, strong volunteer involvement and considerable response capacities at local and regional levels of government that have enabled it to handle most crises rather well. Voluntary relief organisations play an especially important role and are formally incorporated into public crisis management structures. This ensures a certain degree of legitimacy, but volunteerism increasingly faces severe challenges from broader societal trends, such as demographic change and growing demands at workplaces. The federal level can add coordination structures, advanced equipment and human resources in cases of especially serious disasters and plays a stronger role in some special areas, such as epidemics and radiological incidents. Thus, despite the formal division of powers the different levels are actually entangled in an interwoven multi-level system requiring much coordination and cooperation.

Legal and institutional structures as well as nation-wide risk assessment and communication processes in civil security have been significantly reformed and reinforced since 2002, when Germany experienced its last signature crisis. There have been some centralist tendencies over the last decade and the debate about the appropriate division of competences between the federal and state level has not been fully resolved. However, partial revisions notwithstanding, a fundamental reform of Germany's crisis management seems unlikely for the time being. Germany is also actively engaged in cross-border and European crisis assistance, even though a further deepening of EU integration is seen in an increasingly critical light. In sum, Germany wavers between defending the traditional strengths of its civil security system and the need to adjust structures in order to respond to new hazards, such as critical infrastructure failure or changing social conditions, such as the declining supply of volunteers for emergency services.

Key findings

1. The Federal Technical Relief agency and international assistance capacity

While Germany's civil security forces are composed by a wide variety of actors and volunteers, the Federal Technical Relief Agency (THW) makes a highly recognised contribution to national as well as international emergency response operations. As such, the THW exemplifies a highly successful transition from a traditional civil defence organisation to an all-hazard response organisation. Apart from considerable manpower of approximately 40,000 active volunteers that are distributed across Germany in local and regional chapters, the agency maintains advanced technical capabilities for water conditioning, power supply and rescue clearing. It also features substantial logistical capacities for disaster management, including sixty-six specialised logistic units at the regional level. The THW also plays a part in the critical infrastructure protection and has increasingly formed contacts with large utility companies in ensuring the continuity of services. Furthermore, the THW is the main public organisation in Germany, which contributes to international emergency operations. In the context of the EU's Monitoring and Information Centre, it lists 14 specialised units for the EU's civil protection mechanisms. The THW also regularly contributes to EU exercises and research project. Since December 2006, it has been appointed by the European Commission as coordinator for the EU Exchange of Experts in civil protection.

2. Reforming interwoven federal structures for civil security

The provision of civil security is principally organized in a subsidiary, bottom-up manner in Germany's federal political system. However, in most crises scenarios and for crisis preparedness, the different levels of government need to cooperate closely. The German experience over the last ten years exemplifies the potential for, as well as obstacles to, reform in such multi-level systems. On the one hand, Germany managed to improve centralised capacities for crisis management, while keeping the basic decentralised structures with their strength on local expertise and fast reaction times in place. In particular, federal and state-level actors agreed to a partial reallocation financial resources, whereby the federal level would develop and maintain specialised response capacities in the areas of CBRN threats and mass casualties, whereas state and regional governments would remain responsible for regular emergency management. Moreover, Germany (re)created a federal agency for civil protection tasks (BBK) that would be set up as a 'service provider' for training, risk mapping, warning systems, research and coordination capacities, but would not exercise operational authority over lower-level actors. Regular large-scale national exercises – allegedly the biggest table-top civil security exercises in Europe – that are organised by the BBK further strengthen the voluntary links between different actors in civil security (increasingly also with private ones).

On the other hand, the reform process took several years and could not clearly resolve key constitutional questions over an unambiguous division of competences and finances In addition, the gradual build-up

and professional acceptance of the BBK did not resolve the possible problems with regard to the weak or non-existent political powers of coordination through the federal Ministry of Interior or the Chancellery. However, as Germany did not experience a truly major crisis in recent years, security professionals would not see a problem with such incremental adaptation processes.

3. The structural role of volunteerism

The importance voluntary engagement in Germany's civil security is often cited as one of its main sources of its strength and legitimacy, but also represents one of its key vulnerabilities. This represents a lesson for other voluntary- based civil security systems. According to the available data, non-profit organisations can draw on about 520,000 active volunteers. As mentioned above, the THW adds another 40,000 active personnel for crisis tasks. Numbers on participation in voluntary fire brigades are based on less reliable estimates, but range between 1.2 to 1.3 million. Hence, there are about 22 volunteers per 1,000 capita. The high numbers of volunteerism this allows cost-effective and geographically wide-spread civil security provision.

Yet voluntarism in Germany faces severe challenges from wider trends, which affect all European countries. Required stable social and institutional relationships have become increasingly under stress due to social and economic change, whereas non-profit organisations have been slow to respond to growing cultural diversity and the growing need to make membership more flexible and attractive. Recruitment problems are especially acute in some regions of Eastern Germany, which generally suffer from a declining and rapidly aging population. The challenge to stimulate active participation may have also become more acute with the suspension of military conscription in 2011, as conscientious objectors would traditionally constitute a first volunteer base. This overall situation has motivated a large number of research projects, outreach initiatives and advancement awards, many of which are targeted at currently underrepresented audiences, such as seniors, immigrants and women. One particular initiative is the Team Mecklenburg-Vorpommern, which seeks to register volunteers that can be called upon during crisis situations but that do want to commit themselves to long-term engagement in a non-profit organisation (Team M-V n.d.). This initiative explicitly draws on the practice of Austria and its related *Team Austria*. While this is seen as a viable alternative for generating short-term human resources, such as in the case of flood defence efforts, voluntary relief organisations are concerned that this erodes their traditional model of formal involvement, which is believed to entail a broader societal mission.

4. Strict limitations on the military in domestic crises

Due to Germany's historical experience under Nazi rule, the distinction between internal and external security and between civilian and military forces is deeply encoded. The domestic deployment of the armed forces is confined to especially severe disasters or the hitherto hypothetical scenario of a state of emergency that would be constituted by intentional threats and wide-spread violence. In practice, military

assistance has to date been limited to, and not required beyond, short-term technical and logistical support for civilian authorities in response to exceptional natural disasters. The military would not be used for the maintenance of public order or beyond what could potentially be done by civilian responders who maintain overall command.

The role of the military in Germany also exemplifies how legal accountability may be maintained in the face of extreme threat scenarios. The attacks of 11 September 2001 led to calls for the employment of the *Bundeswehr* to protect potential targets, such as government buildings, and assist civil security agencies in the response to attacks, for instance through its CBRN units. The most controversial debates pertained to a law that would have allowed for the shooting down of hijacked airplanes. The Aviation Security Act, which was passed in 2005, was declared unconstitutional by the Constitutional Court only a few months later because it violated the right to life and especially the right to human dignity, which is enshrined in Article 1 of the Basic Law. According to the court, authorities could not pit the dignity of people in a potential target of the plane against the dignity of the people on the plane. In more recent decisions from August 2012 and April 2013, however, the Constitutional Court decided that the armed forces can use special military weapons (e.g. fighter jets) within Germany in "extraordinary exceptional situations of catastrophic scope" as a last resort. The repercussions of this partial reversal remain unclear at the time of writing and deserve further attention in comparison to respective arrangements in other European countries.

List of Abbreviations

AKNZ	Akademie für Krisenmanagement, Notfallplanung und Zivilschutz (Academy for Crisis Management, Emergency Planning and Civil Defence)
ASB	Arbeiter-Samariter-Bund (Workers Samaritan Association)
BBK	Bundesamt für Bevölkerungsschutz und Katastrophenhilfe (Federal Office of Civil Protection and Disaster Assistance)
BDBOS	Bundesanstalt für den Digitalfunk der Behörden und Organisationen mit Sicherheitsaufgaben (Federal Agency for the Digital Radio of Agencies and Organisations with Security Tasks)
BMI	Bundesministerium des Innern (Federal Ministry of the Interior)
CBRN	Chemical, Biological, Radiological, Nuclear
DGzRS	Deutsche Gesellschaft zur Rettung Schiffbrüchiger (German Maritime Search and Rescue Service)
DLRG	Deutsche Lebens-Rettungs-Gesellschaft (German Lifeguard Association)
DRK	Deutsches Rotes Kreuz (German Red Cross)
GG	Grundgesetz (Basic Law/Federal Constitution)
GMLZ	Gemeinsames Melde- und Lagezentrum (Common Monitoring and Situation Centre)
IMK	Ständige Konferenz der Innenminister und –senatoren der Länder (Permanent Commission of State Interior Ministers)
IntMinKoGr	Interministerielle Koordinierungsgruppe des Bundes und der Länder (Interministerial Coordination Committee of the Federal Level and the States)
JUH	Johanniter-Unfall-Hilfe (St. John Accident Assistance)
LÜKEX	Länderübergreifende Krisenmanagementübung (EXercise) (Inter-state Crisis Management Exercise)
MIC	Monitoring and Information Center
RKI	Robert-Koch-Institut
SatWaS	Satellitengestütztes Warnsystem (Satellite-based Warning System)
THW	Bundeanstalt Technisches Hilfswerk (Federal Agency for Technical Relief)
ZSKG	Zivilschutz- und Katastrophenhilfegesetz (Civil Defence and Disaster Assistance Act)

1. Introduction

The most frequent crises in Germany since World War II have been caused by extreme weather conditions, most notably floods and storms. In addition, major transportation accidents, such as the air crash at Ramstein military base in 1988, account for a considerable number of casualties. Only major floods like the 1962 North Sea flood or the 1997 Oder flood required major national efforts, including assistance by the federal armed forces. However, even these 'signature crises' did not pose a direct threat to the functioning of the state as a whole.

Year/ month	Crisis description	Crisis category	Damage		
			# of persons killed	# of persons injured	# of persons affected
08/2002	Flood (Elbe)	Natural disaster	27		330,018
10/2002	Storm (Jeanette)	Natural disaster	11		
06/2003	Storm	Natural disaster	10		
11/2005	Electricity breakdown	Infrastructure failure			250,000
03/2006	Storm (Felix)	Natural disaster	10		200
01/2007	Storm (Kyrill)	Natural disaster	11		5,500
2009	H1N1	Infectious disease	241		225,828
07/2010	Love parade stampede	Mass panic	21	500	
2011	EHEC/HUS	Infectious disease	48		4,220

Table 1: List of Crises (2000-2010)

Source: Authors²⁴⁶

Germany has no nation-wide and coherent definition of crises. Constitutional provisions in the German Basic Law (GG) on federal disaster assistance (Art. 35 GG) and fundamental rights (Art. 11; Art. 13 GG) refer to natural disaster, extraordinarily serious accident, or the potential outbreak of an epidemic. The German states and lower levels of government, which are mainly responsible for the provision of civil security, usually speak of disasters (*Katastrophe*) and emergencies (*Notfall*), while emergency professionals tend to refer to tactical or operational situations (*Lage*). The state of North Rhine-Westphalia has coined the additional popular term "major catastrophic event" (*Großschadensereignis*) (Lange et al.

²⁴⁶ The EMDAT database (CRED n.d.) served as a starting point for the identification of crises, but the authors included only crises that required some kind of national or regional intervention and extended beyond routine emergencies handled by local emergency workers (see ANVIL definition of crisis).

2012, p. 33). Despite the terminological differences, a disaster is commonly understood as a situation negatively affecting a large number of people or essential goods and requiring overall coordination due to the overstraining of local authorities responsible for everyday emergency response (Kloepfer 2007, pp. 167-168).

Civil security in Germany is primarily a task of civilian agencies. Due to Germany's historical experience, the distinction between internal and external security and between civilian and military forces is deeply encoded. The domestic deployment of the armed forces is confined to especially severe disasters or the hitherto hypothetical scenario of a state of emergency that would be constituted by intentional threats and wide-spread violence (section 2.1.1 and 2.2.2). In practice, military assistance has to date been limited to short-term technical and logistical support, such as the 1962 North Sea floods and the 1997 Oder floods. The military would not be used for the maintenance of public order or beyond what could potentially be done by civilian emergency responders. The role of the military continues to be a contentious political issue (see section 3.3.1). Even if recent legal developments indicate a gradual softening of the constraints on military involvement in crisis management (see section 3.3.2), the domestic use of the military continues to be a "highly explosive political subject", especially when it comes to scenarios involving genuinely military equipment, such as warplanes (Musil and Kirchner 2006, p. 381).

The German civil security system tends towards an all-hazards approach, but retains strong sector-specific dimensions. The basic structure of the peacetime civil security system at the local level works largely irrespective of the source of a crisis. Fire brigades, voluntary relief organisations, police and regional crises management authorities deal with all regular emergencies and crises at the local and regional level (see section 2.2.3). At the state and federal level, responsibilities for civil security become more differentiated. Building on different sectoral ministries (e.g. environment, transport, health), specialized state-level and federal bodies and authorities are responsible for specific types of crises, such as epidemics or nuclear accidents (see sections 2.2.2 and 2.2.3). In this context, the Federal Ministry of the Interior (BMI) and the Federal Office of Civil Protection and Disaster Assistance (BBK) assume central support functions, but do not exercise direct operational authority. A comprehensive crisis management competence for the federal level is only foreseen in the case of war-time civil protection (see section 2.2.1). Recent civil security strategy documents highlighted the need for comprehensive crisis management that should focus on the severity of a threat rather than its source and be subsumed under the new umbrella term "population protection" (Bevölkerungsschutz) (Bundesverwaltungsamt 2003, BMI 2009a, see also section 3.3.1). However, these conceptual innovations did not alter the basic constitutional division of powers or reduce fragmentation at the higher levels of government.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Germany is a federal republic and a parliamentary democracy with two legislative chambers. The federation consists of 16 states, or *Länder*, which exercise considerable autonomy. Except for the three city states (Berlin, Bremen, Hamburg), the German states are further subdivided into 295 districts (*Landkreise*) and 107 independent cities. Below this, 11,200 municipalities add an additional layer of complexity (Statistisches Bundesamt 2013).²⁴⁷ Executive heads and legislative bodies are elected at all levels of government. The federal constitution guarantees the federal organisation of Germany (Art. 20) and the basic self-rule and democratic character of municipalities (Art. 28). Based on the "subsidiarity principle" it delegates all legislative and administrative competences to the states, if not explicitly stated otherwise (Art. 30).

In practice, the states participate in federal decision-making and implement federal laws while the federal government partially supplements and funds executive implementation. Occasionally, this may result in the infamous "joint-decision trap" that limits the autonomy of the individual levels or the polity as a whole (Scharpf 1988). Despite strong majoritarian elements such as a strong role of the Federal Chancellor, Germany can also be considered a consociational and neocorporatist state, which stimulates consensus and the formal involvement of different political and societal groups (Lehmbruch 2000). This aligns with the Weberian legacy of German administration that tends to embrace a comparatively legalistic, hierarchical and formalistic approach (Knill and Lenschow 1998).

The civil security system stands out as a particularly decentralised feature of the German administrative structure (see Figure 1). Peacetime crisis management relies on bottom-up upscaling. If a state of disaster is declared, responsibility is scaled up from the municipal level of fire brigades and rescue services, which handle all everyday emergencies, to regional crisis management task forces at the level of districts/independent cities. All federal and state agencies provide mutual legal and administrative assistance (*Amtshilfe*) to each other upon request (Art. 35-I GG). In case of natural disasters or especially serious accidents, a state can request assistance by police forces and agencies from other states or by the federal police, the Federal Technical Relief Agency (THW) or the armed forces (Art. 35-II GG). If a crisis threatens the territory of more than one state, the federal government can deploy the federal police and the armed forces and order a state to provide assistance to another state (Art. 35-II GG).²⁴⁸ The Federal

²⁴⁷ Four German states also feature intermediary administrative districts (*Regierungsbezirke*), which basically carry out administrative tasks on behalf of the state government.

²⁴⁸ These provisions were introduced as part of the so-called emergency constitution, which was a contentious hotbutton issue in the 1960s. In any case, the German legal and historical tradition therefore requires strict civilian control of crisis management operations at all levels (Sattler 2008, pp. 21-23).

Office of Civil Protection and Disaster Assistance (BBK) can fulfil central support functions, but does not exercise direct authority over states or other federal agencies. A comprehensive crisis management competence for the federal level is only foreseen in the case of war-time civil protection (sections 2.2.2 and 2.2.3).

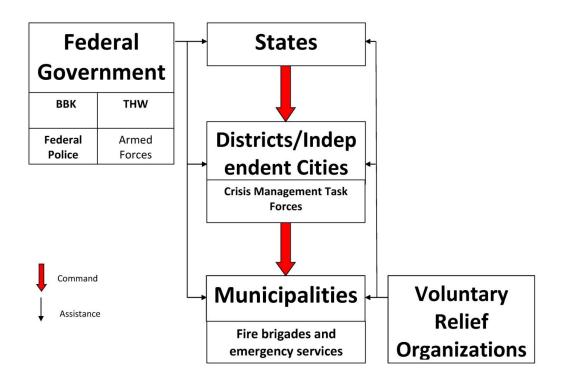


Figure 1: Crisis Management in Germany (Organisation Chart)

Source: Authors²⁴⁹

2.1.2 Government/societal culture

Hofstede et al.'s (2010) grid-group country scores for Germany point to decentralization, a combination of self-accentuation and a sense for duty and responsibility, an orientation towards performance and status, uncertainty avoidance and strong reliance on expertise and systematic planning. The World Value Survey puts Germany in the group of protestant European countries characterized by a high degree of secularism and self-expression (World Value Survey 2010, Inglehart and Welzel 2010, p. 554). Earlier works from cultural theory portrayed Germany as "a hierarchical culture in which individuals identify with the system but believe their participation should be limited to its proper sphere" (Thompson et al. 1990, p. 251). This participation would also extend to consociational and neocorporatist elements of the polity. However, since the 1970s and 1980s non-formalised political participation and individualisation have gained importance through public protests and citizens' movements (Korte and Fröhlich 2009, pp. 111-112).

²⁴⁹ The organisation chart is largely identical with the chart entailed in the European Commission's Vademecum for civil protection (European Commission 2012d).

The German civil security system reflects these traditions. Subsidiarity is the guiding organizing principle for civil security competences and highly organised structures for civilian volunteers remain a critical pillar of emergency response (see section 2.4.1). Germany's adherence to legalism and multi-level consultations cannot be easily fitted to probabilistic risk assessments and central security planning (Krieger 2012, Rothstein et al. 2012), though elements of private self-governance are increasingly included (Lodge et al. 2010, Jennings and Lodge 2011).

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

Civil security in Germany rests upon fragmented formal legislation at the federal level and at the state level. Civil protection during peacetime, or disaster protection (*Katastrophenschutz*), is a legislative responsibility of the states. Each of the 16 states maintains its own law on disaster and emergency management with different levels of internal differentiation. Most states have separate laws on rescue services and fire protection (Kloepfer 2009). These state laws also set the basic parameters for operational crisis response procedures (section 2.2.3), the role of citizens (section 2.3) and the cooperation between the state and private organisations (section 2.4). Internal security and the law of the police is a primary responsibility of the states as well.

The constitution awards the legislative competence for national defence, including war-time civil protection or civil defence (*Zivilschutz*), to the federal level (Art. 73-I-1 GG).²⁵⁰ Various policy papers use the notion of "population protection" (see section 1), which is intended to embrace military and civilian elements at all levels of government, but this concept does not have a formal legal status. Despite the general division between military and civilian crisis response, the federal competency for wartime civil protection has enabled additional federal legislation and capacities for regular crisis management. This mainly concerns the law on the THW and the Civil Defence and Disaster Assistance Act (ZSKG). Additional sector-specific federal laws regulate the basic provision of goods and services in times of national emergencies (section 2.3.1 and 2.4.1).²⁵¹

This statutory framework was reformed between 2002 and 2009 (section 3.3.1). The revised ZSKG set out the need to improve the cooperation between the federal and state level in disaster protection, which mostly concerned improved coordination and communication processes. However, a new full-blown comprehensive federal civil protection law and constitutional amendments to the division of powers remained out of reach, so that the federal level usually still needs to wait for a request by the affected

²⁵⁰ The terminological distinction between wartime civil protection and peacetime disaster protection is not in line with common EU terminology and is not always used consistently in German law and practice.

²⁵¹ Since 2006 the federal level holds the sole responsibility for legislation on "defence against the threat of international terrorism". However, this pertains only to the prevention and pursuit of criminal acts by federal police and intelligence services (Kloepfer 2007, pp. 173-74), which falls beyond the scope of this report.

state (Meyer-Teschendorf 2009, p. 1226). From the perspective of legal scholars, the federal government's increasing involvement in peacetime civil protection therefore continues to operate on "thin constitutional ice" (Musil and Kirchner 2006, p. 391). Practitioners at lower levels of government, however, see this as the most useful and practicable modifications of the existing strengths of the decentralised German civil protection system (Interview, Hamburg, December 2012; Interview, Berlin, April 2013).

2.2.2 Political dimension

Executive and political responsibility for civil security provision primarily rests at the local and regional level. Depending on the constitutions and disaster laws of the 16 states, fire brigades and rescue services are accountable to mayors and county commissioners, which hold the central responsibility for operational crisis management and head the crisis management task forces. Intermediary district governments, where they exist, are responsible to the state government.

Each German state government – usually through its ministry of the interior – is responsible for policy formulation in the area of civil security. The federal ministry and state ministries meet regularly and coordinate their activities in the Permanent Conference of Interior Ministers (IMK) under the lead of a rotating presidency. The IMK is flanked by regular expert consultations. Working group V of the IMK unites professionals and lead officials in the areas of civil protection and disaster relief. The working group has generated numerous position papers and recommendations in order to harmonize operational doctrine and crises management structures across German states and local authorities. The working group partially initiated and served as the key negotiation forum for the legislative reforms to the German emergency management system from 2002-2009 (Interview, Berlin, April 2013). In short, the IMK serves as the most important decision-making body in the decentralised German civil security system.

At the federal level, the BMI formulates additional aspects of civil security policy. The BBK and the THW, which are the main federal agencies for operational crisis management, are directly responsible to the BMI. In contrast, the German chancellery is not regularly involved in the formulation of civil security policy, even though indirect control is exercised through the federal cabinet. Representatives and associations of German communities and districts regularly debate civil security challenges and lobby state and federal governments. Non-profit actors, health professionals, police and fire brigades are organised in strong interest groups at all levels of the political system and seek to influence policy formulation.²⁵²

Under the German Basic Law, the declaration of a formal state of emergency at the federal level is reserved to internal and external armed conflicts, or serious (and intentional) threats to the "free democratic order", and requires a two-third majority in national parliament. In this situation, it is possible

²⁵² A coordinating committee of the major non-profit actors in civil security (see section 2.4.1.), the so-called Permanent Conference on Disaster Preparedness and Population Protection, was constituted and consulted during the institutional reform process between 2004 and 2009, but has been dissolved in 2011.

to curtail numerous civil rights and expand the role of the federal government, including the deployment of the federal police and the armed forces (Art. 91 and 87a GG). Legal scholars have rejected the view that a natural disaster or a serious accident could qualify as a formal internal state of emergency, except for the unlikely case that an accident or a natural disaster causes situations that are comparable to civil war (Sattler 2008, pp. 26-33). Due to the absence of such large-scale violent unrest, Germany has hitherto not declared such a state of emergency.

In contrast, a state of disaster can be declared at the level of counties, cities or intermediary administrative districts by the respective chief administrative officers, which does not authorise wide-spread derogation to civil rights or to act outside regular legislative and judicial control (Kloepfer 2007, p. 167). At the operational level, emergency responders nevertheless enjoy a considerable sphere of discretion. Based on a "blanket clause" (*Generalklausel*) that is typically included in state laws responsible agencies can take all measures they deem necessary for the fulfilment of their crisis management duties, as long as their remain within the confines to normal legal constraints such as the proportionality principle (Musil and Kirchner 2006, p. 385).

2.2.3 Operational dimension

Four levels share responsibility for operational crisis management: the federal level, the state level, the district/local level, and the private/voluntary level (Stober and Eisenmenger 2005, pp. 124-26). The private/voluntary level will be discussed below in chapters 2.3 and 2.4. Due to the constitutional division of powers discussed above, operational crisis management is highly decentralised and mainly located in local and regional administrations (Walus 2012, p. 98). Generally speaking, management authority for major crisis is taken up as a temporary function by various public actors. After declaring a state of disaster, the districts or independent cities form task forces that are typically led by the highest local political actor (e.g. mayor). State governments and intermediary administrative districts focus on the assessment of the overall situation, the definition of political priorities and the provision of additional civil security forces.²⁵³ Specialized state authorities that can come into play during specific types of disasters include health agencies, forestry administrations or road traffic departments. As city states, Berlin, Bremen and Hamburg are directly responsible for crisis preparedness and response (Kloepfer 2007, pp. 182-83).

However, the federal level is relevant to many aspects of crisis management. The BBK, which falls under the executive authority of the BMI, is of particular importance. It was founded in 2004 and can be seen as the institutional embodiment of the growing cooperation between the federal level and the states in civil security. Beyond the area of wartime civil protection, the BBK supplements the civil crisis preparedness of German states through specialized capacities for protection against chemical, biological, radiological and nuclear (CBRN) incidents and medical services, offers open access to its training programs and

²⁵³ See for example the respective guidelines for the state of North Rhine-Westphalia (Landesregierung NRW 2004).

coordination and crisis management resources and provides conceptual and communication services. Thus, it can be regarded as a platform and a service provider for operational agencies at all levels of government (Unger 2012).

Federal security forces also contribute to civilian disaster relief. The former national civil defence organisation THW offers technical and logistical assistance to civilian emergency response operations on demand by the responsible authorities. Apart from considerable manpower of approximately 40,000 volunteers that are distributed across Germany in local and regional chapters (section 2.4.1), the agency maintains advanced technical capabilities for water conditioning, power supply, emergency logistics and rescue clearing.²⁵⁴

The Federal Police, which started out as a quasi-military border guard force during the Cold War, is responsible for security on major national transport networks, especially the German railway. Thus, the Federal Police is regularly involved in ensuring the security of sensitive goods (e.g. nuclear transports) or in the run-up to major national events (e.g. summits). In addition, the federal police and the armed forces can occasionally provide assistance to German states, but overall responsibility remains with the local civilian authorities (Baumgart 2012). Further federal agencies or regulatory authorities come into play in the case of specific threats and situations. This applies, for example, to the Federal Office for Radiation Protection, the Federal Office for Information Security, the Federal Railway Authority, the Robert-Koch-Institute (RKI) with its special expertise on epidemics or the German Meteorological Service with its forecasting and warning functions. Potentially, all federal agencies or regulatory authorities can become involved in different civil security scenarios, but cannot exercise operational command over local and state actors. General political coordination between federal and state-level ministries is possible by way of the Interministerial Coordination Committee of the Federal Level and the States (IntMinKoGr). The BMI may support the coordination among responsible federal ministries through Interdepartmental Committee for National Crisis Management (Ressortkreis Nationales Krisenmanagement). Moreover, several ministries maintain distinct structures for special scenarios and the federal chancellery can assume political coordination via the chancellor's cabinet leadership (BMI 2010a).²⁵⁵ Critics argue that the lack of a federal competence for emergency decision-making can cause severe problems during countrywide crises (Walus 2010, pp. 131-132).

The storm *Kyrill*, which occurred in January 2007, can be regarded as a typical crisis that illustrates how the upscaling process in the German civil security system works. On 18 and 19 January 2007, the storm browsed over Germany and caused substantial damage in wide parts of the country. Crisis response

²⁵⁴ These are organised in 1,000 technical units and 1,440 rescue groups across the country (THW 2012, p.22).

²⁵⁵ To date, however, the Interdepartmental Committee convened only once in the case of a health crisis, whereas in most cases senior decision-makers would remain within their affected region or line ministry (Interview, Berlin, April 2013).

operations were primarily organized at the local level. Affected districts and cities declared a state of disaster and created crisis management task forces, while fire brigades and emergency agencies – with assistance by the THW – performed immediate rescue services (mainly removing debris). The states were responsible for more structural response and recovery tasks, as evident in the case of North Rhine-Westphalia. The state's forestry administration coordinated the closure of roads, forest fire protection, reforestation and compensation. Financial assistance was requested from the federal government and the EU through agricultural and regional funds and private owners of forests were included in response and recovery efforts (Landesregierung NRW 2010).

Germany has been reforming its planning and risk-assessment for civil security over the last decade (Schmitz and Lenz 2011). The Commission on Civil Protection (Schutzkommission), which consists of researchers from social and natural sciences, has issued four so-called Threat Reports (Gefahrenberichte) (Schutzkommission beim Bundesminister des Inneren 1996, 2001, 2006, 2011). On a political level, the "New Strategy on Population Protection" of 2002 underlined that more coherent risk assessment and warning processes were urgently required (Bundesverwaltungsamt 2003, p. 37). By 2005, the German states developed a first standardized template mapping potential vulnerabilities and corresponding response mechanisms at the regional level, which should feed into the reorganisation of competences and resources for civil protection (section 3.2). Since 2010 the BMI publishes an annual report on risk mapping (Deutscher Bundestag 2010, 2011a), while the BBK issued detailed methodological guidance (BBK 2010). However, the implementation of this risk assessment methodology depends on the initiative of state and communal level governments, which have the best view of local or regional vulnerabilities, but which diverge strongly with regard to their commitment and organisational capacities (Interview, Bonn, November 2012). Therefore, a coherent and consistent risk mapping processes for all geographical areas of Germany as well as multiple hazards remains under construction or is an impracticable objective (Interview, Berlin, April 2013, Interview, Hamburg, December 2012).

German security organisations are also in the process of transforming their emergency *communication* system, which can be summarised under three components. First, the German emergency law on telecommunication and postal services foresees prioritised access and special capacities for emergency responders. Since the end of the Cold War, the activation threshold has been lowered from a formal state of emergency to natural or technological disasters and terrorist attacks. Second, German security actors aim to integrate their different analogue radio networks, which experienced severe capacity limits during the major 2002 Elbe flood, into an integrated digital communication system. The introduction of the system is overseen by the newly created Federal Agency for the Digital Radio of Agencies and

Organisations with Security Tasks (BDBOS).²⁵⁶ Third, the BBK created the central web platform DeNIS²⁵⁷ that is directed to emergency professionals as well as the general public. The network provides a wealth of general information on crisis management, but also up-to-date situation assessments and sector-specific warning and communication platforms.

For on-going crisis *monitoring*, the BMI created the so-called Common Monitoring and Situation Centre (GMLZ). The GMLZ is managed by the BBK and aims to facilitate the communication and information flow between state-level and federal actors. The GMLZ does not directly exercise responsibility and command, but has been activated as a communication channel for a number of national as well as international crises. However, the provision that the GMLZ could assume more operational crisis coordination functions upon the request of one or more German states has never been activated or exercised to date (Interview, telephone, March 2013).

With regard to emergency *logistics*, German authorities can utilise, but also have to protect a very dense network of road, rail, water and air transportation. Respective federal regulatory authorities (e.g. the German Authority for Freight Transport) maintain links with the BBK through DeNIS. The decentralised organisation of the civil security system adds a layer of resilience, as emergency response capacities do not regularly have to be brought in over long distances. The THW adds substantial logistical capacities for disaster management, including sixty-six specialised logistic units at the regional level (THW n.d.d). In especially severe crises, the German army may provide additional logistical help through its so-called territorial network (Baumgard 2012), as has been the case during the 2002 Elbe flood. Additional legal provisions allow for the requisition of private actors for logistical purposes, for example up to 12,000 trucks from freight companies (Bundesamt für Güterverkehr 2009), but have not been used at the federal to date.

2.2.4 External dimension

Germany is a member of several multilateral fora with response-related civil security components: the European Union (EU), the North-Atlantic Treaty Organisation and the United Nations, which befits Germany's traditional advocacy of multilateralism. On the regional, sub-European level, Germany is a member of the Council of Baltic Sea States. In addition, Germany has signed functional regional agreements that deal with civil security as a minor issue alongside other tasks, such as the Danube River Protection Convention and the Convention on the Protection of the Rhine. So far, the federal level in Germany has not officially requested disaster assistance through regional and international arrangements.

²⁵⁶ According to official statements by the BDBOS, the new system should be superior to conventional mobile phone networks and constitute the largest integrated digital communication network worldwide (BDBOS 2008). At the time of writing, however, the network was still under construction due to technical and political problems and would remain non-interoperable with the German army.

²⁵⁷ http://www.denis.bund.de/ [Accessed 15 November 2012].

The general assumption in German politics is that European countries will be able to handle substantial crises largely themselves and Germany does not require major assistance beyond local emergency responses (DRK 2010b, p. 12).

Nonetheless, Germany has entered into twelve bilateral agreements on mutual crisis management assistance with all neighbouring countries plus Lithuania, Russia and Hungary (BBK 2008a).²⁵⁸ Requests must usually be filed with the BMI, but treaties can also allow partners to directly address state and district governments in border regions. Moreover, German states and districts as well as the THW have entered into agreements with regions and organisations across the border based on the international agreements of the federal level (Deutscher Feuerwehrverband 2008). Informal cross-border cooperation of first responders is typically considered to work rather well based on established contacts that allow for flexible solutions (Knüsel 2010, Interview, telephone, March 2013). The highest degree of cooperation has been achieved with regard to Germany's southern (German speaking) neighbours and in so-called EUROREGIONS. Some criticisms have arisen with regard to the speed of communication and warning processes with regard to Germany's eastern neighbours where language and technological barriers are higher. German authorities increasingly seek to level out these differences by regular contacts, exchanges and common exercises (Focus 2010).

Germany is a regular provider of international disaster assistance, both within Europe and globally. For this purpose, the BMI acts as official national contact point. If the BMI states that there is a general interest to offer international assistance, it approves federal funding and the GMLZ then searches for available capacities by the THW, the Länder and counties/cities/non-profit relief organisations (Council of the European Union 2010 pp. 21-22, European Commission 2012a). Nevertheless, the highly decentralised distribution and management of civil security capacities in Germany continues to cause problems for larger-scale international cooperation (DRK 2010b, p. 18, Interview, telephone, March 2013). The lack of logistical capacities further explains why the THW is usually the only official contributor to international disaster assistance.

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

The German state expects citizens to accept restrictions and to bear their share of the response effort. The constitution provides for crisis-specific limitations to the right to freedom of movement (Art. 11-II GG) and the right to property (Art. 13-VII GG). Citizens are basically expected to tolerate inflictions on these and other rights as long as they accord to the proportionality principle, notwithstanding the right to legal challenge (Stober and Eisenmenger 2005, pp. 128-129). The ZSKG refers to the principle of self-help and

²⁵⁸ Bilateral agreements follow the lines of the first agreement signed with France and typically include provisions on the commitment to provide assistance, the definition of potential assistance services, responsible agencies, command, financing and compensation and practical procedures for the crossing of borders.

mandates municipalities to support this aim through training and advice (§ 5). Specific provisions are set out in state disaster laws. This includes, among others, the performance of assistance in an emergency situation, the emergency slaughter of livestock, denial of access to prohibited areas and the need to grant access to private property for emergency operations (Musil and Kirchner 2006, p. 385). There are also norms in more general laws on urban planning, construction or fire protection that pertain to citizens' civil security obligations.

Disasters and emergencies are generally no major concern for German citizens compared to economic and environmental problems (Bulmahn 2011, p. 92). According to Eurobarometer data for February to March 2012, 29 percent of the population are fairly concerned about natural disasters and 17 percent are very concerned. Regarding man-made disasters, 37 percent are fairly concerned and 29 percent are very concerned. In terms of terrorist attacks, 31 percent are fairly concerned and 29 percent are very concerned. With this, Germany ranks at the mid to lower level among EU member states (European Commission 2012a, pp. 6-9).²⁵⁹

Professional actors worry that this reflects a lack of awareness of the risks from disasters (Allianz 2008, p. 33, Interview, Bonn, November 2012). Yet it can also be argued that Germans are satisfied with the performance of the civil security system and trust in the ability of established actors to handle most situations. Thus, a German poll shows that 49 percent of the respondents expressed a high degree of trust in the civil security system and 40 percent a medium level while only 8 showed low trust (Allianz 2008, p.12).

2.3.2 Information

According to a Eurobarometer poll for September-October 2009, 27 percent of the respondents felt informed about disaster preparedness and 34 percent about disaster response (European Commission 2009, pp. 23, 27). This reflects a lack of interest among the public as well as of pro-active strategies of civil security agencies. Administrative and political actors at each level of government are responsible for the information of citizens regarding threat levels and impending crises, supported by different emergency services and specialised bureaucracies, such as the BBK. The nation-wide system of alarm sirens, whose main purpose was to warn citizens in the case of war, has been gradually deconstructed since the end of the Cold War. In 2001, Germany instead created the satellite-based system SatWaS to send priority alarm messages to participating news agencies, TV and radio stations as well as to the specialised electronic networks for security authorities (BBK n.d.c). The increasingly coordinated, targeted and effective activation of different communication systems should transform SatWaS into MoWaS, the modular warning system, which should improve coordination across Germany and use a targeted mix of

²⁵⁹ German public opinion research provides additional insights on the relatively weighting of threats. A Forsa poll found that the likely crisis scenarios for citizens were storms (88 per cent), heat waves (79), multi-day power blackouts (69), cold waves (61), large fires (60), CBRN incidents (60), floods (57), snow disasters (52), earth quakes (41), and landslides (29) (Allianz 2008, p. 11).

communication channels to maximise effectiveness (Tiesler 2010). However, some local emergency services have various emergency professional argue that sirens should be restored as the main system. Practitioners fear that other systems lack the general "wake-up effect" of sirens and the ability to reach the full population in one geographic area without any prior registration requirements (Interview, Bonn, April 2013). While large-scale TV and media campaigns are not undertaken, actors in the German civil security system seek to improve their information provision on both preparedness and response management via the internet. The publicly accessible online platform of the German Disaster-Preparedness-Information-System (deNIS)²⁶⁰, which is managed by the BBK, offers information on current crises, crisis preparedness and response capacities and behavioural guidelines for concrete emergency situations. In addition, several web-based platforms offer news on water levels and the threat of floods²⁶¹ or the risk of forest fires²⁶². The use of social media (Twitter, Facebook) for both information provision and data collection (e.g. track the outbreak of epidemics) also remains very limited.

2.3.3 Education

Educational activities are mainly organised by fire brigades and large non-profit organisations that integrate many citizen as volunteers. These actors have developed extensive organisation-specific technical training programmes for different aspects of crisis management, leading up to professional schools and academies at the state and federal level. This system is regarded as effective when it comes to ensuring a high level of professionalism of first responders, including volunteers.²⁶³ In addition, first responder organisations regularly disseminate information on preparedness and response among the wider population.²⁶⁴ Yet apart from one-time first aid courses for driving licence applicants and special professions, such as school teachers there is no general or mandatory civil security training. One official argued that preparedness and self-protection efforts in Germany basically "lie idle" because politicians have no interest to become associated with unwarranted "fear mongering" (Interview, Bonn, April 2013).

At the national level, the BBK offers a wide array of information and educational material on exceptional situations online and in paper. The BBK also operates a civil security information centre including a specialized library, and disseminates scientific knowledge on wider risks and trends.²⁶⁵ However, information is advertised rather passively and is not known to large parts of the population (Allianz 2008, pp. 33-34). Thus, the main contribution of the BBK lies in its training centre for official actors, the Academy

²⁶⁰ https://www.denis.bund.de/ [Accessed 24 July 2012].

²⁶¹ http://www.hochwasserzentralen.de/ [Accessed 24 July 2012].

²⁶² http://www.dwd.de/waldbrand [Accessed 24 July 2012].

²⁶³ However, only the THW maintains a unified accounting system of its training efforts due its nation-wide integrated structures. According to its statistics, the THW spends approximately twice the time on professional exercises than on actual operations (THW 2012, p. 12)

²⁶⁴ For instance, larger professional fire brigades offer guidance and information on correct behaviour during emergencies, and undertake school visits. See, for instance, http://www.berliner-feuerwehr.de/2927.html [Accessed 19 November].

²⁶⁵All material can be accessed or ordered via the BBK website at: http://www.bbk.bund.de/ [Accessed 31 July 2012].

for Crisis Management, Emergency Planning and Civil Defence (AKNZ). The AKNZ primarily trains local leaders (mayors) or higher-ranking officials from public agencies and voluntary relief organizations, which are not specialised in emergency management. This training mainly focuses on legal, institutional or communicative aspects of crisis management, but may also include technical workshops on issues such as CBRN threats (BBK n.d.f).

Official committees and research programmes contribute to civil security research. The advisory Commission on Civil Protection sponsors various related projects from structural engineering to the social sciences (Schutzkommission beim Bundesminter des Innern n.d.). A number of German parliamentarians and scientists formed an additional professional and research platform on civil security, the so-called Future Forum on Public Security (Zukunftsforum öffentliche Sicherheit 2013). Last but not least, since 2007 the federal government runs a civil security research programme, mobilised 123 million EUR for the period from 2007 to 2012. The successor programme that runs until 2017 has a volume of 55 million EUR per year (BMBF 2012). Important exceptions notwithstanding, civil security research so far tends to focus on policy-oriented analysis or technological and natural science research whereas critical academic work in social and political sciences continues to be rare.

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

The German civil security system officially and strongly relies on non-profit relief organisations and their volunteer staff. Their main task is emergency and crisis response through medical, rescue and ambulance services on behalf of public agencies. Most management tasks and everyday emergency services are carried out by professional staff, but volunteers remain essential for membership fees, training, public outreach, and more exceptional crisis management situations. Thus, non-profit organisations are included in all public crisis management structures and exercises, but retain their independent character and have to bear the costs of crisis operations. However, depending on their size and scope of activities, they receive official financial compensation.²⁶⁶ Despite the continuingly high number of volunteers, voluntary organisations face increasing challenges from various societal trends (see section 3.3.3).

The most important non-profit actors are the German Lifeguard Association (DLRG), the German Red Cross (DRK), the Order of Malta Ambulance Corps (*Malteser*), the St. John Accident Assistance (JUH), the Worker's Samaritan Federation (ASB), and the German Maritime Search and Rescue Service (DGzRS). The role of the DRK is illustrative in comparison with other countries. It constitutes a legally privileged actor in some respects, but otherwise closely corresponds to other non-profit actors in Germany. In 2011 the DRK had 3.38 million members with about 400,000 active volunteers (including youth groups) and a

²⁶⁶ That is, in addition to organizational membership fees. Regular emergency services are also paid for, such as by health insurances.

professional staff of 140,342 (DRK 2012, p. 55). It is divided into 19 state associations.²⁶⁷ There are 513 county branches and 4,609 local branches. Moreover, the DRK distinguishes five special sub-chapters dealing with emergency preparedness, mountain rescue, lifeguard service, youth work and social welfare. The local branches carry the primary responsibility for all operational tasks, including especially ambulance and rescue services. The federal office aims to ensure coordination and coherence (DRK 2012, pp. 48, 55). These chapters are part of a "complex assistance and rescue system" (DRK 2011). The DRK's emphasis is on crisis response through its emergency and rescue services, but they also contribute to preparedness through research and first aid training (Lange et al. 2012, p. 60).

2.4.2 Role of profit-oriented organisation

Germany has highly developed regime of health and safety regulation as well as more general liability rules to protect employees, citizens, buildings, infrastructures and other privately-owned assets from harm and accidents. In line with EU law, privately-owned sites that can pose wider risks maintain special emergency plans and first response mechanism, such as plant fire brigades. Further market mechanisms for emergency and disaster management (e.g. mandatory insurance against flood) have been suggested, but are not yet part of the German civil security system (Schwarze and Wagner 2008).

In non-regular emergency situations, state actors and security authorities bear responsibility for response operations, but can require private actors to provide additional assistance. This mainly pertains to the granting of priority access to, and maintenance of, essential services or goods. Beyond utility companies (power, water, fuels, telecommunications), this can apply to transport companies, apothecaries and pharmaceutical corporations.²⁶⁸ The maintenance of stockpiles and the distribution of emergency foodstuff remain an exclusive competence of state actors.²⁶⁹ Medical rescue services traditionally were provided by the large non-profit organisations as well as voluntary and professional fire brigades. Over the last decade, approximately 10-15 percent of this sector has been taken up by private companies.²⁷⁰

While the restoration of power, transport and infrastructures has been a core mission of the THW since its establishment in the 1950s, state representatives have recognized the need for deeper engagement with private industry in the area of critical infrastructure and cyber-security (Schulze 2006). Since 2005, related strategy documents call for private inputs to detect new vulnerabilities and ensure the required technological expertise (BMI 2005, 2009, 2011a). Aside from numerous consultation rounds and preventive efforts, a notable result has been the private involvement in a 2011 national civil emergency

²⁶⁷ There are two organisations for Baden-Württemberg, North-Rhine Westphalia, and Lower Saxony respectively due to historic reasons.

²⁶⁸ For legal bases, see Kloepfer, 2009.

²⁶⁹ This traditional aspect of civil defence planning is regularly criticised, but has not been replaced by public-private partnerships. It is also worth mentioning that oil companies are to maintain a strategic stockpile of gasoline, whereas strategic gas reserves (for heating and power generation) are based on a voluntary agreement among corporations.
²⁷⁰ Interview with senior German official, November 2012.

exercises on cyber-attacks and food crises (Borchers 2011). On the initiative of private actors, specialised consultancies, such as the *Kompetenz Zentrum Kritische Infrastrukturen*²⁷¹, seek to unite the utility companies with local authorities to streamline emergency management planning and response procedures. Large providers, such as *Vattenfall* or *E-On*, also seek to promote their image by outreach activities to state actors, such as official partnerships with the THW (Interview, Berlin, March 2013). However, for the most part public actors maintain a distant approach, whereby private companies are expected to implement additional security measures (BMI 2011b), whereas they receive no direct compensation or influence on security planning. Private companies are also not widely mentioned as security partners for emergency preparedness.

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Political Inquiries

Due to the limits on federal legal competences, the German Parliament (*Bundestag*) cannot exercise close political control and review functions in matters of crisis response and disaster management. Instead, political inquiries over the last decade focused on the pursuit of Islamic terrorist suspects and a right-wing terrorist cell by police and intelligence services. However, Germany did not experience a major terrorist attack that put crisis response capacities and mechanisms to the test. At the level of state governments, only the issue of nuclear power triggered regular and intense political debates, including through political investigative committees. Yet in absence of a major disaster these investigations focused on prevention and regular risk management, which falls beyond the scope of this report.

One exception to the absence of incident-driven political inquiries into civil security response operation is constituted by Germany's only signature crisis during the period of investigation, namely the 2002 Elbe flood. The *Kirchbach Report* (Kirchbach et al. 2002), which was commissioned by the State of Saxony, focused on regional flood defence mechanisms, but also discussed the general effectiveness of the German civil security system. The report attested a high level of technical competence to first responders and specialised civil protection forces, while the support of military units in upgrading and defending dams was also praised. Thus, the basic principles of the German disaster and crisis response system's effectiveness, namely a decentralised approach that builds on local capacities²⁷², were defended. Yet the report also highlighted severe coordination failures across district-level and state-level structures.

²⁷¹ http://www.kki-verein.de/DerKKIeV/Seiten/Organisation.aspx [Accessed 10 April 2013].

²⁷² Even though civilian actors needed to temporarily reinforced by military units. It may be noted that the president of the investigative committee, Kirchbach, was the chief military commander that supported the response to the Elbe flood.

Integrated communication processes were missing, shortening warning times for local actors and leading to inefficient requests for aid and misallocation of resources. Regional and state-level disaster plans and structures were not adequately prepared for such a large-scale crisis. According to one government official, inter-state coordination thus turned out to be "random and arbitrary", often forcing the armed forces to facilitate cross-level cooperation (Interview, Bonn, April 2013). The biggest deficits emerged with regard to warning mechanisms for the population at large, which also highlighted weak forecasting mechanism for extreme weather and floods. As discussed elsewhere in this report (section 3.3.1), many of these criticisms reflected wider reform debates that had been initiated in the aftermath of 9/11 (Interview, Bonn, November 2012). Despite this reinforcement from the *Kirchbach* report., officials are under the impression that reforms in the German civil security system could not be attributed to important political inquiries, but were mainly generated from within the professional community and led by ministry officials (Interview, Berlin, April 2013).

Professional Inquiries

The absence of exceptional disasters since the 2002 Elbe flood also explains the dearth of incident-driven professional inquires over the last decade. At the level of state governments, one could point to ministerial reports on the handling of regional crises, such as storm damages and power failures in 2005-7 (Landesregierung NRW 2010). However, these internal reports did not generate wider attention within Germany's civil security system. The German response to the H1N1 (see annex II) and EHEC epidemics, which generated wide-spread media attention as well political debates, could be seen as the main exception (Deutscher Bundestag 2011b). In the aftermath, professional actors in the health sector and the RKI meticulously documented their actions and worked towards improved coordination, risk assessment and public communication processes (Krause et al. 2010, RKI 2011). This fed into on-going discussions among German emergency professionals on how to revise risk communication strategies to be able to tackle complex emergencies and changing public attitudes (Weinheimer 2011).

In general, the national civil security exercise series "LÜKEX" serves as the most important professional evaluations of Germany's crisis management capacities. The exercises constitute the successor to civil defence manoeuvres during the Cold War and are built on extensive planning and evaluation processes (Baach 2012), which may have come to constitute the largest table-top civil emergency exercises in Europe (Interview, Berlin, April 2013). The exercises, which approximately take place every two years, seek to address new threats and unconventional challenges, as in the case of cyber threats, or are inspired by recent events, as in the case of food contaminations (EHEC). BBK officials underline that LÜKEX helps to upgrade the emergency preparedness of German states, many of which have not experienced major or new security challenges in recent years, in a relatively cost-effective manner.²⁷³ Yet critics have pointed to

²⁷³ Workshop with participating administrators, Mai 2012

the overly formalistic bureaucratic approach of the exercises (Borchers 2012) and the lack of follow-up or investment at lower levels of government (Interview, telephone, March 2013).

3.1.2 Limits to national capacities

To date, Germany has not required more than local cross-border assistance. To date, the declaration of disaster alerts at local and regional levels, which activated provisions of mutual administrative assistance and crisis management task forces, but left the existing institutional order in place, has been sufficient.²⁷⁴ German civil security officials therefore regard the country to be comparatively well equipped and point to various improvements in coordination processes since 2002, while the traditional strengths of a decentralised structure allows for very fast reactions that are based on in-depth local knowledge (Interview, Hamburg, December 2012) . However, a real test of the reformed system is still to come (Interview, Bonn, April 2013) and new limits may emerge in the future. This may be due to the pressure on the membership of voluntary organizations in civil security (section 2.4.1) as well as to exceptional crises that reach across several German states and/or present novel challenges, such as a wide-spread and sustained power cut (Deutscher Bundestag 2011a). The relatively recent end of the mandatory conscription system in the German armed forces and Germany's growing involvement in international military missions further cast doubt over the future availability of military capacities for exceptional domestic disaster assistance (Blechschmidt 2011).

3.2 Efficiency

Due to the fragmentation of civil security tasks across levels and issue-areas there is no overall civil security budget. The lack of data causes problems for assessments and planning as even civil security agencies do not have exact numbers for overall spending or available equipment (Dombrowsky 2011). Under these constraints, the following represents the best possible estimate. In 2012, the federal government allocated 281.2 million EUR for its main civil protection and disaster management agencies (102 million for the BBK, 178.6 million for the THW). These federal spending levels have remained relatively stable over the last four years. Expenditures at lower levels of government, which bear primary operational responsibility for crisis management, cannot be identified with sufficient precision to calculate aggregate figures. Senior officials have the impression that the majority of German state governments decreased their organisational and administrative capacities for disaster management over the last two decades (Interview, Hamburg, December 2012, Interview, telephone, March 2013), though the level of spending and resulting equipment vary considerably among states (Interview, Berlin, April 2013). First responders and fire brigades are mainly financed by local authorities, where expenditures are hardly accessible. Nonetheless, the German statistical office estimated for the year 2004 that 3.3 percent of total

²⁷⁴ As just described, the most severe capacity limitations as during the Elbe flood could be addressed with the support of military actors under civilian control. Sections 1 and 2.2.2 elaborate why Germany has not formally declared a state of emergency, which would allow a more far-reaching activation of military resources and derogations of civil rights.

public expenditures (approx. 1070 billion EUR at all levels of government) have been devoted to internal security. Among the resulting total sum of 32.4 billion EUR, approximately 3.8 billion or 11.7 percent were reserved for population protection (11.7 percent) (Schulze-Steikow 2007). Yet it needs to be noted that these estimates neither include civil security actors that do not fall under the authority of the BMI, such as the RKI for pandemics, nor the considerable role of non-profit organisations and volunteers.

Debates on the allocation of resources within the civil security provide additional insights. As mentioned earlier (section 2.4.4), privatisation has not been widely considered for enhancing efficiency. Instead, the debate focused on the optimal division of financial responsibilities in the federal system. Federal civil defence-related capacities had been largely deconstructed following the end of the Cold War to cash in on the 'peace dividend'. Following the attacks of 11 September and the 2002 Elbe Flood civil security officials alerted to the consequential losses and demanded an expansion of funding for crisis management beyond the old civil defence model (Geier 2002, Läpke 2004). The resulting New Strategy on Population Protection (Bundesverwaltungsamt 2003) further stressed the need for a more targeted allocation of resources across all levels of government. The strategy set out the vision of four categories of emergencies or crises, for which matching complementary capacities should be provided at different levels of government, reflecting the bottom-up scaling of crisis response operations discussed earlier. From the perspective of the German states, a matching financial arrangement with increased federal support would form the basis for a stronger central coordination powers in civil protection (Interview, Berlin, April 2013).

By 2007 the BBK and the IMK agreed on a new concept for complementary federal funding for state-level civil protection mechanisms (BBK 2008b). In the new concept, the federal level (through the BBK) decreases its general support for regular emergency response capacities that had previously been formed with a view to civil defence, but focuses on the maintenance of specialized resources that are shared with states and local governments in exceptional crises (BBK 2010c, BBK 2012). In particular, so-called Task Forces are formed with a view to CBRN attacks and the occurrence of masses of injured and sick persons (Meyer-Teschendorf 2009, p. 1224). Professional associations and regional actors criticised this reform in light of the intensity of regular emergency task (Arbeitsgemeinschaft der Berufsfeuerwehren in Nordrhein-Westfalen 2006), so that a compromise solution maintained some general federal funding for the acquisition of fire engines across all of Germany.

Thus, the allocation of resources of financial resources in civil security by the federal level remains torn between efficiency-driven and political considerations. The current funding regime also perpetuates legal uncertainty, since the constitution stipulates that each level of government has to bear the costs emanating from its exclusive competences (Art. 104a). Subsidising states for general crises preparedness and response, including victim compensation, could be seen a hidden extension of federal competences (Musil and Kirchner 2006, p. 388) or as state action in a "constitutional twilight zone" (Kloepfer, 2007 p. 175). Overall, German civil security professionals remain divided on the question whether their system needs to direct more attention and resources towards exceptional scenarios to avoid potentially catastrophic losses (Interview, Berlin, December 2012), or whether efforts should go into supporting the hitherto relatively effective decentralised capacities for emergency management, as many communes and state governments are under considerable demographic and economic pressures.

3.3 Legitimacy

3.3.1 Political support

While 9/11 generated heated controversies over the best way to prevent and prosecute terrorist crimes (Albrecht 2010), most political actors accepted the view that Germany might become a target of attack and therefore needed to review its response mechanisms (Hanning 2008) that had been cut back after the end of the Cold War (Freudenberg 2011, Interview, Bonn, April 2013). The New Strategy on Population Protection (section 3.2.), which soon emerged as the focal point in the area of civil protection, built on previous internal discussions that challenged the strict division between civil defence as a war-time task of the federal government and general crisis management as a civilian task of lower levels of government (Interview, Bonn, November 2012). Thus, the New Strategy redefined civil security as a "joint task" of the federal level and the states and offered the term "population protection" (*Bevölkerungsschutz*) to capture the overarching nature of the field (Bundesverwaltungsamt 2003).²⁷⁵

The 2002 Elbe flood further accelerated reform. The Elbe flood did not only cause shock due its massive size (coined a "flood of centuries"), but coincided with a period of electoral campaigning at the federal level. The main political parties in Germany competed with each other in demonstrating their commitments to help the affected communities, leading to major financial assistance and tax breaks that were intended to stimulate reconstruction and recovery (Müller 2011). The personal visit of Chancellor Schroeder to the affected areas and the relatively effective flood response significantly contributed to his re-election (Zeit Online 2012).

However, perceived problems in regional and national disaster assistance that were outlined in the Kirchbach report (section 3.1.1.) underlined the need to forge closer links between different levels of government needed to be forged. The federal government first entertained a constitutional revision to institutionalize broader assistance and coordination functions by the federal level that would effectively abolish the two-tier structure in German civil security. In turn, some states suggested the abolition of the federal level's competence for wartime civil protection and even the complete breakdown of the THW into state-level associations. Eventually, the German states asserted their prerogatives and stressed the benefits of a decentralised approach to crisis management (Meyer-Teschendorf 2008, 2009), even if they

²⁷⁵ See section 2.2.1. and 2.2.3 on the related institutional reform efforts, such as the creation of the BBK and the partial revision of the federal legal framework.

agreed to the creation of the BBK, continued support to the THW and allowed some additional coordination competences of the federal level (section2.2.3). After the initial phase of high-level political interest, this result could be attributed to the internal competition of officials within Germany's federal political system rather than as the result of a wide political debate (Carstens 2005).

In sum, since 2002 and the Elbe flood the German system for crisis response and disaster management has not been subject to major political debate between the main political parties (Interview, Bonn, November 2012). However, the debate over the optional division of competences between different levels of government has not been fully resolved and continues to influence political decisions on funding and institutional competences, possibly to the detriment of focusing on substantive challenges to emergency and crisis management (Interview, Berlin, December 2012). There have been no collapses of government or resignations of major political figures due to crisis management failures apart from some local instances such as the removal of the mayor of Duisburg following the *Loveparade* stampede there (section 3.3.3).

3.3.2 Legal support

Germany prides itself on strong judicial oversight structures, which is exemplified by the internationally recognised role of the German constitutional court (*Bundesverfassungsgericht*). There has been some concern among lawyers about potential legal vacuums and loopholes in civil security law, for example for the case of epidemics, despite the possible intrusiveness of disaster response measures for civil liberties and human rights (Trute 2005). Yet, these concerns, so far, have not been subjected to judicial scrutiny by German courts. Rather, the Constitutional Court monitored and renegotiated the structural principles of divided civil/military competences. This question is traditionally highly contentious due to Germany's historical experience during World War II. The attacks of 11 September 2001 led to calls for the employment of the *Bundeswehr* to protect potential targets, such as government buildings, and assist civil security agencies in the response to attacks, for instance through its CBRN capacities (e.g. Schily 2005; Schäuble 2007). These expanded competences were seen by critics as an attempt to undermine the constitutionally-mandated separation between internal and external security and between the police and the military (Wiefelspütz 2007).

The most controversial debates pertained to a law that would have allowed for the shooting down of hijacked airplanes. The Aviation Security Act, which was passed in 2005, was declared unconstitutional by the Constitutional Court only a few months later because it violated the right to life and especially the right to human dignity, which is enshrined in Article 1 of the Basic Law. According to the court, authorities could not pit the dignity of people in a potential target of the plane against the dignity of the people on the plane (Bundesverfassungsgericht 2006). In more recent decisions from August 2012 and April 2013, however, the Constitutional Court decided that the armed forces can use special military weapons (e.g. fighter jets) within Germany in "extraordinary exceptional situations of catastrophic scope" as a last resort

(Bundesverfassungsgericht 2012, 2013). The long-term repercussions of this partial reversal with regard to the division between military and civilian competences in crisis management remain unclear at the time of writing. Critics highlighted the ambivalent formulations and the surprising public "indifference" regarding this traditionally highly contentions questions (Janisch 2013).

Judicial control has also been exercised at lower levels of government and in response to more common threat scenarios. In 2010 a stampede at a popular concert (*Love Parade*) in the German city of Duisburg, caused 21 deaths and several hundred casualties, and subsequently triggered extensive investigations into possible criminal responsibility of the event organisers and supervising public authorities (WAZ 2012). There were indications that the deaths were partially attributable to general organisational problems and careless planning (Bergamin 2012). However, previous legal cases in Germany suggest that direct criminal liability may be impossible to establish (N-TV 2012).

3.3.3 Popular trust and support

People in Germany generally consider themselves to be safe (compare section 2.3.1.). According to a poll by the Social Science Institute of the Armed Forces (Bulmahn 2010) 12 percent of German citizens feel very safe, 43 percent safe and 34 percent rather safe. Natural disasters are perceived as a mid-level risk by German citizens, whereas potentials terrorist attacks with CBRN weapons are among the higher ranking fears. This indicates that public opinion has been significantly influenced by the high media and political attention to terrorism over the last decade, even if the number of fatalities and material damages by terrorism remained very low. Overall, however, there are no systematic polls on the change of public attitudes in response to specific signature crises, such as the 2002 Elbe floods.

However, the reaction of the German public to the 2011 Fukushima disaster was clearly exceptional. Over the last three decades, Germany has become characterised by an increasingly critical public discourse on environmental and technological dangers, particularly with regard to nuclear energy and waste (Gleitsmann 2011). In the aftermath of Fukushima, the governing Christian Democrat Party, which had previously defended nuclear power against the Greens and the Social Democratic Party, took the dramatic decision to shut down all nuclear power plants over the coming decade, which was deemed to be necessary to reassure the public (Hennicke and Welfens 2012). In addition, the aforementioned mass panic at the *Love Parade* led to a significant popular reaction. The mayor of the city of Duisburg was severely attacked by citizen's initiatives and eventually removed from office by means of a popular referendum. This local referendum, which is an uncommon instrument the German political system, achieved a high level of voter turnout and was widely regarded as a positive experience that restored popular trust (WDR 2012).

The importance of voluntary engagement in Germany's civil security (section 2.4.1) is often cited as one of its main sources of legitimacy. According to the available data, non-profit organisations can draw on about

520,000 active volunteers, many of which contribute a substantial number of service hours per week. Volunteer figures or estimates provided by individual organisations are as follows: the DLRG has 40,000 active members (DLRG 2011, p. 16), the DRK 401,113 (DRK 2012, p. 55), the Malteser 35,000 (Malteser 2012), the JUH 29,738 (Die Johanniter 2012, p. 28), the ASB 12,559 (ASB 2011) and the 800 (DGzRS n.d.).²⁷⁶ The THW adds another 80,000 volunteers, approximately 40,000 of which are active personnel for crisis tasks (THW 2011, p.7). Numbers on participation in voluntary fire brigades are based on less reliable estimates due to their strictly decentralized organisation. According to an estimate by the BBK, there are about 1.8 million registered volunteers in the German civil security system (BBK n.d.d), which results in an estimate of 1.2 to 1.3 million volunteers in fire brigades if one subtracts the members of voluntary organisations and the THW as listed above. Hence, there are about 22 volunteers per 1,000 capita. There is no data on the effect of volunteerism on the handling of a particular crisis but the high numbers of voluntarism is also regarded as cost-effective way of civil security provision (Hartmann and Krapf 2009).

However, voluntarism in Germany faces severe challenges from wider trends such as demographic change, domestic migration and growing work demands. Despite state subsidies the private organizations depend on membership fees, voluntary donations and the willingness of members to invest their leisure time as only voluntary fire brigades can rely on guaranteed leaves of absence for their members in the case of crises. Their work, thus, requires a great amount of trust and regular engagement. Required stable social and institutional relationships have become increasingly under stress due to social and economic change (Jentzsch 2012), whereas non-profit organisations have been slow to respond to growing cultural diversity and the growing need to make membership more flexible and attractive (Interview, Hamburg, December 2012). Recruitment problems are especially acute in some regions of Eastern Germany, which generally suffer from a declining and rapidly aging population (Beauftragte der Bundesregierung für die Neuen Bundesländer 2010). The challenge to stimulate active participation may have also become more acute with the suspension of military conscription in 2011, as conscientious objectors would traditionally constitute a first volunteer base.

Practitioners from government agencies and non-profit groups mention this development as one of the most pressing problems of Germany's civil security system. This has motivated a large number of research projects, outreach initiatives and advancement awards, many of which are targeted at currently underrepresented audiences, such as seniors, immigrants and women (Interview, Bonn, April 2013, Interview, Berlin, April 2013). One particular initiative is the *Team Mecklenburg-Vorpommern*, which seeks

²⁷⁶ It needs to be underlined that the accuracy of these estimates is also affected by the fact that many organisational members may be passive or fulfil other social services beyond civil security and emergency management (e.g. regular care and social support for disadvantaged people).

to register volunteers that can be called upon during crisis situations but that do want to commit themselves to long-term engagement in a non-profit organisation (Team M-V n.d.). While this is seen as a viable alternative, voluntary relief organisations are concerned that this erodes their traditional model of formal involvement, which is believed to entail a broader societal mission (Interview, Berlin, April 2013).

4. German Civil Security in the EU Context

Germany can be considered a leading state in regular EU (and other multilateral) civil protection policies and actively contributes to the EU mechanisms for disaster assistance and the Monitoring and Information Centre (MIC). Germany, so far, has not officially requested assistance through the MIC, but contributed assistance 14 times between 2007 and 2011 alone (European Commission 2013a). The BMI and the GMLZ function as official contact points for the MIC.²⁷⁷ Reflecting the decentralised structure of Germany's civil security system and the strong role of voluntary organisations, the main contributing actor is Germany's special civil defence force, the THW, which lists 14 specialised units for the purposes of the MIC (THW 2012, p.20). The THW also regularly contributes to EU exercises (THW 2007) and research projects (THW n.d.a). Since December 2006, it has been appointed by the European Commission as coordinator for the EU Exchange of Experts in civil protection (THW n.d.b). Other German experts and officials have attended EU meetings, exercises and programmes on a case-by-case basis as well. Approximately 73 German officials participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle (Hollis 2010) and the country took part in 17 simulation exercises between 2002 and 2012 (European Commission 2013b).

German citizens' attitudes towards EU civil protection are generally friendly. In a Eurobarometer poll from 2012, the number for Germany largely mirrored the EU average. 39 percent were aware of the EU's role in this field and 82 percent (50 totally agree, 32 tend to agree) basically agreed that a coordinated response is more effective than actions by individual countries (European Commission 2012a, pp. 14, 17). The large number of neighbouring countries and Germany's central geographical position can be adduced as an additional factor for its important role in EU security cooperation.

Aside from the general challenges posed by the Euro Crisis and its consequences for political and public opinion, however, in recent years one could detect a more sceptical attitude. The long-standing domestic debate on the appropriate division of competences between the German states and the federal level in disaster management directly translates into critical positions of some German states in Brussels and a

²⁷⁷ See section 2.2.4. The BBK also maintains a special unit to improve the political coordination of Germany's international civil protection and disaster relief activities (BBK 2012).

strict defence of the principle of subsidiarity (Sheffer 2011, pp. 40-41).²⁷⁸ German officials praise the advantages of informal cross-border cooperation with Switzerland but expressed their scepticism regarding a central EU operations unit that aims to assess and handle situations "from Scandinavia to Southern Europe" (Deutsche Welle 2012). Furthermore, Germany's relatively high level of contribution has occasionally led to the perception that EU disaster assistance mainly turns into a "one way street", whereby other less capable states exploit the resources of more advanced or richer countries (Interview, Bonn, April 2013).

German authorities are aware that EU civil protection after the entry into force of the Lisbon Treaty will require some compromises in order to reconcile the imperative to maintain the traditional German system with the need to cooperate at the EU level. Operational level actors are particularly aware of the fact that the current system of voluntary contributions to the MIC is often too slow and would benefit from further standardisation, as in the envisaged strengthened module approach.²⁷⁹ Nonetheless, the political level currently rather acts as a sceptical decelerator when it comes to more far-reaching EU initiatives (Reichenbach 2007).

In sum, Germany supports enhanced information and coordination procedures in EU civil protection, which could also help to improve some of its national coordination processes. It sees most value-added for the EU in areas like training, research and information exchange. However, Germany strictly opposes any plans for a central operations command in Brussels and prefers building national capacities over creating centralised EU resources (Schmidt 2009, pp. 3-5), be it due to the political principle of subsidiarity or due to efficiency and effectiveness concerns.

5. Conclusion

Germany boasts a civil security system that can effectively respond to all major emergencies and crises that could typically be expected on its territory. This is evidenced by the lack of major legitimating crises or requests for external assistance during the last decade. Instead, during this period Germany regularly supported other European states in disaster management. The shocks of 9/11 and the 2002 Elbe flood, which stretched Germany's civil security system to the limit, led to a series of reforms that strengthened coordination structures, communication and risk assessment processes. Even though the debate on the appropriate division of competences between the federal and state level has not been fully resolved, these reforms helped to ensure a high level of capacity in response to more demanding crises. With few

²⁷⁸ One interviewee explained that Brussels could not have more coordination powers than the BMI or the BBK (Interview, Bonn, April 2013).

²⁷⁹ This divide is also reflected in diverging opinions among political actors and the leadership of the THW, where there is a realisation of the need to build more alliances with several European member states to shape the development of EU civil protection cooperation in a constructive manner(Interview, telephone, March 2013)

exceptions, policy-makers and security professionals continue to regard Germany's historically grown and decentralised structures for civil security as exemplary.

These professional perceptions tie in with comparatively high levels of public trust and legitimacy. In this context, the strong involvement of voluntary organisations in Germany's civil security system contributes to maintaining the link between society and official security actors. However, wider social and economic changes may gradually undermine the willingness to serve as volunteers in such formal institutionalised settings. Security professionals also worry that German citizen's may become victims of success – that is, absence of major disasters and effective day-to-day emergency management may result in a lack of knowledge, awareness and interest for crisis management among the wider population. This is aggravated by the lack of relevant programmes for public education and popular exercises. Combined with the suspension of military subscription in 2010, which provided a constant stream of conscientious objectors that would serve in non-governmental organisations, it is therefore open to question whether the German civil security system can maintain its current structures over the next decade.

Over the short to medium term, new threats and hazards call for further partial reforms in specific areas of Germany's civil security system. Most recently, this emerged during the assessment and risk communication process on health threats, such as H1N1 or EHEC. German security professionals continuously seek to improve management and coordination processes, while avoiding the politically sensitive issue of formal legislative competences. Current initiatives to streamline risk assessment and capacity planning for civil protection that are led by the BBK add to completed reforms, such as the creation of a common situation centre and several electronic communication platforms. Regular high-level table-top exercises have also been helpful to explore new civil security challenge, such as cyber-security. While Germany's decentralised structures retain strong benefits (fast response, deep local knowledge, popular support), some commentators nevertheless worry that Germany remains too exposed to increasingly demanding scenarios, such as large-scale power and infrastructure failures (Reichenbach et al. 2008). But it is also important to remind arguments by critics who warn against speculative risk scenarios that lead to unwarranted fear and overreaction that may ultimately alter the foundations of Germany's civil security culture and that can only be countered by an open democratic debate about the risk to be prevented and the measures to be taken (Daase et al. 2012).

One way to handle new and exceptional risks may be to rely on European and international cooperation in crisis management. Germany has long been actively involved in such international exchanges and missions, particularly via its civil protection forces. However, the majority of Germany's emergency response and crisis management personnel and structures remains oriented towards local and regional issues. German policy-makers also express a growing dissatisfaction with the perceived performance of some European member states in civil security, which adds to growing Euro-sceptic attitudes after the

financial crisis. Therefore, the continued and deepening involvement of Germany in mechanisms of European disaster management should not be regarded as self-evident.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 GERMANY

1	Introduction	Scoring instruction	Score	Source	Comments
			-		
1. a	Is there an official/formal	No = 0	0		
	definition of crisis?	Yes = 1		see section 1	
		A 4111			
1. b	Is the crisis management	-	2	see section 1	
	approach primarily based on military or civilian operations?	Civilian = 2			
1.c.	If civilian operations dominate, is	No = 0	1	see section 1	
1.0.	the military used for support for	In exceptional situations = 1		see section 1	
	crisis management operations?	Regularly = 2			
		Regularly = 2			
1.d	Does the country take MAINLY	Mainly all hazard = 1	1	see section 1	
	an all hazards/generic or	Mainly specific threats = 2	-		
	MAINLY a specific/functional				
	threats approach to crises and				
	disasters?				
2	Analytical dimensions	Scoring instruction	Score	Source	Comments
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1	2	see section	
		Federal = 2		2.1.1	
2.1.1.b	Is the political system	Parliamentary system = 1	1	see section	
	parliamentary or presidential?	Presidential system = 2		2.1.1	
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1	2	see section	
		Republic = 2		2.1.1	
2.1.1.d	Is the political system a	Consociational democracy	1	Lehmbruch	
2.1.1.4	consociational or a majoritarian	= 1		2000	
	democracy?	Majoritarian democracy = 2		2000	
2.1.1.e	Is delegation constructed in a	Top-down = 1	2	see section	
	top-down or bottom-up fashion?	Bottom-up = 2		2.1.1	
		Both = 3			
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national		35	http://geert-	
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		35	http://geert- hofstede.com	

				<u>ml</u>	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		67	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		66	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		65	http://geert- hofstede.com /countries.ht ml	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		31	http://geert- hofstede.com /countries.ht ml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		?	http://www. worldvaluess urvey.org/	No consolidated figure available for Germany
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		?	http://www. worldvaluess urvey.org/	No consolidated figure available for Germany
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	3	See section 2.2.1	
2.2.1.b	When was the last major reform in the civil security field undertaken?	-	2003		Establishmen t of BBK, ZSKG, new guiding strategy

2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	_	1	see section 2.2.1	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	see section 2.2.2	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		1	see section 2.2.1	
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?		3	see section 2.2.2	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	2	see section 2.2.2	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?		1	see section 2.2.3	ВВК
2.2.3.b	Are there specialised agencies for crisis response at the regional level?		0	see section 2.2.3	
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No=0Bylaw=1By executive mandate = 2	0		
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number	2	https://www. denis.bund.d e/luekex/	LÜKEX 09/10, LÜKEX 11
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	1	see section 2.2.4	TERREX 12
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?		1	BBK 2008	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	3	BBK 2008	Hungary Lithuania, Russia
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management	Register the number.	4	see section 2.2.2	Council of the Baltic Sea States, EU,

	(i.e. not general conventions on environmental protection) is the country part of?				NATO, UN
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"		0	see section 2.2.2	
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	see section 2.3.1	
2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	0	see section 2.3.2	
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3		
2.3.2.c	Does the government have a central website with updated information on crisis events?		2	https://www. denis.bund.d e/index.html, see also section 2.3.2, see section 2.3.2	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?		0	see section 2.3.2	There are some pilot projects and development projects, but this has not yet reached a systematic

					level
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	0	see section 2.3.2	The new MoWaS system is under development but not yet implemented
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		0	see section 2.3.3	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To members and wide- spread training programmes for general population = 3	2	see section 2.3.3	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	0	see section 2.3.3	
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		1		
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	123.000.0 00	http://www.b mbf.de/de/6 293.php	
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?		1	see section 2.4.1	
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1	2	see section 2.4.1	

		In (almost) all aspects of			
		civil security = 2			
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?		1	see section 2.4.2	
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	1	see section 2.4.2	
3 3.1	Quality measures Effectiveness	Scoring instruction	Score	Source	Comments
5.1					
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	0	see section 3.1.2	
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	-	0	see section 3.1.2	
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	2000-2012. If there are no	n.a.		
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	1		Establishmen t of BBK, ZSKG, new guiding strategy as one process
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.	1		Elbe flood 2002

3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?		0		Kirchbach report conducted at the provincial level.
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?		0		
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	2	see section 3.3.2	
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	2	see section 3.3.2	
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?		1	see section 3.3.2	
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	62	Special Eurobaromet er 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	66	Special Eurobaromet er 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?		0		
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011			
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector?	Register the number per 1000 capita for 2011.	21.94	BBK n.d.e, see section 3.3.3	Only estimation. No formally collected data.

4	Civil security in the EU context	Scoring instruction	Score	Source	Comments
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	0	European Commission 2013a	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	14	European Commission 2013a	
4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis 2010	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009- 2010 training cycle?	Register the number for the 2009-2010 training cycle	73	Hollis 2010	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	17	European Commission 2013b	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	2	European Commission 2013c	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	610,9	European Commission 2013c	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	39	Special Eurobaromet er 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	82	Special Eurobaromet er 383 (2012)	

Annex II: H1N1 in Germany

During the 2009 H1N1 crisis, operational responsibility, including for the ordering of vaccines and the practical organization of vaccinations, rested with the Ministries of Health in the states and their respective adjunct agencies at the district and municipal level. Länder ministries regularly coordinated their activities through the Health Ministers Conference. The federal government was chiefly responsible for the monitoring and assessment of the country-wide state of epidemic risks and the issuing of respective scientific advice. The RKI, which is subordinated to the Federal Ministry of Health, was the central coordinating agency at the federal level. One of its subsidiary bodies, the Permanent Vaccination Commission, which convenes experts from public health authorities and academia, was responsible for the adoption of recommendations regarding the purchase of vaccines and respective vaccination campaigns. However, despite the countrywide nature of the epidemic the RKI and the commission could only advise state governments upon request without the power to intervene or issue orders autonomously (Walus 2010, p. 129). Thus, H1N1 illustrates that some specialized crises, including epidemics but also nuclear incidents, are subject to special institutional arrangements beyond the main civil security agencies, such as fire brigades or the BBK. The institutional setup confirms the general patterns of functional multi-level coordination and interwoven politics despite formally divided competences. The lack of central federal coordination and emergency decision-making during nationwide epidemics has been cited as a weakness requiring some kind of remedy (Walus 2010, pp. 131-133). Moreover, the coordinating function of the RKI and the Permanent Vaccination Commission indicate that private experts play a strong role and enjoy some authority in areas pertaining to uncertain and complex risks.

In June and July 2009, German authorities reacted to the global vaccination recommendations issued by the World Health Organization (WHO) and the domestic public debate about first instances of H1N1 infections. On 24 July 2009, Germany ordered 50 million units of vaccine, following the WHO guidelines. The purchase was coordinated and ordered by the Ministry of Health in the state of Thuringia, which at the time held the rotating presidency in the Conference of Health Ministers. Since the destined vaccine, *Pandemix*, was not yet officially licensed by the time it was ordered, the vaccination campaign was scheduled to start not before October. There were fears that the delay might cause a high number of additional contagions during the remaining months. In his public statement, the Ministry of Health in Thuringia stressed that public health agencies were well prepared for a possible increase in infections and even more vaccines could be ordered, if needed (Spiegel Online 2009). On 12 October, the Permanent Vaccination Commission recommended vaccination only for special groups, such as people with chronic diseases, pregnant women and public health personnel. The decision was communicated through an official bulletin to the media and the public. The bulletin stressed that the advice was based on more uncertain data and projections than usual announcements, but vaccination was still recommended despite

signs that the number of infections was not reaching the degree anticipated in the summer (RKI 2009). Hence, the responsible authorities expected a major epidemic and aimed to ensure the public that enough had been done to prepare for such a case.

Eventually, the number of infects remained way below the anticipated scenarios and the bulk of the vaccines was not needed. According to the RKI, there had been 225,828 registered infections between April 2009 and February 2010 and 241 fatalities, of which 189 suffered from pre-existing illnesses. Hence, the numbers did not vastly exceed those during other regular influenza epidemics (RKI 2010a, p. 4). In a representative poll conducted during March and April 2010 80 percent of the respondents said they had never regarded H1N1 as a serious personal risk and 78 percent declared that they had always felt able to make an informed decision on a potential vaccination. The poll showed a rather low rate of vaccination that remained significantly below initial expectations (RKI 2010b, p. 1). 29 million out of the 34 million units of vaccine that were actually purchased by the Länder remained unused. Public authorities, apparently, had overestimated the demand after the initial attention ceased during the fall and winter of 2009. Eventually, the Länder governments had to destroy the remaining vaccines since their durability expired in November 2011. The Länder were left with costs of 239 million EUR. The federal government refused to provide financial support even though it has recommended the start of vaccination campaign (Süddeutsche Zeitung 2011).

The handling of H1N1 led to public debates but did not translate into political inquiries or reforms. Critics raised allegations that public health agencies at the federal and state level consciously inflated the risk of an epidemic in response to pressure from the media and the pharmaceutical industry and without sufficient scientific evidence. In October 2011, *Transparency International* wrote an open letter to the Conference of Health Ministers, in which it demanded a public investigation, as already conducted in other countries, and the unveiling of decision rationales and costs (Transparency International 2011). This call remained largely until today. From a broader perspective, crisis management and communication in regard to H1N1 showcased more general cultural dynamics and patters through the adherence to dubious scientific expertise in the WHO, the pathologies of the general precautionary principle and the "securitization" of public health (Abraham 2011, Durodié 2011).

Annex III: Resources

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BMI, Bonn, 2 April 2013

DRK General Secretariat, Berlin, 3 April 2013

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Hungary

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Executive Summary

The present study describes the civil protection structure of Hungary. The main rules and responsibilities are formulated in the New Fundamental Law, and the Disaster Management Law (both issued in 2011). In Hungary, disaster management executive responsibility and the highest level of decision making rest at the highest level of government with the minister of the interior. Regional and local levels are represented by defense boards, and settlement level by mayors. The disaster management authorities' network is hierarchical and consists of the National Directorate General for Disaster Management (NDGDM), county directorates and local branches, and belongs under the supervision of the Ministry of Interior. Both governance and the authorities' organizational approach are basically top down. However, opinion and influences are accepted from lower hierarchical levels. The disaster management system is based on an all hazard approach, with recent changes leading to a more centralized organizational structure. The Ministry of Interior prepares reports on disaster management performance (risk assessment, preparedness and response assessment). Primary response and preparation rests at local level – the first actions are done by the mayors. The disaster management system changed in 2000 (with the establishment of the disaster management authorities), before and following 2004 (along with EU accession and law harmonization process), and most recently in 2012. The latest change included responsibility related issues, industrial safety issues, organizational issues and task division during disaster response.

Disaster planning is based on risk assessment starting at settlement level. Disaster prevention plans are prepared at all levels. Communication during crisis response is coordinated by the disaster management authorities (NDGDM and regional directorates). However, all actors of disaster management are involved in crisis communication. The central and regional directorates coordinate the cooperation with other organizations like army, national rescue organization or police. Some of these organizations are named in the disaster management law.

Hungary has cooperation through bilateral agreements, regional agreements, and EU mechanisms.

Hungarians have civil protection obligations; on the other hand, they expect the state to protect them while a majority doubt if the country is able to do so without external help.

Education rests on the NDGDM and regional disaster management directorates. A new system has been introduced for integrating disaster management into all levels of education and to raise awareness. The private sector is present in civil security via NGOs (humanitarian help, rescue, education) and private companies (logistics, education, special services), based on agreements with authorities.

The disaster management system was recently changed. The changes were supposed to increase effectiveness of the disaster management system. These changes were motivated by a number of signature crises in the recent past (floods, severe thunderstorm in Budapest 2006, red sludge disaster in 2010). These events were investigated and suggestions considered during formulation of the recent changes in the DM system.

Improving efficiency has also been an important aspect of the disaster management reform. Generally the sector has always had a shortage of finances. There have consequently been measures towards cost efficiency, such as a more centralized system, IT reform and a requirement for DM directorates to compile efficiency reports. Privatization and outsourcing have also just been started, and there is potential for more development in this area. Though there have been no governmental crises connected to disaster management, high level leaders have been changed. As a result of many events during the last few years, a number of inquires and ombudsman investigations have been completed. These cover financial issues (lack of money in several sectors), organizational and legally unclear points (lack of defense plans, or coordination discrepancies), education and awareness related issues, and industrial supervision related topics. Some cases have ended in court decisions.

Key Findings

- Substantial reconstruction of the crisis management system. In Hungary from 2012 there has been a new crisis management system introduced. It has involved a substantial reform compared with the previous system. Based on a critical evaluation of the former system, the new system is more centralized and involves new institutions (the disaster management referee). The system is new – still flexible, and it is difficult to assess it but the case study shows that a substantial change of the system is possible.
- 2. Professionalization of crisis management. An important element of the new crisis (disaster) management system has been institutionalizing the help to politicians to fulfill crisis management related tasks and decision making. From 2012, a new position of the disaster management referee is established. They are employees of local governments, trained for helping the mayors in crisis management tasks. Their duties include: cooperating with crisis management authorities, preparing risk assessment plans and disaster prevention plans. They are trained by the Education Center for Disaster Management. The reasons for establishing the position of referee was related to the cases when mayors did not have qualifications for disaster response. During an emergency state the mayors' executive responsibility is overtaken by the directors of crisis management of the local authorities. In this way it is ensured that the response can be done by professional experts, timely and accurately.
- 3. Clarification of responsibility. The new crisis management system introduced in Hungary in 2012 clarified the supervision over related institutions in disaster management and in industrial supervision. As the disaster management system has many supervising institutions, in case of a disaster there is a leading supervising institution. In such a way the appropriate response as well as a clear responsibility line is kept. This is of special importance in the case of supervision of industrial objects obtaining permissions from several institutions (environmental, mining directorates, local authorities, etc.) in order to avoid discrepancies (like in the case of the red sludge disaster) it is important to have one authority for supervising.
- 4. Extraordinary state supervision of a private company after the red sludge disaster. Following the red sludge disaster in Hungary in 2011, the Magyar Aluminum Company was taken under "state supervision". A governmental commissioner was appointed for supervising the company, and this commissioner reported to the prime minister. This supervision lasted for eight months. Neither in Hungary nor in other EU countries has there been such a case before; at that time in Hungary the legislative background for this was also not available (in the new disaster management law it is already mentioned). The supervision was decided since in a typical company there is not enough capacity and knowledge to handle disasters (as it was the case at Ajka). Moreover the employees were under pressure, and not fully qualified for disaster response measures. The state supervision over the company after the disaster prevented it from going into bankruptcy. In this way financial responsibility could be attributed for the damage. Additionally the company, as an important employer of the region, could function further.

List of Abbreviations

DMDisaster Management (Crisis Management)NDGDMNational Directorate General for Disaster Management Ministry of InteriorMICMonitoring and Information Centre

1. Introduction

Hungary has always been endangered by natural disasters. As the country has a downhill character, the most frequent and typical crisis type is flood. Flood protection has thus historically been an important task for its inhabitants. The two largest rivers are the Danube and Tisza. Over 50 percent of the overall territory of Hungary, including two thirds of the arable land, is endangered by flood hazards. On the Danube with a 10 -12 year interval and on the Tisza every 5-6 years, there are larger floods (Janik, 2006 pp.71-76, Vari, 2002). A notable flood in Budapest in 1838 destroyed a large part of the city, while in 1879 the city of Szeged was inundated by the Tisza River. These events resulted in river regulations. More recently, especially severe flooding occurred in 1970 (300 people died).

Temperature extremes and storms have become more frequent (see Table 1 below). Among technological disasters, a potential danger can be related to the nuclear industry (three nuclear power stations; one in Hungary, two in the vicinity) and dangerous waste deposits (4.2 million tons of waste stored). For the public memory, however, the most shocking recent disasters have been the severe thunderstorm in 2006 (which hit a celebrating crowd in Budapest) and the red sludge accident in 2010 (which resulted in a restructuring of the disaster management system in Hungary).

Disaster	Date	Category	No. Killed	No. affected
Extreme temperature	Jul-2007	Natural disaster	500	
Extreme temperature	Dec-2001	Natural disaster	81	
Extreme temperature	27-Dec-2005	Natural disaster	48	
Extreme temperature	Jan-2008	Natural disaster	17	500
Industrial Accident	4-Oct-2010	Industrial Accident	9	7,270
Flood	15-May-2010	Natural disaster		5,200 ²⁸⁰
Flood	28-Mar-2006	Natural disaster		32,000
Storm	20-Aug-2006	Natural disaster	5	300
Transport Accident	19-Jan-2006	Transport Accident	42	
Transport Accident	1-Jul-2002	Transport accident	19	32
Flood	4-Mar-2001	Natural disaster		10,000

Table 1. Disasters and crises in Hungary, 2000-2012.

Source: The International Disaster Database n.d. 2:. Ministry of Interior 2013., 3: General Accountancy Office 2010.

In Hungary, disaster was officially defined first in 1999 (Disaster Management Law 1999) and further clarified in 2011 (Disaster Management Law CXXVIII /2011). Disaster is an event that endangers people

²⁸⁰ Number of evacuated people in Table 1; numbers are different from the data given by the Commission, according to report of the General Accountancy Office (2010).

and people's goods or infrastructure to such an extent that it is not possible to cope within the normal responsibility and cooperative framework of institutions. A description of conditions related to this special legal order is given in the New Fundamental Law (articles 48-53).

Civil protection activity started in 1937 (protecting civilian life and property against air offensives during the war). In 1950 the civil protection system was reorganized with the priority task still "protection against air offensives", though often involved during other types of crisis response (under the Ministry of Defense). From the end of the 90's the civil protection law (XXXVII /1996) enumerated the main tasks of civil protection (as it is stated in the Geneva agreement). Following the disaster management law in 1999, the Civil Protection Directorate became a part of the disaster management system (Hoffmann and Nemeth 2010).

The disaster management and civil protection systems are in general separated from the army. However, in case of natural disaster the army can be involved (Defense Law 2004, later 2011 article 36/2). Army involvement can be initiated by the government or army authorities (the leader of the armed forces or the minister of internal affairs).

There are distinct institutions assigned for specific hazards. However, recent changes have led towards an all hazard approach. From 2012, all civil protection and most firefighting tasks were moved under the disaster management authorities. Also, flood protection issues of water management were moved under the Ministry of Interior (previously under the Ministry of Environment). Based on the new disaster management law, the disaster management authorities (National Directorate General for Disaster Management, NDGDM) located within the Ministry of Interior and regional directorates, have a supervising position over the cooperating institutions.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Since 1989 Hungary has been a republic with a parliamentary system, where the rules follow consociational democracy (New Fundamental Law article B 2011). Historically, Hungary is basically a unitary country where duties and competences of regional authorities have frequently changed throughout history (Balogh 2008).

Hungary's administration was established following the territorial changes after the Trianon treaty in 1929. During the Communist regime, two major administrative reforms occurred, and after the collapse of communism, the administrative institution of self governments was introduced in 1990 (1990/LXV Law). In 2003 the unified statistic EU system (NUTS categories) was introduced. At the moment an overall number of 3,152 settlements is registered in the country ²⁸¹ with the following division: metropolitan Budapest – more than a million inhabitants, 23 towns with county rights (settlements over 50,000 inhabitants), towns (282 in Hungary) and villages – (under 5,000 inhabitants, with 2,846 of these in Hungary). Hungary has a special structure since 20 percent of its inhabitants live in the capital (CSO, Documentation Center).

Local and county self governments (3,152 settlements and 19 counties) are not in leading or subordinated positions; basically local self governments have the same fundamental rights as regional self governments. Of course their competences are divided (Self Governmental Law 2011). At regional level the main

decision making body is the regional general assembly, the head general assembly of the county is chosen by the members of the assembly. Mayors of cities and municipalities are elected positions. Regions and sub-regions are not legal entities.

Crisis management structure in Hungary

The highest level of planning and coordination of disaster related actions is the government. The minister of interior is responsible for disaster management (the NDGM belongs to this ministry). The Coordination Steering Committee for Disaster Management (KKB, from 01.2012 the name was changed) is an intergovernmental committee (with several expert teams, members are ministers, the head is the premier) and coordinates the highest level decision making allowing for cooperation among several involved institutions.

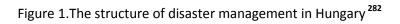
At regional and local levels, the county and local defense boards are in charge of decision making for crisis response and preparation (the structure of the boards was changed from 2012). Defense boards are under central coordination; the members are stakeholders (local authorities, representatives of disaster management authorities, army, police, health care system, water management system (Disaster Management Law 9-17 §).

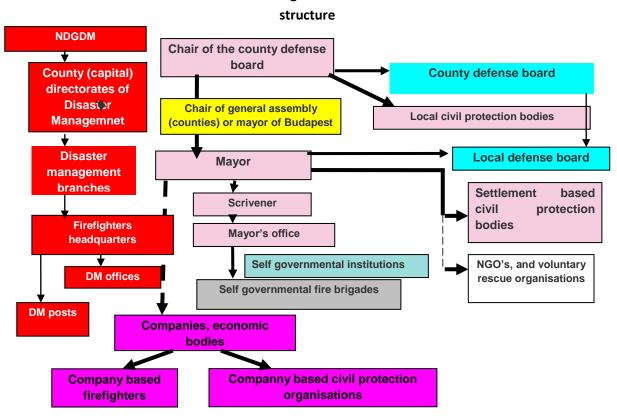
At the local level, crisis preparation and response is the mayor's responsibility. During a special order event, the mayor or the leader of the general assembly have the decision-making power, without the necessity of calling for the defense boards (at local level the representative of the disaster management authorities can replace the mayor in decision making (Disaster Management Law 46§). Local and regional defense boards coordinate the preparation, planning and response in the fields of their competence.

Official disaster management authorities are under the supervision of the minister of interior. The minister of interior is in charge of running the official disaster management institutions, and preparing reports on risk assessment and disaster management planning and performance to Parliament (DM Law 8 §). The disaster management authorities are the following: the NDGDM (central body with competence for the whole country), regional (county) directorates of disaster management (regional bodies, under the supervision of the central body), local branches and disaster management post (see Figure 1). These institutions are primarily in charge of professional disaster preparation and response, coordinating the activities of stakeholders in disaster management.

There are other stakeholders and cooperating organizations – among these the Hungarian army forces (already mentioned), rescue institutions, the national meteorological services and rescue NGO's. These institutions have agreements with the disaster management authority.

Disaster management institutions are centralized, though primary response and planning rests at the local level (with the mayors), supervising and coordination is the task of the disaster management authorities. Within the official disaster management hierarchy, leaders are appointed on a top-down basis; though initiatives are accepted from the local levels as well (website of NDGDM). In the governance of disaster management, also the top down approach is dominant, e.g. the government decides about the guidelines of disaster prevention, education and response, and coordinates the work of county defense boards and these boards coordinate the actions of local defense boards (DM Law 6-14§).

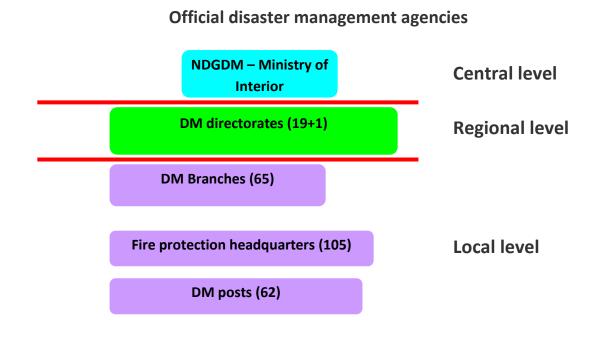






²⁸² The figure was provided by the director of the Educational Center for Disaster Management and is slightly different from the one available on the website of NDGDM.

Figure 2. Disaster management authorities in Hungary



2.1.2 Government/societal culture

Generally, Hungarians are fond of being independent. Geert Hofstede's indices (Hofstede at al. 2010) show that they believe in equal rights and it is hard for them to accept hierarchy (Power distance score: 46). Power is decentralized and managers count on the experience of their team members. Control is disliked and attitudes towards managers are informal and on a first-name basis. Communication is direct and participative. Hungary is an individualistic society (*individualism* score of 80). Hungarians prefer loose social frameworks in which individuals mainly care for themselves and their immediate families only. Hungary is revealed to be a "masculine society" (score of 88), where work gives the essence of life. Hungarians prefer avoiding uncertainty (score of 82). This indicates that there is an emotional need for rules (even if the rules never seem to work), and people have an inner urge to be busy and work hard; innovation may be resisted and security is an important element in individual motivation. At the same time, Hungary is a long term orientation culture (score on *long term orientation* was 50). The World Value Index scores of *traditional values* show a relatively low score, while *self expression values* are below zero all years measured (World Value Indices n.d.).

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

In Hungary a new crisis management (CM) system was introduced recently. From 2012, the main legislative pillars of disaster management in Hungary are the New Fundamental Law (2011/04); the

Disaster Management Law and related amendments; the Defense Law 2011 (2011 CVIII); and the government decree on the establishment, organization and operation of the Intergovernmental Steering Committee for Disaster Management (1150/2012)

At present the crisis responsibilities are relatively well defined. The institutionalization at different level is similar; this changes, however, in case of a state of emergency. Major changes occurred in 2000 and in 2012.

In 2000, the NDGDM was established by combining the civil protection authorities and the state based firefighting organizations. Following 2004, most legislative changes were connected to the law harmonization process during EU accession. In 2011, a new fundamental law and a new disaster management law were accepted. From this time, municipal firefighting bodies belong under state supervision. Part of the changes aimed at ensuring decision making is supported by specialists in disaster management. Politicians get more help in disaster related tasks, from disaster management referees²⁸³ and from the local disaster management board organization²⁸⁴. The general civil protection plan is to be based on settlements' risk categories.

There have been recent organizational changes concerning firefighting. Municipal firefighters belong under the supervision of the disaster management authorities. There are planned to be introduced new small firefighter units – with the general aim to reach all places within 15 minutes (Civil Protection Advisory Board 2012). Voluntary firefighting organizations are more restricted. Among voluntary rescue organizations, only the accredited ones can remain active (Galantai and Újhegyi 2012).

There have also been changes concerning industrial security from 2012, organizationally combined under *dangerous industry: transportation of dangerous materials, critical infrastructure,* and *nuclear safety* (Galantai 2012). An enlarged group of industrial plants and dangerous material transport belong under the supervision of disaster management authorities^{285, 286}.

Adopting and implementation of the required legislative changes is an ongoing process, and new reforms in the near future are not foreseen, apart from on-going legislative clarification

2.2.2 Political dimension

Disaster management is a task for the entire nation (DM, Law 1 §). The governance bodies of disaster management (Figure 3) and the civil security agencies (or disaster management authorities) perform all disaster management and coordination tasks in crisis preparedness and response. Executive responsibility rests on the governmental level (DM Law, 5 - 7§). The Governmental Steering Committee for Disaster

²⁸³In all settlements over 15,000 inhabitant there is an obligation to employ a security referee, who can help in case of emergency situations in the local governments²⁸³. Referees are employed by the self government, but cooperate with the fire protection headquarters; they meet the fire protection leaders monthly. About 4-5 settlements belong to one such referee. <u>http://www.kormany.hu/hu/honvedelmi-miniszterium/elso-allamtitkarsag/hirek/megujul-a-vedelmi-igazgatas-rendszere</u>

²⁸⁴ Previously the major or the leader of the county general assembly was in charge of leading the disaster management board; in the new system these leaders will be from the disaster management authorities or governmental commissariats

²⁸⁵ Apart from high threshold level companies, the industrial plants under agreement, also low threshold SEVESO category plants are supervised. Source: katasztrofavedelem.hu

²⁸⁶ So far only supervision of the road transportation; according to the new legislation all means of transportation (rail and water transport) are controlled by the disaster management authorities.

Management is in charge of coordinating duties and preparing decisions²⁸⁷. The Ministry of Interior supervises the activities of NDGDM, reports to Parliament and to the government the state of disaster management, coordinates the disaster management plans both at national and international levels, decides on international help and is responsible for disaster management regarding critical infrastructures. At regional and local levels the defense boards and the mayors have executive responsibility.

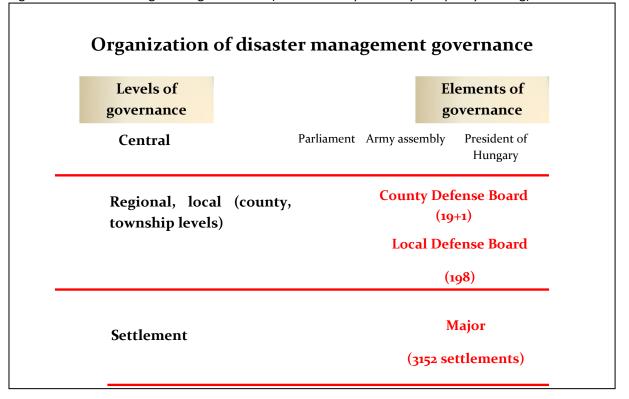


Figure 3. Disaster management governance (executive responsibility and policy making) at different levels

The highest level of disaster management policy making is coordinated at governmental level, via the Governmental Coordination Committee for Disaster Management (National Disaster Management Strategy). Proposals for policy and legislative changes in the field of disaster management are prepared by the NDGDM; these proposals are gathered by the minister who is responsible for disaster management (minister of interior). In order to assess policy implementation and propose policy changes, NDGDM establishes advisory boards out of experts (civil protection, fire protection fire investigation industrial safety technical human resources advisory boards). Advisory boards monitor the efficiency of legislation, implementation of legal obligations and prepare propositions for legislative changes. From the county directorates, propositions for legislative change get through NDGDM (Bonnyai and Ratz 2012, p15-21).

²⁸⁷ The chairman of the committee is the prime minister, and vice chair is the minister of interior (the minister in charge of disaster management), members are the ministers. The scientific background is provided by a scientific council (members are chosen based on the reference of the Hungarian Academy of Sciences) and operative coordination is fulfilled by the Emergency Management Center (NDGDM based). The committee has annual meetings (and more meetings for emergency or special situations). The committee has 14 thematic working groups.

In case of emergency there are specific arrangements in place, described in the New Fundamental Law, and in the DM Law (44-51§). These are partially on possible changes of legal order and administration, concerning private property, and partially on obligatory civil protection duties. A special case in Hungarian legislation is that in the event of a special order, private enterprises can be taken under governmental supervision (DM Law 42 §).

2.2.3 Operational dimension

According to the DM Law, NDGDM and regional directorates have supervisory competence over other institutions involved in disaster management. Some of these institutions are mentioned in the DM Law $(\S2)^{288}$. All of these institutions are independent; DM authorities supervise their DM-related performance. Apart from these institutions, elements of disaster management policy appear in strategies and plans of a wider range of institutions²⁸⁹.

Assessment of the performance of the DM system is fulfilled at different levels. DM authorities as well as the disaster governance network are under a top – down coordination scheme (Figures 2 and 3). The NDGDM activities are supervised by the Ministry of Interior; county defense boards' performance is supervised by the government (DM Law, 5§/i). Moreover, DM authorities and all other institutions are public independent economic bodies. The State Accountancy Office can assess their performance (see chapter 3.1.1). The Constitution Protection Office checks if the legal requirements of disaster management are fulfilled.

General plans and risk assessments are prepared at local, regional and national levels. Disaster prevention plans are based on risk assessments of settlements²⁹⁰. The levels of disaster risk assessment and prevention planning are the following:

- company based (company)
- settlement based (mayors' responsibility, disaster management authority and DM referee can help in this (DM Law, 15§)
- local or regional assessments and plans (prepared by the local or regional DM authority, accepted by the local defense board)
- central disaster prevention plan (prepared by MDGDM, accepted by minister of interior).

²⁸⁸ "During disaster response and recovery, the army, water management authorities, national rescue organizations, national meteorological services, National Center for Public Health Service, national tax and toll agency, economic bodies, self governments and in case of industrial disasters, the company that caused the disaster, should be involved in DM activities"

²⁸⁹ Constitution Protection Office - under their supervision, disaster management authorities work on the plan for critical infrastructure protection, and as a special service for the National Safety Transport Authority, the National Inspectorate of Regional Planning and the National Energy Office.

²⁹⁰ Settlements are divided into 3 so-called "risk categories" – according to this categorization prevention plans are prepared.

Prevention plans cover several disaster types. However, an external defense plan and a plan for protection against water damage are obligatory annexes for settlement plans. There are special thematic risk assessments and plans based on disaster types, prepared by the responsible authorities (flood protection, forest fire protection, critical infrastructure protection, landslide risk assessments and plans). During a disaster event, all actors in disaster management communication are coordinated by the official disaster management authorities. A detailed description of this will be given in chapter 2.3.2.

Logistic coordination during crisis response is a task for central and regional DM authorities. Some of the logistic duties of NDGDM are outsourced (Nepszava 2012, described in chapter 2.4). From 2012, a new information system was introduced, using a unified emergency alarm system (NDGDM n.d.).

During the preparation and response phases, at all levels of disaster management, hierarchy monitoring (assessing the reports and coordinating the level bellow) is in place. These relations are described in the DM Law.

A typical crisis occurred in 2010, when as a result of extremely long and heavy rains, several rivers flooded in Hungary. Altogether in 14 counties, 518 municipalities flooded, more than 5,200 people evacuated (Szarka, 2011), and 3,118 houses were damaged. The damage to the buildings was over 100 billion HUF (approximately 350 million euro), and the flood response measures cost exceeded 30 billion HUF (Váti - Térpont, 2012). Apart from this, the water runoff caused damage in 380 settlements. During the flood protection activities, over 21,000 persons were simultaneously involved (Szarka, 2011). During the event, flood prevention and initial protection were under the responsibility of local municipalities (based on the 1995 water management law, \$16). As long as a state of emergency was in place, the Water Management Directorate was in charge of flood protection related coordination (Szentiványi, 2011). During that time water management issues belonged under the Ministry of Environment and Water Protection, while crisis management was under the Ministry of Interior.

This event was important in evaluation of the ways to improve the DM structure. There were problems with logistics, coordination and cooperation among actors during the response. Moreover, plans for flood protection and implementation of spatial planning principles and practices were in need of reconsideration, and a necessity to work out an integrated management system was revealed (Szarka, 2012). This event was one of the causes for changes in the crisis management structure in Hungary, as it will be described in chapter 3.1.

2.2.4 External dimension

Hungary has bilateral cooperation with all neighboring countries except Serbia. Also, there are agreements with other countries such as Lithuania, Latvia, Turkey, Russia, Germany and France. The fields of cooperation are similar, stated in the agreements (Olajos, 2010). Cooperation includes actions like

common exercises, common practices in risk assessment and information systems, yearly cooperation plans, establishing mixed committees and meetings (international department of NDGDM, n.d.).

The reasons for cooperation (especially along the borders) mostly are the similarity of hazards (Csepregi, 2007) or operative considerations (firefighting). There is a regular cooperation with the neighboring countries (except Serbia) on firefighting and for actions along the national borders. So far, based on bilateral agreements, Hungary has helped in flood protection in Romania (MTI, 2005) and Serbia (MNO, 2005) and obtained help in 2010 from Ukraine (as it is described in chapter 3.1.2).

Hungary is an active participant in civil protection related activities of the EU, NATO and UN. Hungary is included in most regional cooperation schemes and is a member of the Visegrad Group²⁹¹, the International Association of Fire and Rescue Service (CTIF) and the Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE) (in this case, Hungary is not a full member but attends the meetings). Also some wider regional agreements like the Danube Region Strategy contain elements related to CM (Danube Region Cooperation, n.d.).

All international cooperation activities – either offering or requesting help from other countries (through international organizations or directly) – have to be based on a governmental decision (DM Law 5-8 and 23§). The procedure in each case is stated in the agreements and in the international organization's rules. The responsible minister for disaster management issues (at the moment the minister of interior) in cooperation with the minister of foreign affairs supervises international aid. The activities (international help and common exercises) are planned and coordinated by the DM authorities (NDGDM's international department).

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

All Hungarian inhabitants are obliged to fulfill civil protection duties (including obligatory data provision, involvement in exercises and courses, and during special order situations, help in response). These obligations are described in the new fundamental law, in the DM law, and clarified in related governmental and ministerial decrees.

Expectations and opinion on the DM system in Hungary. Similarly to other Central and Eastern European countries, a relatively high proportion of Hungarians is concerned about DM issues, especially with natural (84 percent), and man-made disasters (90 percent). Less interest is shown towards terrorist attacks and armed conflicts, (about 1/3 of the population is concerned with these issues as an area of high importance – (Eurobarometer 383, 2012, p.6-9). After repeated floods in the Tisza region during 3 successive years,

²⁹¹ For more information on the Visegrad Agreement, see case study produced under ANVIL project regional organization studies work package 3.

the inhabitants of the region complained about the lack of sufficient information concerning crisis response (Zelléri and Hornyacsek, 2007). After the red sludge disaster (2010), a poll survey showed most people were satisfied with the crisis response (Századvég, 2010). Surveys on the present DM system system are not available yet.

Most Hungarians (80 percent) believe that countries cannot face major disasters alone; 40 percent of Hungarians had doubt that Hungary has sufficient resources for this (data from 2012 Eurobarometer 383, p.20 and 2009 Eurobarometer 328 p.42).

Volunteer involvement is a priority in DM. At settlement level, volunteers can be involved directly in crisis prevention and response measures under the supervision of the mayor. Voluntary involvement can be through NGOs as well (more described in chapter 2.4.1). Poll results on willingness to help are scarce. In general, voluntary involvement is relatively high in Hungary; recently, 11 percent of adult Hungarians were involved in some sort of volunteerism (Goethe Institute 2011). Willingness to help during a crisis in smaller settlements is higher than in big cities (Takács, 2011, Vári 2002) and also increased among those with previous experience (Vári 2002).

2.3.2 Information

Following the crisis communication failure during the storm in 2006 (see chapter 3.1), a clear responsibility for crisis communication tasks is described for all DM levels. State level information on disaster preparedness is spread via homepages of DM (central and regional directories) and other institutions (National Meteorological Institute, Water Management Institute), providing updated information on threat levels. There are some special information systems, such as a meteorological warning system at lake tourist resources.

In case of an increased level of danger, all media outlets are obliged to broadcast the danger communication (DM law, 45§). Apart from this, the elements of local alarm systems (sirens), other information technological units (cell phones²⁹², Internet), local information spreading sources (loudspeakers, leaflets) or other local sources can be used (234/2011 gov. decree 34§). In smaller settlements, sirens remain the most effective alarm systems, in some cases even old systems like church bell alarms are used (Vári 2002). If necessary, firefighters and DM staff are charged with informing inhabitants about the start or end of a crisis stage, and also provide information about what people are supposed to do.

²⁹² Disaster management authorities can decide on the necessity of involving telephone or cell phone companies in alarming.

In the vicinity of high danger category industrial plants (like chemical factories or nuclear power station), special alarm system is installed. This is a combined system of loudspeakers and sirens that can be operated independent of the local power supply network (Paks Info, 2013).

Establishing and maintenance of the alarm system and an alarm plan is the task of the mayor (under the supervision of the local DM authority), and part of the DM plan (DM law 21§, 234/2011 gov. decree 39.-43.§).

Crisis communication rests on the DM authorities (NDGDM and regional directorates); their task is to formulate the messages and inform the media and the mayors on the actual state of disaster prevention. However, crisis information towards the inhabitants (during response) is a task for all actors of DM at all the levels (DM law 11, 12, 15 and 37-38. §).

Public inspections and evaluations are done by the General Accounting Office, published on the webpages of this institution. Apart from this, expenses of central and regional DM authorities are public, regularly published on their webpages. There are also annual reports of their activities, moreover in case of a disaster, evaluations of disaster responses are also available.

Hungarians exhibit less trust in crisis information from the government and NGOs (24 percent and 23 percent) than scientists or European institutions (52 percent to 34 percent respectively 2009 Eurobarometer 328, p.31). In Hungary less than one fourth of inhabitants feel informed about disaster preparedness; less than 1/3 about disaster response. This is a slightly lower proportion than the European average, but similar to the poll results from other countries from central and eastern Europe (2009 Eurobarometer 328, p. 24-27.)

2.3.3 Education

After the experience of the storm in 2006 (see 3.1.chapter), awareness-raising and education became an important priority for DM authorities.²⁹³

Previously, general requirements towards education focused on first aid exams for those obtaining a driving license (after 1993) and for employees of dangerous plants (for some staff even DM courses). Before 2011, however, there was no complex plan for education in this field. In the new disaster management system a complex action plan for education and awareness raising appeared, following a 3x3 scheme (see Figure 4, NDGDM, 2011). Awareness-raising is mainly the responsibility of the DM authorities (NDGDM, and county directorates).

²⁹³ Mate Szabo 2012, Az alapvető jogok biztosának Jelentése Az AJB-810/2012 ügyben

⁽Kapcsolódó szám: AJB 2041/2011) http://www.obh.hu/allam/jelentes/200603969.rtf

Target groups/ type of activities	Activities within the frame of school education	Teachers and education staff, other cooperative organizations training	Special targets
1	DM issues included into the general curricula	Teachers post gradual education	Special disadvantaged children education
2	Separated lectures on DM	Teachers training curricula	Mentor education
3	Special actions like "Disaster Management Day"	NGO staff training	Family training

Figure 4. The 3x3 scheme for the DM education action plan (NDGDM n.d). This is a complex plan for involving DM issues into all levels of education and adult awareness-raising.

From April 2012, elements of awareness-raising in the field of civil security were included in the national curriculum. Several educational materials for teachers are available on the homepage of NDGDM.

NGOs are involved in education via organizing DM competitions for schools training volunteers, training first aid etc. This includes a novel possibility of engaging youth in DM activities through pupils' obligatory volunteer service (described in chapter 2.4.).

Professional DM training system changes in Hungary. Professional training programs in all fields of DM and courses are organized through the Disaster Management Education Center, and the regional education centers under the supervision of NDGDM. Moreover, the center trains the public security referees for the local municipalities from 2012. Altogether, annually 6,000-8,000 persons are trained by the center (DM Education Center NDGDM, n.d.).

Apart from this, firefighters and other experts are trained at the newly established Institute of Disaster Management of the National University of Public Service. The institute was established on 01.01.2012, and the training starts in 2013 for 200 – 250 students annually (NKE n.d.).

There is also a DM research center supervised by NDGDM, mainly dealing with quality certification of equipment for DM⁻. The National University of Public Service also maintains a center for disaster related research. Within the general funding system, there are schemes like "Research and Technology" (general scheme within the Research and Innovation Fund²⁹⁴) which is a proper tool for financing DM related to

²⁹⁴ This fund is partially financed from the central budget and partially from companies' research contributions, and partially from EU sources; this fund is managed by Magyar Gazdasagfejlesztesi Kozpont company.

applied scientific projects. There are other examples for such research, like a tender call for "improvement of organizational, legislative and operational aspects of disaster management", announced in 2011 by the Scientific Committee of Disaster Management²⁹⁵.

At local level, a further improvement was required for obligatory training and exercises for inhabitants, based on the settlement risk assessment categories (Hajas 2012). Arranging these is a task of the mayor, (with the help of the public safety referee, DM law 15. §).

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organizations /NGOs)

Cooperation with non-profit organizations is a task of the DM authorities (DM law 9-12 §). These organizations have a formal partnership with NDGDM or regional DM directorates declaring the scope and conditions of the cooperation. NGOs' involvement is also included in disaster prevention plans based on their activity profile.

In Hungary the non-profit sector shows an increase both in involved persons and number of such organizations during the last 15 years. In 2010 there were nearly 65,000 registered non-profit organizations. Among them, 913 (1.4 percent) declared civil protection and fire protection activity; 2,918 (3.75 percent) organizations had activities related to public safety; while 5,749 (8.8 percent) were charity organizations. Their declared income was 0.4 percent, 0.5 percent and 9.4 percent respectively (CSO n.d.).

Humanitarian and charity NGOs, rescue teams and voluntary firefighting associations are the most important in the field of DM. Charity organizations' activity is of crucial importance in crisis management, since sometimes the public trust towards charity organizations is higher than towards other (governmental) organizations (Bartal 2012).

Charity and humanitarian organizations are involved in disaster preparation and awareness-raising (courses, brochures). As an example, in 2011 an agreement was signed with several NGOs for training teachers and pupils (Varga, 2011 p.117-120).

During the disaster response phase, collecting and dividing humanitarian aid can be organized by NGOs. During the two large disasters in 2010 (flood and red sludge disaster), the four largest NGOs signed an agreement with the Ministry of Interior on the scope of their activities during the disaster response and recompensation phases (Red Cross, 2010). During the red sludge disaster, the main NGOs established a common headquarter (Civil Humanitarian Center, with coordination of DM authorities – NDGDM, 2012).

²⁹⁵ <u>http://somogy.katasztrofavedelem.hu/index.php?subpage2=8&subpage1=6&subpage=1&contentId=3388</u>

Apart from humanitarian help, NGOs can fulfill some specialized functions, for example during the red sludge disaster they provided first-aid help for victims. The biggest humanitarian and charity NGOs are the Red Cross, Hungarian Maltese Charity Service, Baptist Charity Service, Hungarian Interchurch Aid and the Catholic Caritas.

Among NGOs there are special rescue organizations that are focused on DM activities. In April 2012, there were 63 such organizations with more than 1,000 members contracted to MDGDM. These organizations are involved in civil protection and rescue activities if they pass the national accreditation system requirements (Szent Florian portal, n.d.).

Volunteers have a long tradition in firefighting. The DM law narrowed the scope of their activities. From 2012; voluntary staff can help in rescue, while official staff in firefighting activities. Voluntary firefighters are obliged to provide data to the central disaster database. In 2012, 315 associations got support (Hoffman, I., n.d., NDGDM, 2012). Voluntary firefighter associations can be financed partially by the self governments. Moreover, for them special tenders are organized (through NDGDM), or they can of course apply for the funding sources available all NGOs. Compared to the previous status of voluntary firefighters, however, there are some restrictions that have emerged²⁹⁶. An advantage for them is that these associations are typically on-site where a crisis occurs locally. Thus they increase the safety on-site, and their role is especially important in awareness-raising and forming a cooperative society (Bérci, 2012).

Overall financial information on DM related NGO support is not available; to give some insight, the figure from Red Cross can be used. The Red Cross is the largest NGO in Hungary, with a staff of 1,240. In 2011 the number of members was nearly 130,000 (1.3 percent of the Hungarian population), with 51 percent of income from the state (Voroskereszt, 2011, Voroskereszt n.d.). 14 percent of Red Cross's expenses are related to DM. Red Cross Hungary organizes courses for volunteer training, specialized in first aid, industrial experts and water rescue training. Red Cross members take part in periodic DM exercises. In nine disaster response groups, 159 members can be mobilized immediately in case of crises (Voroskereszt n.d.). The legal base of cooperation with the DM authority is under discussion (MTI 2012 16.11.).

2.4.2 Role of profit-oriented organizations

Outsourcing activities in the field of disaster preparedness mainly includes training and logistics activities. Moreover, in the case of critical infrastructures and dangerous industries there are common exercises planned with the companies and the DM authorities. Sometimes the cooperation is connected to the supervision of certain companies dealing with security related services (fire protection equipment, checking chimney). Since the DM law and organizations are new in Hungary, many such agreements are under preparation as of yet. Financial parts of the agreements are not available.

²⁹⁶ Voluntary firefighters can no longer operate free of road fees; they cannot use alarm signals, and cannot receive old equipment from official firefighters

The training for the fire protection exam is done by private firms. The registration of training organizers and examinations is coordinated by the fire prevention department at the county (capital) directorates (Varga, 2012).

Based on the implemented SEVESO directive, industrial plants have an obligation to prepare internal security plans, periodical risk assessments and security evaluations, and in case of any accidents a special report (DM law 26-40 §, NDGDM, n.d.). Similarly, critical infrastructure security analysis is a requirement. The planning and supervising activity is fulfilled by experts (companies) that are registered on the homepage of NDGDM. Apart from this, companies often offer help in some fields of disaster preparation and rescue. An electricity utility company co-finances rescue machinery for road accident technical rescue; other companies borrow special machinery for firefighting (Berczi 2011 p8). The Hungarian rail companies (Kisalfold announcement 2012), airports (Varga 2012 p 80) have signed contracts with disaster management authorities (county directorates) on task division in disaster management. Among the members of accredited rescue teams can be private companies with specific expertise²⁹⁷.

An example for outsourcing some of the logistic activities is the agreement with the association of transportation companies. The Association of Hungarian Forwarding and Logistic Services signed an agreement with NDGDM on outsourcing some logistic tasks for private logistic companies. The agreement contains certain tasks like transportation preparedness, storage of sand bags, and provision of rescue staff for flood protection. As a result, the overall costs of preparedness will be smaller, and the capacity of NDGDM can be used more efficiently. The beginning of the first such activities is 01.2013 (MTI 2012, NDGDM, n.d.).

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

The disaster management system has been changed recently; this was partially a result of inquiries and recent events.

The 2006 severe thunderstorm during the National Celebration Festival: 1. Ombudsman report (OBH 2006). In 2006 a severe thunderstorm struck during a National Day celebration event in Budapest, directly impacting the celebrating crowd; 5 people died and 300 were injured (see Table 1). Despite a weather forecast from the Hungarian Meteorological Service calling for potentially severe and dangerous weather, there was a lack of disaster response in general, with no measures taken for cancelling the fireworks or

²⁹⁷ E.g , Tisza rescue team, where firms and NGOs among the members are present (diving LTD, car rescue and service LTD, health care and transportation LTD – NDGDM n.d.)

evacuation. An ombudsman report (OBH 2006) contains the chronological description of the event, the legal background of the response, and views of different stakeholders and experts. The report analyses the response of different organs, and points out the fields of necessary improvement in the legislative environment. Based on the legislation only the police could cancel the event; other organs did not have such obligations at that time. The event showed a clear failure of the crisis management system, a lack of decision making responsibility, and a lack of preparedness exercises and public awareness. Concrete changes in the legislative and organizational environment were advised.

The 2010 flooding disaster: The 2010 flood (described in chapter 2.2.3.) resulted in a report from the General Accountancy Office (Hajas 2012 p60-71). Assessment of this flood is only a part of the report, which looks at the overall capability of the DM system to cope with natural catastrophes. The report provides a detailed analysis on the causes of disaster escalation, assessed response, DM effectiveness and efficiency (if the available sources were used in a cost efficient and proper way), and the bottlenecks of the system. Disaster response was found to be timely; however some improvement was suggested for DM (concerning legal and operational coordination among different organizations, logistics, combining water management risk assessment with spatial planning). There were some general remarks on the DM system in general. Mayors were not properly prepared for disaster response (though the response was their task), protection plans were missing and funds were missing for maintaining the flood protection system. The report called for an integrated DM system (which during the time of the report already was under discussion, later these points were integrated into the DM law). Some elements of the inquiry were related to finances, which will be mentioned in chapter 3.2.

The 2010 flooding in Felsőzsolca: There was an also an ombudsman investigation concerning the flood in 2010 in Felsőzsolca settlement (Szabó 2010). The investigation was focused on the self government's activities during the crisis protection and response phases. There was no legal requirement for a settlement defense plan, thus the self government did not fail in its obligations. Disaster response was also found to be sufficient. There were proposed legislative changes towards an obligation for a defense plan in case the settlements are situated in high risk areas. Later in the DM law these suggestions were included.

The 2010 red sludge disaster: In the 2010 red sludge disaster, Parliament called for an investigation committee to clarify what led to that severe crisis.²⁹⁸ This investigation focused on the causes of the disaster escalation; response analysis was not included. The main reasons for the disaster pointed to planning of industrial storage, privatization conditions of the plants, operation and supervision. Several authorities failed in supervising this particular company. In a department investigation of the privatization process, environmental categorization and inspection, providing a building permit and supervising the

²⁹⁸ Report on the responsibility allocation of the red sludge storage damage – and on the possibilities of avoiding such crises in the future. 2011. J-4795 Parliamentary Investigation Committee Report (This report is a political inquiry; the committee started its investigation on 30.11.2010²⁹⁸, and the report was accepted on 10.10.2011.).

state of the waste reservoir showed many discrepancies. During the EU law harmonization process, supervision of industrial entities like MAL Hungarian Aluminum (the plant operator) became doubtful (mining and environmental authorities without clear task division shared the responsibility over controlling the red sludge storage). The defense plans for the nearby settlements were missing. MAL managed to obtain building permission for the storage using legislation gaps, and the reservoir was not properly used. This report clearly showed the responsibility of MAL Hungarian Aluminum, and suggested a penalty and liability for the cost of reconstruction.

Already during the work of the parliamentary committee the DM law was modified²⁹⁹, allowing the DM authorities to supervise all red sludge storage places in the country. The report stated points where the Hungarian DM and legislation could be changed; these points were included into the new DM law. Some of the most important points are: the NDGDM and regional directorates have coordinating and supervising positions over the other authorities, and over plants that are below the limits. In the new law, industrial safety and critical infrastructure are of special importance. Mining legislation is changed to give clear responsibilities for permits.

On the disaster response, there is no available professional inquiry report online. However, there are summarizing reports from the DM authority (Bakondi 2010) and the army (Hoffmann 2011). Both reports stated that the disaster response was timely and accurate. Hoffmann (2011) showed some bottlenecks of CM response. (There should be a clear leading position for the DM authority over other stakeholders, a common reporting system and a local operative body working together with the local defense committee). The new disaster law contains elements of these suggestions – MDGDM has a clearly stated coordinating role in disaster preparation and response.

Most suggestions pointed out in the above-mentioned inquiries are included in the DM law at present (reports, experiences and inquiries contributed to formulation of the DM law in 2011).

3.1.2 Limits to national capacities

Up to now, Hungary has obtained assistance from its neighbors in cases of typical disasters, based on existing bilateral agreements e.g. from Ukraine during the flood on the Tisza River in 2010 (MTI 2010). During the time period 2000 to 2012, a state of emergency was announced three times for some areas of

²⁹⁹ A special decision of the Hungarian government was an immediate national inspectorate over MAL Hungarian Aluminum. This was without legal base and previous precedence, both in Hungary and in European countries. In this way the company could not announce bankruptcy and avoid the financial responsibilities and further actions in making the MAL storage reservoirs safer; moreover the company, as a main strategically important employee of the region, could survive.

Hungary. In all three cases the Community Mechanism for Civil Protection (MIC) was activated as well. Two of these cases were typical crisis events (flood) while the third event was an industrial disaster.

In the 2006 flooding on the Danube River, a state of emergency was announced for areas in two counties. This was the first time for announcing a state of emergency; the reason for this partially was to achieve a more efficient decision making process without calling for the county assembly (NDGDM n.d.). Hungary asked for help in terms of sand bags and MIC satellite images for more successful flood protection.

2010 flood: a state of emergency was announced for four counties. As a result, Hungary obtained help (1 million sandbags) from Ukraine – based on the bilateral agreement. In June, Hungary activated the MIC mechanism, asked for sandbags (over 2 million) from EU countries (Commission, 2010). The reason for requesting help was a temporary shortage because of the extent of the flood.

In October 2010, during the red sludge accident, a state of emergency was announced for three counties, and Hungary applied for help through the MIC. The reason was the immediate need for specialized experts to work out an environmental impact assessment and an immediate action plan for preventing a large scale ecological disaster (NDGDM n.d.)

3.2 Efficiency

The budget for DM in 2012 was planned to be 47.5 billion HUF (1.628 billion euros), which is 0.31 percent of the overall state budget. (Zipp 2012, National Legislation Collection 2012). In December 2012, there was a necessity to allocate an additional 650 million HUF for this purpose. This is however only a part of the disaster related costs; some elements of the prevention and rescue costs rest on the self governments and water management authorities (activities like maintaining the water protection facilities and dams), while some response-related costs rest on the police or army (maintaining staff and equipment for disaster response). Thus assessing the overall costs is difficult.

After the 2012 flood there was an investigation of the General Accountancy Office (Hajas, 2012) focused on the ability of the DM system to cope with natural disasters. Recommendations were made for raising the efficiency and transparency of the financial background of DM. One recommendation is that a common budget for DM related cost planning should not be divided among the several sectors.

Among the reasons for flood escalation was an inadequate state of the water protection facilities resulting from a weak financial foundation - an accelerating shortage of money allocated for maintenance of these facilities. In 2000 a complex flood protection plan for the Tisza River drainage was worked out, called the Vasarhelyi plan³⁰⁰. However, it could only be partially realized. The shortage of money allocated for DM

³⁰⁰ A complex plan for economic development with elements of the Tisza river flood protection management, containing a network of several water storage and built facilities as well as partial revitalization of the original

was visible in both the water and disaster management authorities, where even a basic functionality was hardly possible to achieve. As a result there were cases in self government coordinated protection with a lack of expertise and technical staff (allocated from other sectors). The allocated resources for water protection were enough just for the starting phase of disaster response. Similarly, the lack of financial resources also had an impact during the recovery phase; in many cases the water management authority had financial obligations which could only be fulfilled with a time lag.

At the same time, due to the complicated and uncoordinated tender system, only a small proportion of existing EU support was used for water management facility improvement (Hajas 2012 p 14-18).

On the other hand, the accountancy office report pointed out positive examples on increasing cost efficiency. In financing reconstruction there is a so called "vis maior" fund (for disaster compensation). Applications are possible through the self government. Previously the whole sum was given, while now only part – after fulfilling part of the reconstruction in reality, the remaining parts of this fund can be obtained (National Accountancy Office 2012).

Recommendations from the investigation of the General Accountancy Office report were included in the new DM law (National Accountancy Office 2012).

The new DM system was formulated in such a way that efficiency was one of the main priorities, though the reform itself was primarily introduced to increase effectiveness. In centralizing the entire nationwide fire protection system (previously partially rested on the responsibility of self government), having all supervising under coordination enables a more efficient management. As an example, previously within the DM structure there were more than 132 accounting offices, and now they are only at the county directorates and have been reduced to 20 (NDGDM, n.d.).

Cost efficiency measures have led to changes in the disaster information system as well (previously about 80 places and now 20 answering emergency calls), and in responsibility and structure of the DM hierarchy and other fields (see chapter 2 in this report).

The institution of the disaster management post is another example of an element in the new DM system that is leading to increased efficiency. This is in most cases just one equipped vehicle situated in a remote strategic point, without the necessity to maintain buildings and more sophisticated facilities (Bérczi 2012). Outsourcing training and logistics (see 2.4. chapter) also aims at improving efficiency.

In the new system a basic principle is to assess the efficiency of investments (maintenance, or buying new equipment). To achieve efficiency, the director of NDGDM requires an annual summary on efficiency from the regional directorates. Examples of cost efficiency are vehicles running by gas (instead of other fuels

floodplain function. Accepted in 2003 by the government (2004. /LXVII. Law), in the original form it is one of the largest investments of the country.

like oil or petrol) or the newly introduced, similarly looking uniform for all organs under the Ministry of Interior. These uniforms are prepared by prisoners (NDGDM, n.d.).

Data on expenditures of the DM authorities are public (law on public information, and self management 2011/CXII). There is an obligation to place this information on the Internet, in every quarter of the year. County directorates and the NDGDM supply this; some blogs observe these activities and have established a "black list" of directorates which do not fulfill this obligation (Langlovagok blog n.d.).

3.3 Legitimacy

3.3.1 Political support

Among policies related to crisis management, the integrated plan for flood prevention along the Tisza River (New Vasarhelyi Plan) was the most important debate – since it would be a large investment, across many governmental departments (Őri 2007, JNO 2009)³⁰¹. Related issues like the test case of implementing an obligatory insurance program on the floodplains were also discussed and rejected. (Linneroth-Bayer and Vari, 2004). A recent smaller scale debate, following the changes in 2012, was on the introduction of a disaster management tax that finally was cancelled (Ado online 2012). Common features of these debates are that there are many interest groups, and interest spheres involved; thus decision making is difficult.

There have been no governments or ministers resigning due to disasters. However, there have been cases where after investigations, leaders in the DM system have been replaced. In July 2010 the director of NDGDM was changed, the reason being that there were some financial discrepancies concerning investments connected to the "martinsalak case" ³⁰² (Prime Minister Office 2003). Following the 2010 flood, the director of the water directorate was fired ³⁰³(Visnovitz, 2010).

There have been several examples where actions were taken for help in disaster response (this always improves public support for politicians); however, no poll results on these relations are available.

³⁰¹ Both as an investment and as a decision involving public participation, this plan is ambitious and unique as a complex technical and legally sound solution. The basic idea is a system of artificial and natural water storage systems with restrictions (compensated) of land use towards an ecologically sound floodplain management program. To work out this plan, significant inter-ministerial cooperation was needed. There were 6 parliamentary committee discussions, 15 county committee discussions, 41 scientific and expert meetings, and more than 100 local meetings held before the law was accepted. In its original form this would have been a complex regional developmental strategy. First, the lack of allocated finances, and later, challenged restrictions on land management were obstacles.

³⁰² During the 1980-90s, side production of the Ozd metal factory was used for producing concrete. This material however is not safe in houses; as an effect of moisture, houses built from this material are not safe. In 2001, a governmental decree 1085/2001(VII.25.) decided on the governmental responsibility in this matter. However, the funds for rebuilding of the houses and properties were not transparently used, and overran the allocated budget. http://misc.meh.hu/letoltheto/KEHI_korabbidok_20030109_ozd.pdf

³⁰³ He was accused for giving permission for building a shopping center in the flood zone without the planned flood protection investigations, – and as a result the nearby village was flooded

During the period of 2000-2010 there were two major changes in DM structure (see section 2.2.1.). Reforms in 2011 partially were initiated by the ombudsman investigations following disaster events.

3.3.2 Legal aspects

Ombudsman cases:

In Hungary there have been many discussions and ombudsman investigations and recommendations concerning disaster preparation and response. These have resulted in complex changes in the DM system. From 2008 there is the possibility to initiate ombudsman inquiries in a "project system". Before this, ombudsman inquiries had rather a response-to-specific-events character. At the beginning of 2012 there was a thematic project assessing the 10 year activities of ombudsman inquiries in the DM sector (Hajas 2012) which gives a good insight into the DM system before the new DM law.

On the role of self-governments in the areas of inland water and flood protection there were six ombudsman investigations (1999-2002- Hajas, 2012 p 16-23)³⁰⁴

Another group of investigations is related to compensation after disasters, emphasizing the need for a complex compensation system (Hajas 2012 20-48)³⁰⁵. A national disaster fund was discussed and rejected in 2005, finally accepted in 2006.

Concerning disaster response, also many ombudsman cases were recorded (see chapter 3.1.1 on the storm in 2006)³⁰⁶. In 2009 there was an investigation on the flood protection practice started including the 2010 flood (Hajas 2012 p 32)³⁰⁷.

In October 2010, consequences of the red sludge disaster (see chapter 3.1.1) were also investigated by the ombudsman (3 cases - Hajas 2012 p38)³⁰⁸. Several aspects of the disaster were investigated, concerning building permission for the destroyed storage, permission and supervision discrepancies.

Civil rights (Hajas 2012 55-61) are considered as a basic principle in all ombudsman cases. An example of this is the inquiry after the red sludge disaster³⁰⁹.

Some elements of the new DM law and related decrees have already been challenged in an ombudsman investigation. These include the new institutional division of water management (Szabo, 2012), and the

³⁰⁴ 6 reports: OBH 2852/1999, OBH 2528/2000, OBH 3147/2000, OBH 4884/2000, OBH 6064/2000 (Hajas, 2012 p 16-23). In this field for many years there was a lack of money and attention to the maintenance of existing facilities, and building new ones.

³⁰⁵ OBH 1691/2002, OBH 3943/2006, OBH 3969/2006, OBH 5041/2003 as a result of earlier investigations in 2003 on the Wesselenyi Fund for water damage compensation; both the scope and the manner of compensation were criticized. However, It was only for flood and inland water damages, and there is a mortgage loan and a ban on selling put on the real estate. The ombudsman investigation showed that this rule is not fair in the case of smaller scale damage.

³⁰⁶ OBH 3969/2006, AJB-3157/2010, AJB-4452/2010, This inquiry dealt with the role of the self governments on permissions for building in the flood zone, and on the sufficiency of the legal background concerning disaster management, legal obligations of preparing risk assessment and flood management plans.

³⁰⁷ AJB-3157/2010, AJB-4452/2010

³⁰⁸ 619/38/2010, AJB-843/2012, AJB-3765/2011

³⁰⁹ AJB-3765/2011. The ombudsman inquiry focused on the personal right of disabled persons and disaster management actors during the response. The investigation did not show major discrepancies towards staff taking part in the disaster response, but the treatment of the disabled was not sufficient.

disaster management tax (withdrawn in 2012 NDGDM, n.d.). Since the disaster management system was drastically changed by the new DM law, there will probably be more inquiries like this.

The main legal cases between 2000 -2010 were the following:

In 2006 there was a fire in the Technical University of Budapest, where five firefighters died. The court decided on paying a compensation fee above the insurance for the families of firefighter victims (MTI 2008).

In connection with the storm disaster of 2006 there have been 75 legal procedures started against the government or governmental organizations (see chapter 3.1.1). Finally the decision on this was accepted in June 2010 (in the meantime there were elections and the Parliament accepted the decree on state responsibility related to compensation arrangements – Kartesites blog 2011).

The national court has investigated cases related to the red sludge disaster (see chapter 3.1.1). There have been several cases brought against MAL Hungarian Aluminum and the first decision came in October 2012. This case concerned court proceedings against the company and 15 legal persons that were mainly from the management of MAL (MTI 2013).

3.3.3 Popular trust and support

Hungarians believe that the main responsibility of disaster protection rests on the central and to a lesser extent on local government, while only 10 percent stated that property owners should be responsible (Vari and Ferenc 2006). Eurobarometer (2011) has shown that about half of Hungarians are satisfied with DM activities in the country; however in the case of man made disasters the trust in the competence of DM activity is much less (Eurobarometer 2011 p 65-78). Concerning crisis types, in case of man made disasters Hungarians are more doubtful than in the case of border crime or terrorist events. There are no studies on the change of public opinion following a disaster, and how it may have influenced subsequent elections. A majority thought that the government handled the red sludge disaster of 2010 in a proper way (Szazadveg 2010).

Voluntary involvement in disaster response is described earlier, in chapters 2.3.1 and 2.4.1. A survey in 2004 showed that nearly 40 percent of adult Hungarians were involved in voluntary work (Czike and Kuti 2005 p 3). However, other methods show much lower percentages (11 percent in Bartal 2012) A small fraction of volunteer actions is directly civil security related (5.6 percent to security 2.1 percent civil protection or firefighting - Bartal 2012).

As an example of voluntary involvement in crisis response, during the flood of 2010, Hungarian Interchurch Aid helped in the rebuilding of a town of 4,400 people (Szendro, in northern Hungary). Activities were mostly related to reconstruction work; 248 families received help in reconstructing their homes. The impact assessment of the aid by this organization showed that crisis communication was more successful than in the case of communication led by governmental organizations (Bartal 2012).

4. Hungary's Civil Security in the EU Context

Hungary signed the agreement joining the EU civil protection mechanism in 2003. Since EU accession Hungary has been an active member of EU civil protection activities. NDGDM is responsible for contact with EU civil protection bodies, represented in the ProCiv working group of the EU Commission since 2006. NDGDM leads the nuclear safety, civil protection and critical infrastructure expert committees within the EU Coordination Committee. Since 2004 Hungary (NDGDM) is a member of the operational and control committee of the EU Mechanism and financial support (NDGDM n.d.).

Hungary has activated the MIC mechanism three times – twice during typical natural disasters (flooding) and the third time during a signature crisis – the red sludge disaster (industrial disaster). During the flood in 2006 Hungary asked for sand bags and satellite images from the EU (Commission 2006); during the flood in 2010 sand bags (Commission 2010); and during the red sludge disaster Hungary asked for a special expertise team (NDGDM n.d.). While in the first two cases there was a need for capacity sharing, in the last case the specifics of the industrial disaster made it necessary to call for help.

Hungary participates regularly in international exercises (e.g. CARPATEX). NDGDM has been active in international disaster assistance during 2007 - 2011 in 12 cases, taking part in actions through EU's Civil Protection Mechanism. The help had different forms, like providing experts, coordinating staff, equipment or rescue teams (Commission 2011, NDGDM n.d.).

The Hungarian public has a relatively low level of awareness of the role of EU in civil protection issues. In 2009 less then 1/3 of inhabitants had heard about it. Probably later, after the red sludge disaster where EU experts were involved, this proportion is higher. At the same time, 84 percent of Hungarians thinks that a coordinated EU action is better to cope with a disaster than a single country effort (Eurobarometer 321, 2009 p 21).

5. Conclusion

In Hungary, both the constitutional and legislative environments for disaster management are new, implemented from 2012. There have been important changes in DM, especially concerning organization and responsibilities. The formulation of the DM Law was partially a result of experience with financial deficits during earlier disasters, and investigations on disasters and on the DM sector as a whole.

Just to give some examples: investigations after the severe thunderstorm in 2006 and floods in 2009-2010 pointed to the necessity of clear responsibility lines, education and emergency exercises, improvement of coordination among the stakeholders during disaster recovery, clear supervisory roles, and the importance of local disaster management planning. The red sludge disaster showed discrepancies of improper task division in supervising low and high threshold Seveso companies, procedures of issuing building permits, and dangers of improper implementation of EU requirements into the national legislative system.

The DM system has become more centralized; responsibility lines and supervision are clearer, and at all levels of disaster management. At the local level, risk assessment, and for the high risk settlements, obligatory DM plans have been introduced. At the same time, mayors get help in coordinating and

organizing DM tasks. There have been organizational changes concerning water management and municipal firefighters. The NDGDM coordinates other bodies during disaster response and holds a supervisory position. Special importance is given to education and settlement-based civil protection duties. In the new curricula of education there are elements of crisis management at all levels. From 2012, civil protection duties of the inhabitants have become more defined.

After implementing the new system, there probably are many things yet to be changed, and it will be revealed in reality if this system is more able to cope with crises than the previous ones. Potential bottlenecks of the system can be the result of novel elements like the newly introduced emergency call system, which requires time to get used to. Other potential difficulties can appear concerning the divided supervision of water management; water quality monitoring remains at the environmental authorities while flood protection is under the disaster management authorities. The system is not yet tested.

Another important consideration is a long-standing shortage of finances for flood protection and DM. This is difficult to change because of the present economic situation in Hungary. There has been a plan to implement a DM fee from industrial plants. However, partially due to legislative discrepancies, and the lobby against this from private enterprises, this part of the DM law has been withdrawn. At the same time, there is still no unified insurance system for high disaster risk areas. As a result, there remains an overall lack of finances in the sector.

In addition to awareness-raising, the idea of involving inhabitants through obligatory civil protection exercises and voluntarism is promising, and it might be a cost effective solution. Involving local people in disaster response is a good idea, since public acceptance of local help is higher than the ranking of official help from the central government. The future is evidently towards the involvement of private parties – outsourcing certain tasks and increasing the level of volunteering. There are examples of this at present in Hungary. However in the new system there is still a lot to be done in these fields.

As Hungary is an EU member, legislative and organizational elements of EU civil protection are implemented in the national legislation. The experience of this particular country in reforming the DM system can be a useful reference point for other countries facing reforms in the future.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 HUNGARY

1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	DM Law CXXVIII /2011	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	DM Law CXXVIII /2011, Defense Law (CVIII /2011)	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?		1	DM Law CXXVIII /2011, Defense Law (CVIII /2011)	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	DM Law CXXVIII /2011	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	New Fundamental Law 2011	
2.1.1.b	Is the political system parliamentary or	Parliamentary system = 1 Presidential system = 2	1	New Fundamental Law	

	presidential?				
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	New Fundamental Law	
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	1	New Fundamental Law	
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down = 1Bottom-up = 2Both = 3	1	New Fundamental Law	
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		46	http://geert-hofstede.com/countries.html	
2.1.2.a.ii	Geert Hofstede country national cultural score - IDV		80	http://geert-hofstede.com/countries.html	
2.1.2.a.iii	Geert Hofstede country national cultural score - MAS		88	http://geert-hofstede.com/countries.html	
2.1.2.a.iv	Geert Hofstede country national cultural score - UAI		82	http://geert-hofstede.com/countries.html	
2.1.2.a.v	Geert Hofstede country national cultural score - LTO		50	http://geert-hofstede.com/countries.html	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0.4	http://www.worldvaluessurvey.org/	Year 2000
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		-1.22	http://www.worldvaluessurvey.org/	Year 2000
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				

2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	1	DM Law CXXVIII /2011	
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2012	DM Law CXXVIII /2011	
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	DM Law CXXVIII /2011	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	New Fundamental Law	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		1	New Fundamental Law	
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?		3	DM Law CXXVIII /2011	In case of qualified stages (emergency stage) the responsibility is changed
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1At the regional level = 2At the local level = 3	1	DM Law CXXVIII /2011	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1	1	DM Law CXXVIII /2011	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1	1	DM Law CXXVIII /2011	

2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	1	DM Law CXXVIII /2011	
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	n.a.		In 2012 there were 2 main exercises (announced in the TV and local media), earlier data are missing
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	12	Commission 2011	This is the number for 2007-2011.
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?		0	Website of NDGDM	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	11	http://www.katasztrofavedelem.hu/index2.php? pageid=szervezet_nemzetkozi_ketoldalu	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	2	http://www.katasztrofavedelem.hu/index2.php? pageid=szervezet_nemzetkozi	
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	One or two times = 1	4	Comission 2010, Comission 2006, MTI 2010.	
2.3	State-citizens relations				
2.3.1	Expectations				

2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	2	New Fundamental Law	
2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	DM Law CXXVIII /2011	
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0Yes, at the local/regional level = 1Yes, at the national level = 2Yes, at both local/regional and national levels = 3	3	DM Law CXXVIII /2011, 234/2011 Governmental Decree	
2.3.2.c	Does the government have a central website with updated information on crisis events?		3	NDGDM n.d.	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3	NDGDM n.d.	

2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?		0		
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		1	NDGDM n.d.	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To members and wide- spread training programmes for general population = 3	1	NDGDM n.d., www.voroskereszt.hu	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	2	NDGDM n.d.	
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		1	NDGDM n.d	The funding is not straightforward, there are several schemes, not one distinct source, as it is described in the text.
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	n.a.		
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				

2.4.1.a		No = 0 Yes = 1	1	DM Law CXXVIII /2011	
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	1		
2.4.2	Role of profit-oriented organisations				
2.4.2.a		No = 0 Yes = 1	1	NDGDM n.d., Berczi 2011 p8, Varga 2012 p 80	
2.4.2.b		No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	1	MTI 2012, NDGDM n.d.	
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific
					problems with data)
3.1	Effectiveness				
3.1	Effectiveness		3	Comission 2010	
3.1 3.1.2	Effectiveness Limits to national capacities How many times has external assistance	Register the number for 2000-2012. Register the number for 2000-2012. If there are no		Comission 2010	

3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	2	NDGDM n.d.	
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.	2	NDGDM n.d.	
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.	n.a.		
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?		0		
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	3+		Many individual cases were concerning 3 main events: storm in 2006 and flood in 2010 in Felsozsolca, red sludge disaster
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	3+	OBH 2006, J-4795 Parliamentary Investigation Committee Report, Alapvető Jogok Biztosanak Hivatala ISBN 978-963-89170-7-2.	In the thematic disaster management project there are summarised the ombudsman (10+) cases concerning recompensation rules, financial responsibilities, and all flood protection related activities, organisations, apart from this the investigation on 2006 storm and the red sludge disaster were important.

3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?		0		
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	percentage for "Agree"	52	Special Eurobarometer 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	63	Special Eurobarometer 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	0		
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	n.a.		
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	42 <i>,</i> 6694	Central Statistical Office 2011, data from 2009	
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be compl eted by UI/IFH S	http://ec.europa.eu/echo/files/policies/disaster response/EUCPM activations since 01012007. pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be compl eted by	http://ec.europa.eu/echo/files/policies/disaster _response/EUCPM_activations_since_01012007. pdf	

			UI/IFH S		
4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	the 2009-2010 training	18	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	-	10	http://ec.europa.eu/echo/policies/prevention_p reparedness/preparedness_en.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?		2	http://ec.europa.eu/regional_policy/thefunds/d oc/interventions_since_2002.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	-	37.6	http://ec.europa.eu/regional_policy/thefunds/d oc/interventions_since_2002.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	28	Special Eurobarometer 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	84	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in Hungary

The first H1N1 case was recorded in Hungary on the 29th of May in 2009. Hungary was the third country worldwide where fatal H1N1 cases were reported. Hungary was among the first countries where vaccines were ready by the end of September. Vaccination was free for children, elderly people and for critical infrastructure and hospital employees. Altogether, more than 2.1 million vaccines were used. Among children, 436,000, among health care and critical infrastructure employees 128,000 and 143,000 were injected, a much lower proportion than planned.

Following the escalation of the virus in Mexico, in April 2009 a pandemic prevention team was first called together to agree on monitoring and a reaction strategy. After the first cases were recorded, several measures were taken, such as special monitoring at airports, information to the local health services and increasing the flu monitoring system. On 15.08.2009, Governmental Decree (1137/2009) was accepted on coordination of H1N1 related tasks.

The main responsibility for coordination was the Ministry of Health, for coordinating the related tasks and an intergovernmental pandemic committee was established. In the Intergovernmental Committee there were representatives from four ministries, and representatives of related institutions (National Health Service, Animal Health Inspectorate, police, rescue service and NDGDM). An operative body was established for performing executive tasks. The Ministry of Health in Hungary adopted a national pandemic plan for H1N1 by August 2009 (National Pandemic Strategy 2009).

In August 2010, following the WHO announcement, Hungary also announced the end of the H1N1 infection preparedness stage. Altogether there were 382 cases where H1N1 infection was proven; 119 of them were fatal. (This is 28.21 and 11.26 per million inhabitants, respectively) (ANTSZ 2010/1).

The overall expenditures were 40 billion HUF, which is 0.15 percent of the GDP, out of this the health expenditures were 0.03 percent of the GDP (Privatbankar 2010).

The vaccines were made by a private company, which has an agreement with an offshore company (Omnivest LTD). This company has an agreement with the government for providing vaccines. The vaccination material was bought from the WHO and improved in Hungary.

This was the first viral infection incident of such a scale. There were some parts of the response that need to be improved. Though vaccine was available, the public campaign for spreading information

was apparently not so effective. Compared to the planned 60 percent level, a much lower proportion (23 percent) obtained the vaccination (Nepszava 2010).

There are some criticisms considering the effectiveness of the measures connected to the swine flu outbreak. In 2010 an investigation started, as an initiative of the Ministry of Human Resources, to check the agreement conditions with Omnivest LTD. It revealed that the company had a long term (15 year) agreement for supplying vaccine (ANTSZ 2010/2).

Annex III: Resources

Disaster Management Law 1999/LXXIV.

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Ireland

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Executive Summary

The Irish civil security system has been regularly tested by emergencies in the last decade. Apart from the floods occurring almost every year in autumn, the country had to face extreme weather conditions due to heavy snowfalls in winters 2010 and 2011. The latter and the West Cork oil spill crisis in 2009 are considered the signature crises in Ireland for the time span 2000-2012. Irish civil security is decentralised and bottom-up with the transfer of executive responsibilities from local to national level clearly depicted in the official document *Strategic Emergency Planning Guidance 2004*. Interestingly, even though Ireland adopts a decentralised approach in emergency response and has embraced the 'Lead Government Department' doctrine, cardinal administrative functions and units for civil protection are traditionally accommodated within the Ministry of Defence. This is associated with the country's previous experience with para-military activities and domestic terrorism, forcing the civil security apparatus to develop within the administrative framework of national defence.

The example of the West Cork oil spill crisis shows a timely reaction of the Irish administration, with effective coordination of the different domestic actors and with good communication with the European agencies. The activities of the principal response agencies towards the recurring floods have sometimes been critically perceived by the country's media and citizens who have high expectations from their government. Apart from the attitude of public opinion, parliamentary discussions often refer to the government's actions in tackling civil security challenges; parliamentary questions were posed with regard to the oil spill crisis as well. To mitigate the government's position, though, the efficiency of Irish civil protection should be examined against a background of budget cuts due to the financial crisis agonising the whole of the public sector.

The role of national culture does not seem to affect crisis management in Ireland – at least the reactions of the practitioners towards emergencies do not appear to depend upon the cultural context of the country. The tendency of citizens, however, to volunteer when crises strike is associated with norms of solidarity and communitarianism among members of the same community.

Key Findings

1. The country's civil security system follows a civilian crisis management, but administratively the role of the Ministry of Defence is quite important as it houses the units/structures responsible for civil protection.

2. The Irish government is in general willing to coordinate with European partners within the Civil Protection Mechanism. National culture appears to be important when we approach citizens' conduct when disasters strike. Facing an emergency, the Irish nation unites in a spirit of national solidarity (even though according to Hofstede et al's Indices, Ireland is an individualist society). The role of national culture has not emerged when we tried to employ it for explaining the attitude of the Irish practitioners. To the best of our knowledge, administrative culture and experience with civil protection institutions appear to shape their professional conduct and mindset.

3. The private sector can be recruited on an *ad hoc* manner when disasters hit Ireland. The FMEM describes the exact procedure to be followed for recruiting private capacities for the sake of emergency response.

4. Ireland has retained a sizable civil defence organisation, based upon voluntarism and localisation, established during the Cold War. The organisation numbers around 6,000 volunteers.

5. The official documentation explicitly mentions budget constraints as one factor hindering the conduct of interdepartmental exercises.

6. It is important to note how the current financial crisis in Ireland has indirectly affected the delivery of civil protection. It has triggered interdepartmental changes of staff and reallocations of budgets in government departments that play a role in the civil crisis management. However, the Ministry of Defence has not suffered substantial budget losses and it has confirmed that the civil protection remains a priority of the public administration.

7. The records of the Irish civil security system can demonstrate some success stories. Without generalising, in the West Cork oil spill crisis the Irish government cooperated smoothly with the EU, EU Commission-affiliated agencies, and other participating countries (e.g. Russia) in order to monitor and prevent further escalation of the crisis.

8. On the other hand, taking into account the country's critical media output, it appears that Ireland's national capacities may not be enough to deal with certain types of calamities. Hence, creating the impression that the country's civil security mechanism gets overstretched when it has to deal with floods and extreme weather conditions.

9. As in the case of the UK, the Irish ombsudman is not used by the citizens for civil security complaints but mainly as a channel to communicate discontent regarding the National Health

System. Notice here that the cooperation between Irish and British ombusdmen is institutionalised, once again confirming that the two countries collaborate closely in specific areas.

List of Abbreviations

CDB	Civil Defence Board
DFAT	Department of Foreign Affairs and Trade
ECDC	European Centre for Disease Prevention and Control
EMSA	European Maritime Safety Agency
FMEM	Framework for Major Emergency Management
HSE	Health Service Executive
IDV	Individualist Index
IDWGEP	Inter-Departmental Working Group on Emergency Planning
LGD	Lead Government Department
LTO	Long Term Orientation
MIC	Monitoring and Information Centre
OECD	Organisation for Economic Cooperation and Development
OEP	Office of Emergency Planning
OPW	Office of Public Works
PRA	Principal Response Agency
SEPG	Strategic Emergency Planning Guidance
UAI	Uncertainty Avoidance Index

1. Introduction

The Irish Republic has dealt with various crises in modern times. For the period 2000-2012, the signature crisis has been the extreme weather conditions in the 2009/10 and 2010/11 winters that demanded a whole-government response.³¹⁰ The West Cork oil spill crisis in February 2009 could be ranked as the second most significant emergency due to its potential impact and because it forced the Irish government to work closely with other countries and the EU. The Irish pork crisis in 2008 with dioxin detections in pork meat resulted in many job losses but fortunately in no confirmed deaths. Floods are the typical, most common type of crisis for Ireland as can be seen in the table of major disasters for the period 2000-2012 below:

	Cuitaia		Damage	Damage		
Year/Month	Crisis Description	Crisis Category	Persons killed	Persons injured	Persons affected	
January 2000	epidemic	Pandemics/infectious diseases			1,374	
November 2002	Flood	Natural disaster			300	
October 2004	Storm	Natural disaster			200	
December 2008	Irish pork crisis	Pandemics/infectious diseases			Whole society	
February 2009	West Cork Oil spill crisis	Transport accident			Not easily estimated	
Winter 2009- 2010	Extreme Weather Conditions	Natural disaster			Whole society	
Winter 2010- 2011	Extreme Weather Conditions	Natural disaster			Whole society	
October 2011	Flood	Natural disaster			600	

Source: *The International Disaster Database*, <u>http://www.emdat.be/</u> and exchange of notes with Irish authorities

Overall, floods have been a common phenomenon in Ireland almost every October/November (they occurred in the early 2000s as well as in 2009 and 2012). Despite Ireland's traditional focus on domestic terrorism, the *Global Terrorism Database* does not register any major terrorist incident for the period 2000-2012 (University of Maryland, undated).

Based upon informal correspondence with a Civil Servant from the Health Service Executive.

So, what is considered crisis in Ireland? The *Strategy Statement 2008-2010* of the Department of Defence distinguishes firstly internally induced crises, coming from 'dissident republican paramilitaries' that 'continue to pose a low-level threat in terms of capability and intent', without being a significant challenge for the Irish state in the present context. Secondly, 'in terms of significant damage and/or casualties, the main international threat to domestic security is expected from a terrorist attack or an accidental disaster, such as a nuclear accident or medical epidemic' (Department of Defence & Defence Forces, 2008, p. 9). The Irish official documentation mostly refers to 'domestic' rather than 'civil' security, accentuating the geographical element, namely crises that occur within the borders of Ireland.³¹¹ The Irish Office of Emergency Planning (OEP) defines a major emergency as 'an incident, which, usually with little or no warning, causes or threatens death or injury, serious disruption of essential services or damage to property, the environment or infrastructure beyond the normal capabilities of the principal emergency services in the area in which the event occurs' (Office of Emergency Planning, undated).

The delivery of civil security in Ireland is achieved through civilian means. It is only in severe crises, for example terrorism, emergencies related to explosions, severe public unrest, or grave chemical, biological, radiological and nuclear (CBRN) incidents that the Department of Defence will coordinate the emergency response; military assistance can be made available to civilian authorities for emergency response, though, if this is required (Office of Emergency Planning, undated 2). Crisis management addresses specific threats in a distinct manner even though the civil security system presents certain elements of an 'all hazards' approach. Depending upon the nature of the emergency and for each different type of crisis, a specific government department will tackle the crisis. However, there is no distinct legislation for different types of crisis. There is one common legal framework for all of them, the so-called *Strategic Emergency Planning Guidance*.

In addition to the term 'domestic security', the Ministry of Justice uses the term 'community security', thus transferring the issue of civil crisis to a sub-local level. This is reasonable as the Department of Justice deals with offences that address the individual, such as 'organised crime' (Department of Justice, 2008).

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Ireland is a unitary state. According to the country's Constitution, 'Ireland is a sovereign, independent, democratic state' (The Convention of the Constitution 1937, Article 5). Drawing again upon the Irish Constitution, 'There shall be a president of Ireland (Uachtaránnah Éireann) ... who shall take precedence over all other persons in the state and who shall exercise and perform the powers and functions conferred on the president by this Constitution and by law' (*ibid.*, Article 12.1). Ireland is also recognised as a republic, with a regime that, according to Arend Lijphart, can be categorised as consociational democracy (Lijphart, 1991, p. 74).³¹² At the moment, the country is administratively divided into 114 local authorities; however, due to a recent reform aiming at effective local governance, this number will be reduced to 31 integrated authorities from 2014 onwards (Ministry of Environment, Community and Local Government, undated).

Historically speaking, the Irish civil security system has developed mainly around the question of Northern Ireland as a potential source of civil security concerns. Negotiations between the Republic of Ireland and the UK on the conflict in Northern Ireland continued for more than 30 years before reaching a successful agreement in the late 1990s (Woolf, 2001, p. 163). Since the signing of the 'Good Friday Agreement' on 10 April 1998, the region has been relatively tranquil. Because of intense paramilitary activities in the past, Irish civil security has developed in close relation to military and defence issues, and key aspects of domestic security are managed by the Ministry of Defence. The over-arching authority of crisis management and emergency response in Ireland, the Office of Emergency Planning (OEP), has been administratively associated with the Ministry of Defence.

The Irish civil security system presents features of both a state-centred and decentralised system. On the one hand, it can be considered state-centred because the final responsibility for confronting a crisis rests with a government department. Moreover, administrative agencies related to civil security operate within the government's context. For example, the Civil Defence Board (CDB) was an independent office for the time-span between 2003 and 2012. However, a notable reform

The political system of Ireland is very distinct. It is a presidential democracy based upon proportional representation and the 'single transferable vote'. For more details see paragraphs 16.2.1 and 16.2.5 of the Irish Constitution.

process ended up with the adoption of the *Civil Defence Bill 2012*; this piece of legislation dissolved the office as a legal entity and has brought its functions under the Ministry of Defence (as it was before 2003).³¹³ On the other hand, the civil security system is also decentralised because emergency response commences at the local level, with the local authorities in the first line of tackling civil security challenges.³¹⁴

When crises escalate or are of an overwhelming magnitude, the local authorities can delegate power at higher levels of administration (up-scaling) (National Steering Group, 2006, pp. 52-59). More precisely and according to the *Strategic Emergency Planning Guidance 2004*, delegation of responsibilities to manage a crisis will flow from the Lead Government Department (LGD) that has been appointed the operational 'manager' of the specific crisis. Coordination at national level will be the responsibility of the Government Task Force on Emergency Planning (OEP, 2004, p. 10). We further elaborate on these aspects in following sections. For the time being we provide a chart of how delegation of responsibilities, information sharing and coordination issues are structured in the Irish civil security system which will help the reader to grasp Irish emergency response as presented in the following pages.

Based upon informal correspondence with the CDB.

³¹⁴ From informal exchange of views with the OEP.

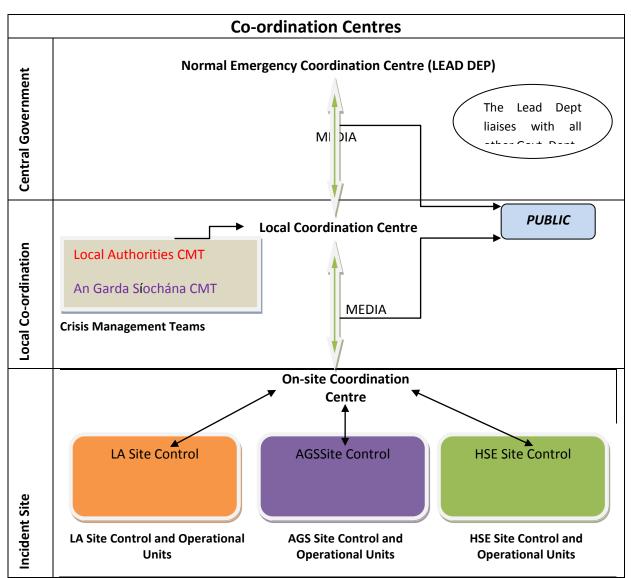


Chart 1: Responsibilities, information flows and coordination in Irish civil security

Source: FMEM, p. 57. (Not all information flows depicted)

2.1.2 Government/social culture

Turning now to the issue of national culture and whether it has an impact on how crises are managed in Ireland, we firstly employ the cultural indices developed by the sociologist Geert Hofstede and collaborators to approach the issue. In the 'Individualism Index' (IDV), Ireland scores 70, clearly depicting an individualist society with Irish people choosing to self-determine more as individual units than members of a collective. In the 'Uncertainty Avoidance Index' (UAI), the country's score is 35, revealing a society that does not pre-plan everything and that is open to risks, innovation and creativity. Last but not least, Ireland scores 43 in the Long Term Orientation Index (LTO). This means that notwithstanding its respect towards tradition and history, Irish society, as a

whole adopts a short-term orientation towards life, achieving goals little by little (Hofstede *et al.*, 2010).

A second academic source for evaluating the role of national culture in crisis management is the analysis of *World Value Survey* (WVS) according to Inglehart and Welzel. In the early 2000s, Ireland's score in the 'traditional vs secular values dimension' was -0.91, clearly indicating a traditional society. Besides, Ireland cannot be characterised as a secular society with its religious tradition of Catholicism. In the 'survival versus self-expression values dimension', the Irish score was 1.18 (very similar to Great Britain's), pinpointing a people that is not over-worried with issues of survival but is more concerned with the quality of life (Inglehart & Welzel, 2012; World Values Survey Organisation, undated). A note is necessary here. These data refer to the period before the EU financial crisis, which severely affected the prosperous economy of the country. We expect that the processing of data from the next rounds of the *World Value Survey* may present a different picture (the country may shift more towards the Survival Values).

There are some contradictions between the results of empirical research based on survey analysis and what actually occurs when crises emerge. Hofstede *et al.*'s research pinpoints an individualist society in Ireland. Yet, the existence of many volunteer groups as well as the considerable size of the Civil Defence service constituted again by volunteers (see following sections) imply a society whose members help each other and have developed a sense of community and solidarity when the nation deals with crises. Feelings of solidarity would also seem to be embedded in the mentality of a nation with a strong religious, Catholic, tradition. A second paradox relates to the UAI. If the Irish people are so keen on facing the day without prior arrangements and plans, why does the crisis management mechanism focus so much upon emergency planning and disaster prevention and preparedness? It might be that the way members of the same society come closer in periods of crisis cannot be explained by Hofstede *et al.*'s approach. In fact Mary Douglas' work on risk provides certain answers to society's solidarity in the face of an emergency. Douglas argues that facing a disturbing situation, human beings will firstly address their societal circles and consult with them on how to deal with such situations (Douglas, 1994).

2.2 Legal and constitutional aspects

2.2.1 Statutory basis

Crisis management in Ireland abides by a well-defined legal and institutional framework. The principal official document defining crisis management is the *Strategic Emergency Planning Guidance* (SEPG) adopted in 2004 by the Office of Emergency Planning (OEP) of the Ministry of

Defence. As mentioned in the Guidance, 'The concept of this document arises from the need to consolidate, in one strategic document, the good work that has been done by the Government Task Force on Emergency Planning and at the Inter-Departmental Working Group on Emergency Planning' (OEP, 2004, p. 5). SEPG's Annex A is called 'Lead, Principal and Other Support Roles' and it describes which ministry takes the LGD role according to the nature of the crisis. Annex A to SEPG was revised in 2008 (OEP, 2008).

Additionally, the *Framework for Major Emergency Management* (FMEM), a statutory document resulting from the 'Major Emergency Development Programme 2006-2008', sets the operational details of emergency response in Ireland. According to the National Steering Group, 'The Framework for Major Emergency Management is afFramework enabling An Garda Síochána, the Health Service Executive and local authorities to prepare for and make a co-ordinated response to major emergencies resulting from events such as fires, transport accidents, hazardous substance incidents and severe weather' (National Steering Group, 2006). An Garda Síochána i.e. the Irish Police Forces, the Health Service Executive and the local authorities are the country's principal response agencies (PRAs) (OEP, 2008). The An Garda Síochána and the Health Service Executive are national organisations with local branches.

As mentioned before, the country has recently passed the *Civil Defence Bill 2012* that reintegrates civil defence within the Department of Defence for the sake of economising resources (O'Halloran, 2012). Moreover, a number of supplementary documents refer to crisis management in specific areas of public administration and to specific types of civil security challenges. For example, there are the *National Maritime Search and Rescue (SAR) Framework*, the *Advice to Businesses on Preparing for a Pandemic*, and the *National Emergency Plan for Nuclear Accidents*.

The legal framework in its present status has resulted from a series of alterations within the last decade. There have been three major reforms that affected crisis management in Ireland. Firstly, in 2003, the country's volunteer-based Civil Defence left the Ministry of Defence and became a distinct legal entity. In the same period, the SEPG was adopted. In 2008 the Major Emergency Development Programme was concluded with the adoption of FMEM and the revision of roles and responsibilities of public actors participating in crisis management. The last major change took place recently with the cessation of Civil Defence's independence and its return under the administrative umbrella of the Ministry of Defence.

2.2.2 Political and operational dimensions

Examining issues of responsibility in emergency preparedness and response, the SEPG firstly clarifies that emergency planning and emergency management (what this study refers to as emergency response) should be seen as two interrelated but distinct activities (OEP, 2004, p.6). In emergency planning, responsibility rests with all three levels of government. At the local level, each Principal Response Agency (PRA) should maintain its own Major Emergency Plan. Regionally, the PRAs fine-tune and synchronise their emergency plans within the context of regional steering groups. 'At national level the national steering group is assigned responsibility for promulgating and promoting the Framework (of Major Emergency Management) and ensuring its timely and consistent implementation' (OEP, undated). At the level of strategic coordination of emergency preparedness and planning, the Government Task Force on Emergency Planning (GTEP), chaired by the minister of defence, facilitates coordination and provides political leadership and strategic guidance of emergency planning at national level (OEP, 2004, p. 10).

The exercise of risk assessment defines potential hazards, assesses their impact, and links the probability of hazards and their expected consequences, resulting in a final account of risks. In Ireland, this process should be conducted by each of the three PRAs at the local level. An interagency team, working under the regional steering group, will revise all the local risk assessments of PRAs and conclude with outcomes which are afterwards incorporated in each PRA's 'Major Emergency Plan' (OEP, 2008, pp. 20-22). The country also maintains 'National Emergency Plans'. 'National bodies, operating in accordance with National Emergency Plans, may call upon the principal response agencies to assist in responding to, or to perform their normal functions/roles arising from, a national level emergency' (OEP, 2008, p. 37). The PRAs should make sure to include provisions regarding national-scale crises and thus render their 'Major Emergency Plans' compatible with the existing national plans.

In order to evaluate emergency preparedness, each PRA is responsible for assessing its own preparedness to deal with emerging crises. This is done on a regular basis; every year PRAs locally submit their 'Major Emergency Preparedness Appraisals'. The inter-agency team working within the regional steering group takes the different appraisals into consideration and reaches final conclusions concerning emergency preparedness at the regional level. In other words, this is a regional evaluation of emergency preparedness (OEP, 2008, pp. 49-50).

Staying within the field of emergency preparedness, the country's emergency services have an obligation, set by law, to conduct exercises. The SEPG explicitly states: 'A training strategy must be devised for each government plan to develop operational effectiveness. This must be driven by top

management with a proactive approach to developing and supporting a culture of emergency preparedness' (OEP, 2004, p. 26). Even though the departments and their respective PRAs have to organise their own exercises, joint inter-agency training is also expected as PRAs should be able to effectively collaborate in operations (OEP, 2004, p. 26). The FMEM depicts exercises taking place mainly at the regional level, between the PRAs of the region. This is confirmed by the example of the Sligo Borough; the local authorities of Sligo participated in nine major emergency exercises for the North Western Region in the period 2007-10 (Sligo Borough Council, undated). The FMEM does not really encourage the organisation of third party exercises due to the scarcity of resources. We thus conclude that the conduct of national, interdepartmental exercises of massive scale in Ireland is a rather rare phenomenon (OEP, 2008, pp. 46-47). Exercises are mainly at the local and regional level. Interestingly, Ireland did participate in 2005 in INEX3, which was an international tabletop exercise on nuclear safety and preparedness organised by the Nuclear Energy Agency of the Organisation for Economic Cooperation and Development (OECD) (Department of Environment..., 2006).

Let us now turn to how crises are actually managed. When crises occur, the PRAs arriving on site can declare an emergency after having assessed the situation according to their 'Major Emergency Mobilisation Procedure' (OEP, 2008, p. 52). Each PRA has responsibility over its own resources and their personnel (this extends to issues of command and control). Moreover, each of the three PRAs defines its own 'controller of operations' (OEP, 2008, pp. 53-54). However, the actions of the PRAs arriving on the site of the disaster/crisis need to be coordinated. This will be the responsibility of the 'on-site coordinator' who is the 'controller of operations' of the PRA that has been determined the 'lead agency' for the particular emergency. The 'lead agency' now is the one administratively affiliated with the LGD for the specific emergency, and will have executive responsibility over emergency response (OEP, 2008, pp. 56-58). In her efforts, the on-site coordinator will be assisted by a local co-ordination group (*ibid.*, 60).

Finally, according to the SEPG, policy formulation regarding civil security broadly lies with the Inter-Departmental Working Group on Emergency Planning (IDWGEP) which is presided by the OEP. IDWGEP acts as a consultant to the Ministry of Defence when the latter ponders policy initiatives in the field of civil security (OEP, 2004, p. 10).

2.2.3 External dimension

A final issue to mention here is the institutional framework that enables Ireland to require assistance from other countries. The principal partner of Ireland in issues of civil security is the UK. For instance, the Irish and British governments signed an agreement on police co-operation in 2002 (DFAT, 2001). The two countries collaborated closely in tackling the West Cork oil spill crisis in 2009, an incident further described in following sub-sections. Information from the website of the Department of Foreign Affairs and Trade (DFAT) indicates that the country has signed six bilateral agreements with a number of third countries which can be extended to civil security concerns, yet the agreements themselves are not exclusively on crisis management. These agreements are with the USA in 2000, the Russian Federation in 2001, Hungary in 2001, Bulgaria in 2007, the Republic of Cyprus in 2007, and Poland in 2007 (DFAT, undated).The country also participates in a limited number of multilateral cooperation schemes and organisations that deal with civil security: the Bonn Agreement (maritime pollution disasters), the International Organisation of Fire and Rescue Service (CTIF), and the Regional Coordination Council for South Eastern Europe (RCC SEE).

2.3 Relations between the civil security system and citizens

2.3.1 Expectations

The different aspects of crisis management are linked with citizens' perceptions of civil security challenges, with what they feel to be their obligations during a crisis response and with their own expectations to be secured and protected by the government.

Starting with crisis perception, in the *Special Eurobarometer Survey on Civil Protection 328*, 62 percent of the Irish respondents would feel at risk because of flooding. The percentages for storms are 39 percent, for industrial accidents 25 percent and for marine pollution 24 percent (European Commission, 2009). According to the *Special Eurobarometer Survey 383 on Civil Protection*, 57 percent of the Irish population feel either very or fairly concerned about the occurrence of a natural disaster in Ireland. The percentage for terrorist attacks falls to 44 percent whereas it reaches 63 percent for man-made disasters such as oil spills and nuclear accidents (European Commission, 2012). It can be observed here that even though the typical crisis in Ireland is floods and storms, citizens are currently more afraid of the disastrous impact of a large-scale man-made disaster.³¹⁵ Ireland suffered the consequences of the West Cork oil spill in February 2009. This may have caused a certain increase in the percentages referring to man-made disasters such as marine pollution and industrial accidents.

As in every country, in Ireland citizens are supposed to comply with the authorities' ordinances when an emergency happens. Especially the individuals participating as volunteers either in voluntary

We should take into consideration that this poll took place in early 2012, only a few months after the Fukushima nuclear accident in Japan. Public opinion on man-made disasters might therefore have been further affected, with the result that citizens showed more concern about this specific category of civil security threats. This is not a justified inference but an assumption here.

emergency organisations or in the country's Civil Defence Forces will be more actively involved (OEP, 2008, pp. 60-62). The specifics of how casual volunteers will be employed during emergency response will be defined by the 'On-site Coordinator' (OEP, 2008, p. 56).

Concerning citizens' expectations, the 2012 *Edelman TrustBarometer Survey* reports for Ireland: 'There is a significant gap between public expectations and perceived delivery by government in Ireland' (Edelman TrustBarometer, undated). We cannot be certain about whether and how the government of Ireland failed to meet the expectations of the Irish people. We should notice here that the Irish government is currently under budget constraints due to the EU financial crisis forcing changes in public administration. To a certain extent the normal operation of the units dealing with crisis management has not been left untouched.³¹⁶ Taking into account that the survey refers to all governmental functions, a possible scenario explaining the expectations gap is the fact that the public administration underwent a phase of modifications in the last few years which had some impact on civil protection, lowering its effectiveness, whereas citizens' expectations remained high as always. Further research is needed to test this hypothesis.

2.3.2 Information

An important issue that affects relations between the state and its citizens during emergency response is the quality and flow of information provided. During a crisis, the Irish authorities will employ both radio and TV stations to inform the public.³¹⁷ Moreover, the OEP makes the most recent updates about crises, emergencies or disasters available through the 'News' link of its website (http://www.emergencyplanning.ie/news.aspx). The most frequent information to be found here is warnings of severe weather conditions. The communication of alerts and warnings will take place through the mass media; to the best of our knowledge, a siren system is not employed in Ireland.

At the local level, FMEM assigns responsibility for the dissemination of information to the public to the 'local co-ordination group': 'The local co-ordination group may establish a sub-group for this purpose and use all available channels to make concise and accurate information available. This may include the use of dedicated 'help-lines', webpages, Aertel, automatic text messaging...' (OEP, 2008, p. 67).

Based upon informal discussions with an Irish civil servant.

³¹⁷ At national level, announcements can be emitted by the following radio stations: RTE Radio 1, RTE 2 FM, Today FM, RTE Lyric FM, RTE Radio naGaeltachta, Newstalk 106. TV messages can be presented through RTE 1, RTE 2, TV3, TG4 (Department of Defence, OEP, undated).

2.3.3 Education

The OEP makes efforts to keep citizens aware of potential civil security challenges. For example, the office has constructed the webpage 'Be Winter-Ready', (http://www.winterready.ie/Be-Winter-Ready.aspx) which not only includes weather forecasts but also advice and recommendations to drivers on road safety, to students regarding school closures, and to farmers (Department of Defence, OEP, undated)⁻ The development of this webpage is part of a broader national information/awareness campaign ('Winter Ready Campaign') on severe weather conditions that came as an inter-departmental initiative (RTE News/Ireland, 2011). Furthermore, the Department of Environment, Community and Local Government established the 'National Fire Safety Week' taking place every early October, in collaboration with the Fire and Rescue Services of Northern Ireland, to better inform citizens about fire safety and especially how to secure their households (Department of Environment, 2012). Last but not least, citizens can access online the 'Irish Flood Warning Service', an online system of alerting citizens about imminent floods developed by University College Cork (University College Cork, undated).

2.4 Role of the private sector in maintaining civil security

How is the Irish private sector involved in crisis management? This section examines the matter by bearing in mind the basic distinction between profit-oriented and non-profit oriented organisations. The former will be involved in crisis management if their services have been contracted, on an *ad hoc* or regular basis, by the state. The latter consist of volunteers in non-governmental organisations (NGOs) and Civil Society Organisations (CSOs) related to crisis management.

2.4.1 Role of societal/non-profit organisations/NGOs

Starting with the non-profit oriented organisations, three primary groups can be distinguished. First, the Irish 'Civil Defence' which is a non-profit organisation structured upon the legacy of civil defence against the nuclear threat during the Cold War. The organisation no longer specialises in nuclear safety but focuses on preparing citizens to deal with crises, mainly through a series of training exercises. Civil Defence Ireland currently consists of approximately 6,000 members scattered throughout the whole of the country. As previously hinted, for the period 2003-2012 the Civil Defence service was directed by the CDB which was dissolved at the end of 2012 when the service was re-integrated into the Department of Defence (*Civil Defence*, undated). The volunteers of the Civil Defence service are divided at county level; they are available to the local authorities and are thus mobilised according to the 'Local Authority Major Emergency Mobilisation Procedures' (OEP, 2008, p. 75).

Second, the Irish Red Cross plays a significant role in emergency response, providing assistance to PRAs, mainly in the field of ambulance and rescue services (Red Cross, undated). At the time of publication, the FMEM reported that the volunteers of the Irish Red Cross amounted to 2,500, organised on a local basis (OEP, 2008, p. 75). This number has recently been raised to approximately 2,900 volunteers (Red Cross, EU Office, undated).

The vital contribution of the Irish Red Cross to civil security has been particularly evident during the extreme weather conditions of 2009-2010 and 2010-2011. The organisation issued tips for households and enterprises to take precautions against the cold. At the same time, volunteers provide ambulance services when needed and facilitate the circulation of vehicles, especially when the latter are used to transfer patients (Red Cross, EU Office, undated 2).

Interestingly, the Irish Red Cross is closely interlinked with the public sector on issues of leadership. 'The president of Ireland is president of the Irish Red Cross and the chairman is appointed by the president, on the advice of the government. The Department of Defence is the government department associated with the organisation – a senior official of that department sits on the Board of the Irish Red Cross' (*ibid*.). Once again, we confirm how heavily the Department of Defence is involved in issues of command, control and coordination with regard to emergency preparedness and response.

Third, there are a number of emergency voluntary services whose mandate lies primarily within the areas of search and rescue and ambulance services. According to FMEM the principal ones are:

- The Order of Malta Ambulance Corps,
- The St John Ambulance Service,
- Mountain Rescue Teams,
- Cave Rescue Teams,
- Search and Rescue Dog Associations,
- River Rescue Units,
- Community Inshore Rescue Units,
- The Royal National Lifeboat Institution (RNLI),
- Sub-Aqua Units (OEP, 2008, p. 76).

2.4.2 Role of profit-oriented organisations

Turning to the profit-oriented organisations, the public authorities have not outsourced responsibilities of crisis management to private companies and enterprises on a regular basis. Checking the existing Public-Private Partnerships in Ireland, it can be confirmed that most of the projects relate to drainage of lands, sewerage schemes or exploitation of water resources but none of them has been exclusively conducted in order to prevent or deal with an emergency, e.g. arising from floods (Department of Public Expenditure, 2013). This does not mean that private companies' services cannot be recruited when an emergency/disaster actually occurs. A private sector party may be obliged by circumstances to participate in emergency response if it holds ownership of the site of the emergency. In addition, private companies may be summoned to contribute to emergency response by the 'on-site coordinator' who will have previously discussed the matter with the 'controllers of operations' of the other PRAs on the site. Operationally speaking, the mobilisation of a private sector party will be under the distinct responsibility of the PRA that has specifically requested the services of a private sector company/enterprise (OEP, 2008, p. 76).

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

In order to assess the effectiveness of the Irish civil security system, we will be describing the Irish authorities' management of two crises of different types. The first is the West Cork oil spill in February 2009. The second is the severe floods that the country suffers almost every year.

In early February2009, the Irish Coast Guard was notified by the European Maritime Safety Agency (EMSA) that an oil spill was moving towards the shores of Ireland. The spill was the result of a Russian aircraft carrier being refuelled by another Russian ship. Apart from the Russian ships, British and Irish ships were also in the area (an Irish naval vessel had already been present; British ships moved towards the area as the oil spill could affect the Welsh coast of the UK). To prevent a generalised crisis and ecological disaster, the Irish and British Coast Guards together would primarily monitor the expansion of the oil spill. Furthermore, the Irish filed an official request to the Russian embassy for oil samples (Department of Transport, 2009a). The Irish authorities continued their surveillance of the progress of the oil spill throughout the month of February, reporting in mid-February that the spill was naturally diminishing, although still approaching the Irish coast. At the same time, the Coast Guard, exceptionally acting as the responsible PRA in this incident, requested

oil recovery vessels to be vigilant and convened an inter-governmental group 'to monitor and advise on the current situation and potential impact to the coastline and marine environment' (Department of Transport..., 2009b). At the end of February and while still monitoring the development of the oil spill, the Coast Guard reported a further reduction of the slick and met with representatives from local authorities and environmental agencies to inform them about the de-escalation of the crisis and to reflect upon how wildlife could be protected in the highly unlikely contingency of contamination (Department of Transport..., 2009c). The crisis concluded without further escalation. Interestingly, some days later (in early March), the Irish minister of transport attended the European Parliament, which had just adopted the Third Maritime Safety Package. The minister congratulated MEPs for passing supranational measures on maritime safety and highlighted how important the role of EMSA had been in preventing a large-scale catastrophe from the oil spill in the Irish south west coast (Department of Transport, 2009d).

The following remarks can be made on the incident. Firstly, the Irish Coast Guard, acting as the lead agency in this case, and the Department of Transport, Tourism and Sport, undertaking the LGD role, reacted in a timely manner when they received the warning from EMSA. Moreover, they both had to coordinate with a number of different actors during the West Cork oil spill incident. The government had to take into account the inter-state dimension of the incident with Russian and British interests at stake. It also stayed in contact with the EU's Monitoring and Information Centre (MIC) and with EMSA. The Department of Transport in particular liaised with other government departments and sought their advice on how to contain the oil spill. The Irish Coast Guard had to collaborate with colleagues from the British Coast Guard. The Irish Coast Guard also kept the local authorities and other public stakeholders (environmental organisations) informed. Taking into account these parameters and the fact that the oil spill did diminish naturally, this can be seen as an instance of successful crisis management.

Floods are quite common in Ireland and they tend to occur in October and November after severe rainfalls sweeping the country (*Irish Times*, 2012). In 2009, the whole of Ireland (Northern Ireland included) experienced floods with a negative impact on individuals, businesses and infrastructure (Adamson, 2010). In October 2011 the flooding of Dublin caused great damage to the city's infrastructure as well as the deaths of two people (BBC, 2011); floods caused extensive damage and disruption in the city of Cork in 2012 (RTE, 2012).

How has the civil security system reacted against the regularity of this type of natural disaster? Account should be taken here of the difficulty of predicting how a natural disaster will develop. No matter how well coordinated a civil security system, the contingency that it will be overwhelmed by the unpredictable progress of a natural disaster always remains. Thus, extra attention should be paid to preparedness and relief. To a certain extent, this has been the case with the reaction of Irish authorities to floods. The floods in the early 2000s highlighted, first, the limits of coordination of governmental response due to the loosely determined roles of the actors involved in emergency response and, second, the need of an integrated policy of national radius for flood management. In 2004 the Office of Public Works (OPW) published the Review of National Flood Policy 2004 where it proposed a new approach towards flood risk management. The OPW made a series of recommendations, among others that the OPW should be the lead agency coordinating emergency response to floods, that 'catchment flood risk management plans should be developed' and that national infrastructure works (e.g. drainage) should be conducted for the country to better resist the impact of floods (Office of Public Works, undated). The government accepted the recommendations put forward by the review and proceeded to initiate infrastructural work programmes to increase the effectiveness of the country's resilience to floods (Office of Public Works, undated 2). Moreover, the responsible authorities (i.e. the OPW) planned a public awareness campaign by establishing a webpage with different types of advice for citizens (such as how to prepare and protect themselves and what to do after flooding) (Office of Public Works, undated 3). Abiding by the rationale that floods should be managed locally, the Irish civil security system has greatly invested in the relief phase of crisis management through the implementation of 'Flood Relief Schemes' for areas/regions that have been affected by floods. For example, in November 2012, the government approved a 7million-euro flood relief scheme for the region of Claregalway that suffered from the flooding of the river Clare (MerrionStreet, 2012).

In the history of floods in Ireland during the period 2000-2012 a certain responsiveness of the civil security system to the 'shocks' caused by the frequency of major floods can be confirmed. We can assume with some safety here that, despite the fact that the civil security system was overwhelmed during the response phase due to the unpredictability of floods, its attention to preparedness and recovery somehow compensated for this weakness. Yet, the measures taken by the state were insufficient to placate the anxiety of citizens, as we saw earlier regarding the perceptions of crisis in Ireland and as we will mention below in discussing legitimacy.

3.1.2 Limits to national capacities

Our discussion on the West Cork oil spill crisis and on the recurrent floods so far has shown the limitations of the Irish civil security system. Firstly, there are budget constraints that can be eased through external financial aid. The Irish government accepted 13 million euros from the EU Solidarity Fund for recovering from the floods of 2009 (EU Commission, DG REGIO, undated). Secondly, it is difficult for the Irish administration to confront transnational crises alone, without some sort of cooperation with external actors. As seen in the case of West Cork Oil Spill, the activation of MIC and the resultant exchange of information with EMSA helped the Irish authorities to assess the emergency and constantly monitor its progression (European Commission, DG ECHO, undated 2). In spite of this, to the best of our knowledge the Irish government has not declared a generalised 'state of emergency' for the period 2000-2012 even though the severe weather conditions in winter 2009-2010 and 2010-2011 necessitated the mobilisation of the whole of society.

3.2 Efficiency

Efficiency in public administration has usually been concerned with economisation of resources without compromising the quality of delivery. In our study this will translate to whether civil protection in Ireland is good value for money. Therefore, discussions around efficiency concentrate on budget issues.

In an initial effort to express the magnitude of the budget dedicated to civil security in Ireland, we turn to national statistics as these are presented to Eurostat. Some indicators that address government expenditures (General Government) expressed in national GDP percentages, in different areas that can associate with civil security, and for the period 2007-2011, are presented in Table 1.

Table 1: Government Expenditures on Civil Security

Category of Expenditure	2007	2008	2009	2010	2011				
Civil Defence	0	0	0	0	0				
Public Order and Safety	1.6	1.8	1.9	1.8	1.8				
Police Services	0.9	1.1	1.1	1.1	1.1				
Fire-Protection Services	0.2	0.2	0.2	0.2	0.2				
Environment Protection	1	1.2	1.2	1.1	1				
Source: Eurostat, COFOG (undated)									

For the last few years the utmost priority of the Irish government has been economic recovery. In the framework of an EU bailout programme, the country has been assisted by its Eurozone partners to cope with its sovereign debt. In compliance with the programme, the Irish government had to proceed to budget cuts in its public expenditures as well as to increases in taxation (Noonan, 2012).

In this context of austerity, the 2013-2014 budget predicts cuts in all government departments referenced in the previous sections of this study as having played a role in crisis management. First of all, the Department of Defence, which is heavily involved with issues of civil security, has lost 3 million euro of current expenditures for the period 2012-2014 (the departmental ceiling was 893 million euro for 2012, predicted to be 892 million euro in 2013 and 890 million euro in 2014) (Department of Finance..., 2012a, p. 20). Especially for 2013, the budget allocated to the Department of Defence will be 901 million euro (892 million euro in current expenditures plus 9 million euro in capital expenditures). Despite the budget constraints, the government does not want to economise on civil protection as becomes apparent from the following statement in the *Expenditure Report 2013*: 'The Defence Forces will continue to deliver required operational outputs for all approved aid to the civil authority requests' (Department of Finance..., 2012b, pp. 44-46). This entails that armed forces will still be at the disposal of PRAs if needed.

A picture of more robust frugality applies to the Department of Environment, Community and Local Government and of Transport, Tourism and Sport. Both have to undergo considerable decreases in their allocated current expenditures. The former will be saving 84 million euro for the period 2012-2014 and the latter 95 million euro ((Department of Finance, 2012a, p. 20). These two departments are experiencing significant cuts in their budgets (more severe than those in Defence). However, both departments are indirectly linked with crisis management. Emergency preparedness, training, public awareness of contingencies and involvement of volunteers are a concern of local governance which implies engagement with the Department of Environment, Community and Local Government. This is confirmed by the legislators themselves. Speaking in the Dáil in the context of finalising the *Civil Defence Bill 2012*, Deputy Pádraig MacLochlainn clearly expressed his concerns:

The difficulty in this area is that there are a lot of cutbacks to local authorities, including huge changes to their budgets and consequently how they operate. It is very important that on an ongoing basis resources are there for training and re-training to deal with new techniques, equipment and health and safety processes. We want to ensure that all the strengths continue in operation (Dáil Éireann, 2012a).

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On the other hand, the Department of Transport, Tourism and Sport can be associated with resilience of the national infrastructure. Budget cuts in all three departments may not directly affect the efficiency of the system, yet they can cause implicit problems because many administrators in Ireland have been allocated the additional role of emergency planner in their agency/service. And as we mentioned before, budget cuts in public administrators.

3.3 Legitimacy

In liberal democracies, every domain of public governance should be adequately legitimised. The current study takes into consideration three different legitimising factors: support from the political system itself; support from the judicial sector manifested through judiciary decisions that the civil security stakeholders abide by the rule of law; and support coming directly from the citizens.

3.3.1 Political support

Starting with political support of governmental actions in the field of civil security, the debates around Irish civil security are numerous in both houses of the Parliament, Dáil and Seanad, and vary significantly, covering the broad gamut of crisis management. The great reforms of the civil security mechanism, depicted in previous sections, have been largely discussed in the Irish Parliament. For example, the recent *Civil Defence Bill 2012* has been extensively discussed in the respective sub-committee as well as in the Dáil.³¹⁸

Plenty of questions are addressed in the Parliament on emergency preparedness and response. In this context, it is important that citizens be able to communicate with the public authorities if they have vital information about crises. Accordingly, Deputy Arthur Spring has questioned the minister responsible as to whether there have been arrangements to introduce a text message service to alert the emergency services (a system that is easily accessible for people with disabilities). Minister Deputy Pat Rabbitte replied that a text service has been available to Emergency Services since January 2012 (Dáil Éireann, 2012b). On emergency response, an interesting question was addressed to the minister of Department of Transport just after the West Cork oil spill crisis in 2009. Deputy Brendan Howlin asked the minister whether Ireland is adequately equipped with pollution protection vessels and whether the country will need emergency vessels in the future for cleaning up marine pollution. Minister Deputy Noel Ahern replied that the management of this specific crisis was successful but the government did proceed to review the national capacity to handle man-

This inference draws upon an online search at the Houses of the Oireachtas' website and upon the large number of results obtained for 'emergency services' for 2012 and 2013.

produced marine pollution (Dáil Éireann, 2009). All these concrete examples show us that both legislative initiatives as well as the government's actions in crises and emergencies are scrutinised by partisan forces and sub-committees of the Irish Parliament.

3.3.2 Legal support

Legitimacy is generally combined with issues of accountability and liability. In Ireland, the Parliament can order the investigation of how a crisis has been managed. In other words, it can establish a 'Tribunal of Inquiry'. There has been no such tribunal set up exclusively on an emergency or disaster for the period 2000-2012 (Citizens Information Board, undated). What is more, citizens themselves can refer to the national courts with regard to the public administration's activity during an emergency response. However, we could not retrieve from the *Courts Service Annual Report 2011* a case that has been brought before the country's courts specifically and explicitly regarding civil security (The Courts Service, undated). Moreover, citizens can address the national ombudsman with complaints about the delivery of civil protection. Their complaints, though, mostly refer to health services; there are complaints about An Garda Síochána and the Health Service Executive, both PRAs, but in the last *Annual Report of the Ombudsman* we have found no indication that these complaints particularly refer to crisis management. An interesting point in this report is that the British and Irish ombudsmen have established a line of collaboration within their domain of jurisdiction (public scrutiny and accountability) (Office of the Ombudsman, 2012).

The means to hold Irish policy-makers to account for their political choices, decisions and actions in the field of civil security do exist. Yet, it seems that citizens feel crisis management is still an issue which concerns public administration and misdeeds in this area should mainly be dealt by the political system itself, not by citizens individually. This assumption is based upon the fact that in our research we could not locate major cases of Irish individuals against the state brought before either the ombudsman or the national courts.

3.3.3 Popular trust and support

Does the aforementioned hesitancy to blame the civil security system actually imply satisfaction of the citizenry with its function? According to the *Special Eurobarometer Survey on Internal Security*, 45 percent of the Irish feel their country has taken sufficient measures to fight terrorism versus 39 percent believing that it has failed to do so. The two figures are very close. The situation is equally ambiguous in the case of man-made and natural disasters. 34 percent of Irish respondents believe the public administration deals appropriately with man-made and natural-disasters, whereas 39 percent of them deem the Irish measures against these types of disasters inadequate. Notice here

that the survey took place just a few months after the severe winter of 2010-2011, which this study considers as the signature crisis for the period 2000-2012 (European Commission, 2011). In any case, these data describe a stance of public opinion with ambivalent inclinations towards the public administration's management of crises and emergencies. This, nonetheless, has not discouraged the Irish people from volunteering when disasters strike. One can speculate that the public administration's shortcomings in delivery may even work as a motivation for the public to get more involved, which helps to explain the large numbers of members of both the Civil Defence organisation and the Irish Red Cross.

4. Irish Civil Security in the EU Context

A last aspect of the country's civil security system to be evaluated is its capacity to operate harmoniously within the EU framework. Ireland is a member of the EU Civil Protection Mechanism and moderately involved with its operations. Ireland has entrusted its practitioners to acquire joint training with other European emergency planners within the training programmes organised by the Mechanism (17 Irish participated in the training 2009-2010 training cycle) (Hollis, 2010). Yet the Irish government has only once participated in the Mechanism-led simulation exercises that have been conducted the last few years (EU Commission, DG ECHO, undated). Ireland seems hesitant towards more cooperation within the framework of the Mechanism with regards to joint exercises. This is not a generalised tendency because the country also participated in the INEX3 exercise which was organised by the OECD.

Unlike exercises, willingness to cooperate with the EU is much more evident when crises emerge. Ireland requested assistance from the EU Civil Protection Mechanism for managing the West Cork oil spill crisis. The Mechanism acted as an intermediary and contacted EMSA who made the necessary arrangements to render an oil recovery vessel available for Ireland. Moreover, the country has provided its assistance five times to other countries experiencing major disasters (European Commission, DG ECHO, undated 2).³¹⁹ And as we mentioned before, the country has benefitted before from the EU Solidarity Fund to cope with the disastrous impact of the 2009 floods.

Is the cautious stance towards a potentially more dynamic interaction with the EU Civil Protection Mechanism the result of public perception? Simply put, is it because Irish citizens do not favour cooperation with the EU on issues of civil security? This does not seem to be the case. Even though the majority of Irish citizens are not aware of EU activities in civil protection (only 37 percent knew that the EU coordinates crisis management within the EU and abroad versus 56 percent who did not

Data refer to activations of the Community Mechanism for the period 2007-2011.

know), an overwhelming 82 percent of the Irish believe that a coordinated EU action in the domain of crisis management will be more effective than actions solely focused upon national means (European Commission, 2012). To a certain extent, this also reflects the Irish people's discomfort with how the Irish government has confronted emergencies, in particular floods, in the last decade.

5. Conclusion

From the above mapping out and evaluation exercises with regard to crisis management in Ireland, the following observations can be made in respect of the analytic dimensions of the Irish civil security system:

-*Cultural and historical aspects*: Due its historical background of para-military activities and domestic terrorism, the Republic of Ireland has developed an understanding of civil security that is closely associated with national or domestic security. However, the country no longer faces its traditional internal security challenges. It is not domestic terrorism or nuclear safety but floods that inflict mayhem upon the Irish population today. The national culture plays a role in crisis management because and when it brings the Irish people closer in the face of calamities. We could not find evidence that Irish policy-makers and civil security practitioners adopt a distinctively Irish mentality towards crisis management solely because they are Irish. Simply put, one cannot talk about an 'Irish' way of doing things in emergency preparedness and response.

-*Constitutional and legal aspects*: The Irish civil security system is based upon a concrete institutional and legal framework with the responsibilities of every civil security stakeholder well defined in the official documentation. The Irish civil security mechanism takes a bottom-up approach of crisis response with local authorities taking the lead in declaring an emergency and dealing with it. Our findings with regards to centralisation are mixed, though. On the one hand, emergency response is decentralised as the country has adopted the LGD approach to crisis management. On the other hand, the role of the Department of Defence (as an umbrella organisation) is very much entangled in the civil security administrative structures. This takes us back to how civil security in Ireland has historically developed in close correlation to issues of national defence.

-*State-citizen relations*: The public authorities make strenuous efforts to inform and alert the public on imminent disasters. This is most conspicuous in the case of natural disasters such as floods and extreme weather conditions. Radio, TV, info lines, Web campaigns and text messaging services are all employed to keep the population vigilant. At the same time, though, this may not be enough to satisfy Irish citizens who feel that their welfare and lives are endangered every year due to floods and prolonged snowfalls. At the end of the day, it is the emergency response that

matters, and not solely preparedness. The expectation gap between the government and Irish citizens is high within all different aspects of governmental activity, including the delivery of civil protection.

-*The role of the private sector*: The country has a long tradition of Civil Defence dating back to the Cold War and nuclear deterrence. The Irish participate in emergency voluntary organisations and have developed sentiments of communitarian solidarity that link back to the Irish culture with its focus on tradition and religion. We found that there are no responsibilities exclusively reserved for the profit-oriented organisations in crisis management. The private sector is recruited on an *ad hoc* basis (when crises occur) by the PRA involved in emergency response.

Bearing in mind the analytic dimensions of the Irish civil security system, the country report proceeded to an evaluation exercise in accordance with different parameters such as:

-*Issues of effectiveness*: We examined and compared two different emergency incidents (the West Cork oil spill and the floods) in Ireland and observed that, in general, the Irish civil security system is effective because it has extensively invested in pre-planning (Major Plans, National Plans). Its effectiveness also depends upon taking advantage of international cooperation when this is necessary, as in the case of the West Cork oil spill. In contrast to its effective reaction to the latter, extensive focus on pre-planning does not always help with unpredictable crises such as natural disasters. It is the rigorous emergency response that matters here and which will guarantee civil protection. Problems in tackling floods during the last decade indicate that the Irish civil security system should probably increase and ameliorate its crisis management capabilities.

-Issues of efficiency: The country has experienced general budget cuts due to the financial crisis and this has not left the departments that are involved in civil protection unaffected. As part of saving resources, a considerable number of civil servants were obliged to either transfer into other services or retire from the public sector. This has caused institutional changes in crisis management, such as the decision to dissolve the Civil Defence Board and bring the Civil Defence organisation under the authority of the Department of Defence. At present, it is not possible to ascertain how these administrative changes will actually affect the delivery of civil protection in Ireland but some sort of negative impact upon the tasked responsibilities of the administrative units in crisis management could be expected (especially when the latter are already shortstaffed or under-staffed).

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-*Issues of legitimacy*: Institutional mechanisms to hold the government to account for its decisions on civil security are in place. Especially, parliamentary debates and questions on civil security and the actions of emergency services are frequent, scrutinising governmental activity. Visibility of crisis management is ensured by the Irish press, which generally proffers a critical stance of the public sector's choices vis-à-vis emergencies. One significant factor legitimising civil protection, and which is linked with effectiveness, is how satisfied citizens are with crisis management in the country; surveys show that the simple majority of Irish citizens deem the measures of the state against man-made and natural disasters inadequate.

Last but not least, this country report examined the Irish crisis management in the framework of the EU. In general, Ireland has favoured more collaboration within the frame of the EU Civil Protection Mechanism, participating in its training procedures as well as offering assistance to countries referring to the Mechanism. Cooperation with the EU is viewed positively by practitioners in the fields of exchange of information, disaster prevention and emergency alertness. The government has not been equally active in the field of EU-funded exercises. More engagement with the EU on issues of crisis management would accord with Irish public opinion which favours more cooperation on civil protection with other European partners.

Annex I: Coded Data

				ANNEX I (QUANTITATIVE DATA)	
1. a	Is there an	No = 0	1	Strategic Emergency Planning Guidance 2004	
1. a	official/for mal definition of crisis?	Yes = 1	Ţ	Strategic Emergency Flamming Guldance 2004	
1. b	Is the crisis managem ent approach primarily based on military or civilian operation s?	Military = 1 Civilian = 2	2	Revised Annex "A" to Strategic Emergency Planning Guidance 2004	
1.c.	If civilian operation s dominate, is the military used for support for crisis managem ent operation s?	No = 0 In exception al situations = 1 Regularly = 2	1	Revised Annex "A" to Strategic Emergency Planning Guidance 2004	
1.d	Does the country take MAINLY an all hazards/g eneric or MAINLY a specific/fu nctional threats approach	Mainly all hazard = 1 Mainly specific threats = 2	2	Strategic Emergency Planning Guidance 2004	

					,
	to crises				
	and disasters?				
	disasters?				
2.1	Culturel				
2.1	Cultural and				
	historical				
	aspects				
2.1.	Administr				
1	ative				
	tradition				
2.1.	ls the	Unitary =	1	Irish Constitution, Article 5.	
1.a	state	1			
	unitary or	Federal =			
	federal?	2			
2.1.	ls the	Parliamen	2	Irish Constitution, Article 12.1.	
1.b	political	tary			
	system parliamen	system = 1			
	tary or	Presidenti			
	presidenti	al system			
	al?	= 2			
2.1.	Is the	Monarchy	2	Irish Constitution, Article 6.1.	
1.c	country a	= 1			
	monarchy	Republic =			
	or a	2			
	republic?				
2.1.	ls the	Consociati	1	According to Lijphart, Arend (1991)	
1.d	political	onal	-		
	system a	democrac			
	consociati	y = 1			
	onal or a	Majoritari			
	majoritari	an			
	an	democrac			
	democrac	y = 2			
2.1.	y? Is	Top-down	1	Strategic Emergency Planning Guidance 2004	
2.1. 1.e	delegation	= 1	1	Stategic Entergency Flamming Outdunce 2004	
	constructe	Bottom-			
	d in a top-	up = 2			
	down or	Both = 3			
	bottom-				
	up				
	fashion?				

2.b Value 2 Survey's national 2 national score on 4 dimension 1 - traditional vs. secular 4 vs. secular 1.18 http://www.worldvaluessurvey.org/ Y 2.c Value 1.18 http://www.worldvaluessurvey.org/ Y 2.c Survey's 1.18 http://www.worldvaluessurvey.org/ Y 2.c Survey's 1.18 http://www.worldvaluessurvey.org/ Y score on 1 1.18 http://www.worldvaluessurvey.org/ Y y. self- 1.18 http://www.worldvaluessurvey.org/ Y	2.1.	Culture			
2.a.i Hofstede country national cultural score - DP 70 http://geert-hofstede.com/countries.html 1 2.1. Geert cultural score - IDV 70 http://geert-hofstede.com/countries.html 1 2.1. Geert cultural score - IDV 68 http://geert-hofstede.com/countries.html 1 2.1. Geert cultural score - IDV 35 http://geert-hofstede.com/countries.html 1 2.1. Geert cultural score - IDV 43 http://www.worldvaluessurvey.org/ 1 2.1. World Score on dimension 1 - IDV 1.18 http://www.worldvaluessurvey.org/ 1 2.1. Score on dimension 2 - Survey's national score on dimension 2 - Survey's 1.18 http://www.worldvaluessurvey.org/ 1					
2.a.i Hofstede Image: score of the		Hofstede country national cultural	28	http://geert-hofstede.com/countries.html	
2.a.i Hofstede Image: score of the	2.1.		70	http://geert-hofstede.com/countries.html	
2.a.i Hofstede country antional antional antional cultural score - MAS - - 2.1. Geert 35 http://geert-hofstede.com/countries.html - - 2.a.i Hofstede -	2.a.i	Hofstede country national cultural score -	-		
2.a.i Hofstede country national cultural score - UAI 43 http://geert-hofstede.com/countries.html - 2.a. Hofstede v country national - cultural score score - TO - 2.1. World Survey's -0.91 http://www.worldvaluessurvey.org/ Y 2.b Value Survey's - national - vs. secular 1.18 http://www.worldvaluessurvey.org/ Y 2.c Value Survey's 1.18 http://www.worldvaluessurvey.org/ Y 2.c Value Survey's 1.18 http://www.worldvaluessurvey.org/ Y 2.c - Survey's - national - vs. self- -	2.a.i	Hofstede country national cultural score -	68	http://geert-hofstede.com/countries.html	
2.a. Hofstede v country national v v country national cultural score v LTO - - traditional y y 2.1. World -0.91 http://www.worldvaluessurvey.org/ y y 2.1. World -0.91 http://www.worldvaluessurvey.org/ y y 2.b Survey's national score on national y score on 1 - traditional y y y 2.1. World 1.18 http://www.worldvaluessurvey.org/ y y 3.1. y score score score score	2.a.i	Hofstede country national cultural score -	35	http://geert-hofstede.com/countries.html	
2.b Value 2 Survey's national 2 national score on 4 dimension 1 - traditional vs. secular 4 vs. secular 1.18 http://www.worldvaluessurvey.org/ Y 2.c Value 1.18 http://www.worldvaluessurvey.org/ Y 2.c Survey's 1.18 http://www.worldvaluessurvey.org/ Y 2.c Survey's 1.18 http://www.worldvaluessurvey.org/ Y score on 1 1.18 http://www.worldvaluessurvey.org/ Y y. self- 1.18 http://www.worldvaluessurvey.org/ Y	2.a.	Hofstede country national cultural score -	43	http://geert-hofstede.com/countries.html	
2.1. World 1.18 http://www.worldvaluessurvey.org/ Y 2.c Value Survey's national score on dimension 2 - survival vs. self- 1.18 http://www.worldvaluessurvey.org/ Y		Value Survey's national score on dimension 1 - traditional	-0.91	http://www.worldvaluessurvey.org/	Year 2000
expression n 2.2 Legal &	2.c	World Value Survey's national score on dimension 2 - survival vs. self- expressio n	1.18	http://www.worldvaluessurvey.org/	Year 2000

	constituti				
	onal				
	aspects				
2.2.	Statutory				
1	basis	Highly	1	Stratagic Emergency Planning Cuidance 2004	
2.2. 1.a	To what extent is the legal framewor k that regulates civil security centralize d versus fragmente d?	Highly centralize d (1-2 key laws regulates civil security) = 1 Neither centralize d nor fragmente d (3-5 key laws regulates civil security) = 2 Highly fragmente d (6 or more key laws regulates civil security) = 3	1	Strategic Emergency Planning Guidance 2004	
2.2. 1.b	When was the last major reform in the civil security field undertake n?	Provide the year of the reform	2004	Strategic Emergency Planning Guidance 2004	
2.2. 1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	Strategic Emergency Planning Guidance 2004	
2.2. 1.c	Are formal legal provisions in place	No = 0 Yes = 1	1	Framework for Major Emergency Management 2006	

	1	r	1		
	allowing				
	the state				
	to call for				
	a state of				
	emergenc				
	y				
	, (including				
	derogatio				
	ns from				
1	political				
	order)?				
2.2		N- 0	0		To the
2.2.	Are formal	No = 0	0		To the
1.d	legal	Yes = 1			best
	provisions				of our
	in place				knowl
	allowing				edge,
	the state				the
	to call for				term
	a state of				is not
	disaster				used
	(facilitate				in the
	d				Irish
	operation				civil
	al				securit
	coordinati				
	on				y syste
	mechanis				m.
	m)?				┼───┤
2.2.	Political				
2	dimensio				
ļ	n				
2.2.	On what	At the	3	FAQs of Office of Emergency Planning	On
2.a	level of	national			emerg
	governme	level = 1			ency
	nt does	At the			respo
	executive	regional			nse, it
	responsibi	level = 2			seems
	lity for	At the			that
	civil	local level			the
	security	= 3			Lead
	FIRST AND	-			Agenc
	FOREMOS				y,
	T rest?				y, operat
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1	Trestr				ing
	Trestr				ing
	T Test?				locally
	Trest				locally , will
	T Test:				locally , will have
	T Test:				locally , will have execut
	T Test:				locally , will have execut ive
	T Test:				locally , will have execut ive respo
					locally , will have execut ive
					locally , will have execut ive respo nsibilit
2.2.	On what	At the	1	Strategic Emergency Planning Guidance 2004	locally , will have execut ive respo
2.2. 2.b		At the national	1	Strategic Emergency Planning Guidance 2004	locally , will have execut ive respo nsibilit
	On what level of	national	1	Strategic Emergency Planning Guidance 2004	locally , will have execut ive respo nsibilit
	On what level of governme	national level = 1	1	Strategic Emergency Planning Guidance 2004	locally , will have execut ive respo nsibilit
	On what level of	national	1	Strategic Emergency Planning Guidance 2004	locally , will have execut ive respo nsibilit

	· ·				1
	formulatio n for civil security FIRST AND FOREMOS T rest?	level = 2 At the local level = 3			
2.2. 3	Operation al dimensio n				
2.2. 3.a	Is there a specialise d agency for crisis response at the national level?	No = 0 Yes = 1	1	Strategic Emergency Planning Guidance 2004	It is the Office of Emerg ency Planni ng.
2.2. 3.b	Are there specialise d agencies for crisis response at the regional level?	No = 0 Yes = 1	0	FAQs of Office of Emergency Planning	At the region al level, civil securit y aspect s are coordi nated by the "Regio nal Steeri ng Group s" but these are inter- agenc y forma tions.
2.2. 3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	1	Strategic Emergency Planning Guidance 2004	
2.2. 3.d	How many major exercises with a national dimension	Register the number	N/A		Please , refer to the corres pondi ng passag

2.2. 3.e	have been organised in the period 2008- 2012? How many major exercises with an internatio nal dimension have been organised in the period 2008- 2012	Register the number	1	http://www.environ.ie/en/Environment/EnvironmentalRadiation /PublicationsDocuments/FileDownLoad,1325,en.pdf	es of the countr y report To the best of our knowl edge, this is OECD' s INEX3
2.2. 4	External dimensio n				
2.2. 4.a	Has the country signed bilateral agreemen ts with all neighbour ing countries?	No = 0 Yes = 1	1	Framework for Major Emergency Management 2006	
2.2. 4.b	How many countries has the country signed bilateral agreemen ts with OTHER THAN the neighbour ing countries?	Register the number.	6	Department of Foreign Affairs and Trade.	
2.2. 4.c	How many regional/ multilater al agreemen ts on RESPONSE oriented disaster managem	Register the number.	1	http://www.bonnagreement.org/eng/html/	The Bonn Agree ment

	1	1			1
	ent (i.e.				
	not				
	general				
	conventio				
	ns on				
	environm				
	ental				
	protection				
) is the				
	country				
	part of?				
2.2.	Has the	No = 0	1		Please
4.d	country	One or	-		, refer
4.u					
	received	two times			to the
	assistance	= 1			corres
	from	More			pondi
	partner/n	than two			ng
	eighbouri	times = 3			passag
	ng				es of
	country/ie				the
	s in				countr
	response				
					У
	to MAJOR				report
	DISASTERS				
	(not day				
	to day				
	cross-				
	border				
	help)				
	during the				
	period				
	2000-				
	2012?"				
2.3	State-				
	citizens				
	relations				
2.3.	Expectati				
1	ons				
2.3.	Do	Not	1	Framework for Major Emergency Management 2006	
			1	Tranework joi wajoi Linergency wanagement 2000	
1.a	citizens	formally			
	have a	specified			
	formal/leg	= 0			
	al	Temporar			
	obligation	y support			
	or	upon			
	responsibi	request			
	lity in civil	by public			
	security?	authoritie			
	Please	s = 1			
	choose	Regular			
	the	private			
	maximal	responsibi			
	score on a	lities for			
	scale (i.e.	disaster			
	option 2	managem			
	includes	ent (e.g.			
	yes option	mandator			

	1 as well).	y civil			
	i as wenj.	service			
		and/or			
		insurance)			
		= 2			
2.3.	Informati				
2	on				
2.3.	Does the	No = 0	0		To the
2.a	country maintain a	Yes = 1			best of our
	siren				knowl
	system?				edge.
2.3.	Does the	No = 0	2	http://www.emergencyplanning.ie/being-prepared.aspx	cuge.
2.b	governme	Yes, at the	-		
	nt have a	local/regi			
	system for	onal level			
	, radio/TV	= 1			
	warnings	Yes, at the			
	_	national			
		level = 2			
		Yes, at			
		both			
		local/regi			
		onal and			
		national			
		levels = 3			
2.3.	Does the	No = 0	2	http://www.emergencyplanning.ie/news.aspx	
2.c	governme	Yes, at the			
	nt have a	local/regi			
	central website	onal level = 1			
	website	= 1 Yes, at the			
	updated	national			
	informatio	level = 2			
	n on crisis	Yes, at			
	events?	both			
		local/regi			
		onal and			
		national			
		levels = 3			
2.3.	Does the	No = 0	1	Framework for Major Emergency Management 2006	
2.d	governme	Yes, at the			
	nt make	local/regi			
	use of	onal level			
	social	= 1			
	media (Facabook	Yes, at the			
	(Facebook , Twitter	national level = 2			
	, Twitter etc.) to	Yes, at			
	update	both			
	citizens on	local/regi			
	relevant	onal and			
	crisis	national			
	issues?	levels = 3			
2.3.	Does the	No = 0	N/A		Missin
2.e	governme	Yes, at the			g data.

	r	r	1		·
	mobile	onal level			
	applicatio	= 1			
	n for	Yes, at the			
	reaching	national			
	citizens	level = 2			
	with vital	Yes, at			
	crisis/secu	both			
	rity	local/regi			
	informatio	onal and			
	n?	national			
		levels = 3			
2.3. 3	Education				
2.3.	ls civil	No = 0	N/A		Missin
3.a	emergenc	Yes = 1	,		g data.
	y training				8
	(not/exce				
	pt basic				
	FIRST AID)				
	part of the				
	school				
	curriculu				
	m?				
2.3.	Do	No = 0	2	http://www.redcross.ie/get-involved/volunteer/	
3.b.	societal/v	То			
	oluntary	members/			
	actors	profession			
	offer civil	al = 1			
	emergenc	То			
	y training?	members			
		and			
		limited			
		public			
		outreach			
		= 2			
		То			
		member			
		and wide-			
		spread			
		-			
		training			
		programm			
		es for			
		general			
		populatio			
		n = 3			
2.3.	Does the	No = 0	2	http://www.rte.ie/news/2011/1109/weather.html;	Ве
3.c	governme	Yes,		http://www.environ.ie/en/LocalGovernment/FireSafety/News/M	Winte
	nt run TV	moderatel		ainBody,31204,en.htm	r-
	campaigns	y (once			Ready'
	to raise	per year)			Inform
	awareness	= 1			ation
	of crisis	Yes,			Camp
	issues	extensivel			aign;
	among	y (more			Nation
					al Fire
	the	than once			
	public?	per year)			Safety
1		= 2			Week

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					with
					North
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					d in
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					er)
2.3.	Does the	No = 0	0	EUROSTAT, COFOG	er)
2.3. 3.d	governme	Yes = 1	0		
5.0	nt provide	163 - 1			
	for a				
	budget for				
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	g research/t				
	echnologi				
	cal				
	developm				
	ents on				
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	risis				
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	ent?				
2.3.	If yes,	Register	N/A		See
3.e	please	the			previo
	provide	number			us
	the				questi
	overall				on.
	volume of				
	research				
	funding				
	for civil				
	security				
2.4	Role of				
	private				
	sector				
2.4.	Role of				
1	societal/				
	non-profit				
	organisati				
	ons				
2.4.	Do	No = 0	1	Framework for Major Emergency Management 2006	Both
1.a	societal/n	Yes = 1			Civil
	on-profit				Defen
	actors				ce and
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	ally				Cross
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	crises?				
		l	I	1	

2.4. 1.b	Do societal/n on-profit actors play an official/leg ally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergenc y medicine) =1 In (almost) all aspects of civil security = 2	1	http://www.redcross.ie/get-involved/volunteer/	
2.4. 2	Role of profit- oriented organisati ons				
2.4. 2.a	Do for- profit/priv ate actors play an official/leg ally mandated role in EXCEPTIO NAL crises?	No = 0 Yes = 1	0	Framework for Major Emergency Management 2006	
2.4. 2.b	Do for- profit/priv ate actors play an official/leg ally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergenc y medicine) = 1 In (almost) all aspects of civil security = 2	0	Framework for Major Emergency Management 2006	

3.1	Effectiven ess				
3.1. 2	Limits to national capacities				
3.1. 2.a	How many times has external assistance been received during a crisis?	Register the number for 2000- 2012.	2	http://ec.europa.eu/echo/files/policies/disaster_response/EUCP M_activations_since_01012007.pdf	If one takes into accou nt the aid proffe red by the EU Solida rity Fund for the floods in 2009.
3.1. 2.b	How many times have a state of emergenc y or disaster been declared AT THE NATIONAL LEVEL as a conseque nce of a crisis?	Register the number for 2000- 2012. If there are no legal provisions for state of emergenc y/disaster, note NA	2	http://www.environ.ie/en/Publications/LocalGovernment/Firean dEmergencyServices/FileDownLoad,27525,en.pdf	The extre me weath er condit ions of two conse cutive winter s (2009- 2010 and 2010- 2010 and 2010- 2011) activat ed a "whol e of societ y" and "whol e of societ y" and """
3.1. 2.c	How many	Register the	N/A		Missin g data.

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	state of	2012. If			
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	y or	no legal			
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	been	for state			
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	AT THE	emergenc			
	REGIONAL	y/disaster			
	LEVEL as a	or data is			
	conseque	not			
	nce of a	accessible			
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		level, note NA			
3.3	Legitimac				
5.5	y				
3.3.	, Political				
1	support				
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3.3.	How	Register	0	http://www.citizensinformation.ie/en/government_in_ireland/na	Please
1.c	many	the		tional_government/tribunals_and_investigations/tribunals_of_in	, refer
	formal	number		quiry.html	to the
	and	for 2000-			corres
	politically	2012.			pondi
	instituted				ng
	inquiries/c				passag
		1	1		0

3.3. 1.d	ommittee s on civil security have been undertake n at the national level? Has there been a prematur e change in the governme nt (replacem ent of individual ministers up to full resignatio n of governme nt) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0		es of the countr y report To the best of our knowl edge (for examp le it did not happe n for extre me weath er condit ions above or the West Cork
3.3.	Legal				Oil Spill).
2 3.3. 2.a	support How many NATIONAL LY NOTED judicial challenges or ombudsm an petitions concernin g the civil security system have been filed?	Register the number for 2000- 2012.	difficul t to answe r	http://www.ombudsman.gov.ie/en/Publications/Annual- Reports/2011-Annual-Report/2011-Annual-Report.pdf	Mainly compl aints about deliver y of health servic es; there have been compl aints about An Garda and the Health Servic e Execut

3.3. How Register difficul 1.b many the to 1.admark number answe r	ive (but not explici tly on crisis manag ement). The Irish and British Ombu dsmen collab orate as well.
2.b manythettoReports/2011-Annual-Report/2011-Annual-Report.pdflandmarknumberanswejudicial orfor 2000-r	not explici tly on crisis manag ement). The Irish and British Ombu dsmen collab orate as
2.b manythettoReports/2011-Annual-Report/2011-Annual-Report.pdflandmarknumberanswejudicial orfor 2000-r	tly on crisis manag ement). The Irish and British Ombu dsmen collab orate as
2.b manythettoReports/2011-Annual-Report/2011-Annual-Report.pdflandmarknumberanswejudicial orfor 2000-r	crisis manag ement). The Irish and British Ombu dsmen collab orate as
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3.3. Are there None = 0 0	To the
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3.3. Popular	+
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3.3. Based on Record 34 Special Eurobarometer 371 (2011)	

	1	1			1
3.a	Eurobaro	the sum			
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	and man-				
	made				
	disasters?				
3.3.	Based on	Record	45	Special Eurobarometer 371 (2011)	
3.b	Eurobaro	the sum			
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	country is				
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	enough to				
	fight				
	terrorism?				
3.3.	Do official	No = 0	1	http://www.civildefence.ie/cdweb.nsf/documents/AEEB0628497	
3.c	actors	Yes= 1		7F81C80256E8A003C631F	
	maintain				
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	for				
	volunteers				
	in crisis				
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	ent?				
3.3.	If yes to	Register	6,000	http://www.civildefence.ie/cdweb.nsf/documents/AEEB0628497	This
3.d	above, list	the	in	7F81C80256E8A003C631F	refers
	number if	number	appro		to the
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		2011			ce
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					sation.
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					2,900 volunt eers for the Irish Red Cross in the curren t period
3.3. 3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector?	Register the number per 1000 capita for 2011.			
4.a	How many times has your country activated the Commissi on's Monitorin g and Informatio n Centre (MIC) – 2007- 2011?	Register the number for 2007- 2011	To be compl eted by UI/IFH S	<u>M activations since 01012007.pdf</u>	
4.b	How many times has your country contribute	Register the number for 2007- 2011	To be compl eted by UI/IFH S	http://ec.europa.eu/echo/files/policies/disaster_response/EUCP M_activations_since_01012007.pdf	

	d to a MIC				
	request - 2007-				
	2007-2011?				
4.0		No - 0	1	Hollis Simon (2010) National Participation in EU Civil Protection	
4.c 4.d	Does your country participat e in the EU civil protection mechanis m's training programm e? If yes to question 4.b,	No = 0 Yes = 1 Register the number	1 17	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College. Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
	approxim ately how many practition ers participat ed in the EU civil protection mechanis m's training programm e in the 2009- 2010 training cycle?	for the 2009- 2010 training cycle			
4.e	How many EU- led civil protection simulation exercises did your country participat e in between 2002-12?	Register the number for 2002- 2012	1	http://ec.europa.eu/echo/policies/prevention_preparedness/pre paredness_en.htm	
4.f	How many times has the country received financial support through	Register the number for 2002- Sept 2012	1	http://ec.europa.eu/regional_policy/thefunds/doc/interventions 	

·					,
	the EU's				
	Solidarity				
	Fund (SF)				
	due to				
	natural				
	disasters				
	(2002-				
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4.g	How	Register	13	http://ec.europa.eu/regional_policy/thefunds/doc/interventions	
-• 5	much aid	total	15	since 2002.doc	
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	been	in million			
	granted				
	through	2002-Sept			
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	to natural				
	disasters				
	(2002-				
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	Sept.)?				
4.h	Based on	Register	37	Special Eurobarometer 383 (2012)	
	Eurobaro	the			
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Annex II: H1N1 in Ireland

The swine flu crisis in 2009 affected and activated the Irish civil security mechanism which, nevertheless, had anticipated an influenza pandemic. In the aftermath of the crisis, confirmed deaths due to H1N1 were calculated as 22 (BBC News, 2010). The spread of the disease reached its peak in early November 2009, with 174 patients per 100,000 of the Irish population diagnosed with swine flu in the first week of November; this ratio started decreasing in the following weeks (*The Irish Times*, 2009).

The swine flu crisis was tackled by allocating to the Department of Health and Children the LGD role and with the Health Service Executive (HSE) as the lead agency in emergency response. After having received the World Health Organisation (WHO)'s alerts in April, the Department of Health and Children initiated the country's 'National Plan on Pandemic Influenza' and accordingly convened the 'National Public Health Emergency Team', a group of experts to coordinate the national response to the crisis. The Department constantly interacted with the European Centre for Disease Prevention and Control (ECDC) as well as with the rest of the Cabinet and the Irish Parliament, keeping all of them updated about the spread of the virus. The first swine flu infection was registered in May 2009 and the contamination kept being monitored through the hospitals and network of general practitioners in the country. Initial political debates on issues of vaccination appeared in September 2009. They not only focused on the development of a vaccine against the H1N1 virus but also on how to employ the doses of the vaccine previously ordered. The Irish experts did not propose a mass immunisation programme but instead vaccination on demand, based on availability of the vaccine (Houses of the Oireachtas, 2009a).

Cooperation with civil security stakeholders to tackle the crisis was not limited to the Irish state. Apart from exchanging information with the WHO and the specialised European Agencies (ECDC), the Irish Republic discussed preparedness and pre-planning of management of the swine flu with the public authorities of Northern Ireland (Houses of the Oireachtas, 2009b). It is apparent that the Irish Republic was willing to collaborate with any external actor that was relevant and could help deal with the epidemic.

The public health stakeholders paid close attention to providing the public with practical information about the disease. Apart from a dedicated swine flu website, <u>www.swineflu.ie</u>, the HSE kept their online site updated on how citizens could take precautions and get vaccinated, and established a 24-hour phone line to provide information to the public.³²⁰ Public portals, like the Irish Health website, <u>www.irishhealth.com</u>, were also providing information on how citizens could avoid getting infected (HSE, 2009).

³²⁰ This piece of information was made available through the HSE's page on Protect – Prevent – Immunise, which is still available. See Health Service Executive (undated).

Throughout the crisis, a number of parliamentary questions were posed to the minister of health and children, most of which were referred to the HSE. These questions mainly concentrated upon topics such as the progress of the vaccination programme, the conditions of treatment at hospitals, and how to deal with the crisis at schools.³²¹ Thus, the Department of Health's activities during the crisis were subject to parliamentary scrutiny. This does not mean, however, that the management of the swine flu in Ireland has been without flaws. More critical perspectives have been proffered by the press. Post-crisis criticism targeted the vaccination programme. According to the press, there should have been more reflection upon the side-effects of the vaccine as it was allegedly associated with sleeping disorders (O'Regan, 2011). What is more, the media questioned the efficiency of the programme as the government did purchase a considerable surplus of vaccines. The HSE employed 1.1 million doses out of a 3-million stock; the surplus of approximately 2 million doses became unusable (due to the expiry date) in 2012, having cost the Irish people 8 million euros nonetheless (Ó Cionnaith, 2012).

We launched an online research for the term 'Swine Flu' in the parliamentary questions from May 2009 to January 2010, available at Houses of the Oireachtas (undated).

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Italy

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Executive Summary

Italy is exposed to a wide range of natural hazards, and in particular earthquakes and forest fires. The complex Italian civil security system is based on a flexible interaction among its numerous institutional actors. Depending on the profile of crisis the central government or/and the local levels (municipalities, provinces, regions) intervene together with private actors and voluntary organizations. The Italian civil security system is based on the presence of civil defence and civil protection domains. While civil defence primarily regards *intentional* acts, such as terrorism or intentional release of CBRN (Chemical, Biological, Radiological and Nuclear) agents, civil protection mainly concerns safeguarding, rescuing and assisting the population as well as protecting and recovering goods in the event of *involuntary* natural, accidental or man-made disasters. Such an equilibrium is based on a substantial complementarity and a certain degree of overlap between the two domains and the related institutional actors.

A National Civil Protection Service is under the coordination of the Civil Protection Department within the presidency of the council of ministers at government level. A Civil Defence Department is also established within the Ministry of Interior. Italy's dominant crisis management approach is primarily based on civilian activities but in some cases the military contribute to crisis management, particularly the Army and the Carabinieri. The civil security system adopts an all hazard approach to crisis management, and adjusts its interventions to each specific situation. Italy has developed a response system based on an up-scaling approach (the so-called principle of *subsidiarity*): action starts from the local level and involves the relevant administrations upwards. Disasters are classified in three different types based on extension, intensity and responsiveness of civil protection: "type a" (municipal level), "type b" (provincial and regional) and "type c" (national). Concerning the political dimension, the primary responsible of crisis preparedness and response is the mayor. In the event of a national emergency, the primary executive responsible is rather the president of the council of ministers. The president of the council of ministers is the apex of the Italian executive power, and coordinates institutional actors involved in civil defence and in civil protection domains.

Regarding the operational dimension, the Civil Protection Department has dealt with several crises. In the last decade, the major one has been the 2009 earthquake of magnitude 5.8 which hit the province of L'Aquila claiming the lives of 309 people, injuring thousands of citizens, causing 64,391 displaced persons and resulting in severe material destruction.

The external dimension of the Italian civil security system is characterized by both multilateral and bilateral cooperation, particularly with neighbouring countries in the Mediterranean region, including active participation the PICRIT, FIRE4, PPRD-South EUROMED and Adriatic Ionic Initiative projects.

The awareness that citizens have responsibility to protect their life and environment has increased in recent years, as showed by the growth of volunteer organizations. Half of the Italian citizenry (49 percent) perceive natural and man-made disasters as the threats most likely to hit the country, and the percentage of Italians concerned about earthquakes (58 percent) is much higher than the EU average (22 percent).

Tools such as the pamphlet *The Civil Protection Handbook for Families* are used to increase information. In 2005 there was the first official terrorist attack simulation/drill in Milan, involving 2,000 people representing different actors of the civil security system.

Undoubtedly, volunteer organizations – non-profit organization according to ANVIL terminology – such as the Italian Red Cross play a decisive role in Italy's civil security system by providing human resources and qualified support both in the preparedness and response phases. A particular aspect characterizing the Italian civil security systems is the solidarity role played by the Catholic Church.

Profit oriented organizations are becoming increasingly aware that they should be more active. For example, the private actors owing and/or managing critical infrastructures (CI) have to appoint a *liaison* security officer and to draft an *operator's security plan*.

The presence of civil defence and civil protection domains entails two different budgets within the civil security system. In 2012, EUR 1,747,977,737 have been allocated to the Fire Brigades, Public Rescue and the Civil Defence Department, and EUR 1,670,392,269 have been given to the Department of Civil Protection.

As of November 2011, 60 percent of Italian citizens believe that Italy is doing enough to fight terrorism, while 52 percent think the country is doing enough to manage natural and man-made disasters. About the 54 percent, are not aware that EU coordinates civil protection both inside and outside the Union.

Key Findings

1. Good practice: flexible cooperation

The complex Italian civil security system is based on a flexible interaction among its numerous institutional and operational actors, as demonstrated by the complementary role played by civil defence and civil protection. For example, this works at horizontal level with strong civil-military cooperation: Italy's dominant crisis management approach is primarily based on civilian activities but in some cases the military contributes to crisis management with a cooperative role (*concorsuale*), particularly the Army and the Carabinieri (see section 2.1 and 2.2). This is in line with the all hazard approach to crisis management adopted by the Italian civil security system, which adjusts interventions to each specific situation.

Such a mindset and praxis of flexible cooperation is particularly important in countries like Italy where a number of institutional actors and levels of governance are involved in the civil security system. It is noteworthy for European readers since it may represent a good practice and a feasible alternative to more centralized civil security systems based on different administrative traditions – in other words, it is an example of the ANVIL assumption that no single solution fits all.

2. Good practice: role of non-profit organizations

The volunteer (non-profit) organizations play a decisive role in Italy's civil security system by providing human resources and qualified support both in the preparedness and response phases. For example, the Italian Red Cross has 160,000 volunteers, 5,000 employees and 1,000 offices throughout Italy. A particular aspect characterizing the Italian civil security systems is the solidarity role played by the Catholic Church (see section 2.4).

The role of non-profit organizations is highly relevant for investigation by ANVIL. Italy, as probably other countries in Europe, shows strong social activism based on the richness and strength of the country's social ties; for example within the family, the villages or small towns, the variety of non-profit organizations, and the Catholic Church. Such ties and activism become more evident during the response phase to crises such as the earthquakes in Emilia Romagna (2012) and L'Aquila (2009) with rapid, substantial and autonomous response of citizens and non-profit organizations. Although specific social features of every EU country cannot be simply replicated elsewhere in Europe, encouraging such a role for citizens and non-profit organizations may be a good practice to be kept in mind.

3. Problematic aspect: levels of governance

Italy has developed a response system based on the principle of subsidiarity: action starts from the local level and involves the relevant administrations upwards. Disasters are classified in three different types based on extension, intensity and responsiveness of civil protection: "type a" (municipal level), "type b" (provincial and regional) and "type c" (national). Concerning the political dimension, the primary responsible of crisis preparedness and response is the mayor. In the event of a national emergency, the primary executive responsible is rather the president of the council of ministers (see section 2.1 and 2.2).

This feature of the Italian civil security system is linked to the country's history marked by strong local identities and prolonged political, institutional and legal fragmentation until 1861. This situation may be similar to other federal European countries. A key point here is how and how much the various levels of governance cooperate with each other. It may be a problematic aspect, for example, if the up-scaling mechanisms are not streamlined, if the cooperation between national and local authorities is not based on a clear division of labour, etc. The debate occurring in Italy in recent years over the abolition of provinces

demonstrates that there is some scepticism within the public opinion on the existing number of levels of governance in the country.

4. A major test: the 2009 earthquake in L'Aquila

The major test for the Italian civil security system since 2000 has been the earthquake of magnitude 5.8 which hit the province of L'Aquila on 6th April 2009 claiming the lives of 309 people, injuring thousands of citizens, displacing 64,391 persons and resulting in severe material destruction. The response phase implied massive search and rescue activities in the aftermath of the earthquake, the establishment within few days of tents to host around 33,000 persons for 8 months, the building of earthquake-proof houses for 24,000 displaced persons completed by the end of 2009, as well as immediate and extraordinary measures regarding education, transport, judiciary and fiscal systems in the Province of L'Aquila (see Section 2.2.3).

The response phase to the earthquake is a good example of strengths and weaknesses of the Italian civil security system, including those mentioned above. It has successfully proved the praxis of flexible cooperation among actors such as the Civil Protection Department, the Ministry of Interior including Fire Brigades, and the military deployed in L'Aquila for one year in order to contribute to local security and safety. The response phase has also showed the rapid and strong reaction of citizens and non-profit organizations, for example to alleviate the obvious difficulties of 33,000 people living in tents for 8 months.

On the other hand, it has highlighted the problematic issue of the relationship between central and local levels of governance. The response phase was marked by a strong lead of the presidency of the council of ministers through the head of the Civil Protection Department. This allowed a speeding up of the response phase and achievement of some substantial results in a reasonably short timeline, but at the same time it raised criticism from local authorities and sectors of public opinion about the marginal role in the decision-making enjoyed by representatives of locals such as the mayor of L'Aquila.

List of Abbreviations

AIIC	Associazione Italiana esperti in Infrastrutture Critiche					
ANAS	Azienda Nazionale Autonoma delle Strade Statali					
ANSF	Agenzia Nazionale per la Sicurezza delle Ferrovie					
CASE	Centri Abitativi Sismicamente Ecocompatibili					
CBRN	Chemical, Biological, Radiological and Nuclear					
ССМ	Centro nazionale per la prevenzione ed il controllo delle malattie (Centre for Disease Prevention and Control)					
CDN	Centro Decisionale Nazionale (National Decision Center)					
CI	Critical Infrastructures					
CITDC	Commissione Interministeriale Tecnica per la Difesa Civile (Technical Interdepartmental Commission for Civil Defence)					
CoPS	Comitato Politico Strategico (Political Strategic Committee)					
ENAC	Ente Nazionale per l'Aviazione Civile (National Board for Civil Aviation)					
ENAV	Ente Nazionale di Assistenza al Volo (National Board for Flight Assistance)					
EDA	Elaboratore Distacchi Automatici					
EU TEREX	European Union Tuscany Earthquake Relief Exercise					
F.I.R.E. 4	Force d'Intervention Rapide Européenne					
FYROM	Former Yugoslav Republic of Macedonia					
ILI	Influenza-Like Illness					
ISPRA	Istituto Superiore per la Protezione e la Ricerca Ambientale (Institute for Environmental Protection and Research)					
MAP	Moduli Abitativi Provvisori					
MIC	Monitoring and Information Centre					
NISP	Nucleo interministeriale situazione e pianificazione (Situation and Planning Interdepartmental Unit)					
OSCE	Organization for Security and Cooperation in Europe					
PSO	Piano di Sicurezza dell'Operatore (Operator's Security Plan)					
SERIT	Security Research in ITaly					

1. Introduction

Italy has a complex civil security system, based on a flexible interaction among its numerous institutional actors. Depending on the profile of crisis that the country has to deal with, the central government or/and the local levels intervene together with private actors and voluntary organizations. The Italian civil security system is based on the presence of civil defence and civil protection domains. This has led to the development of a system of crisis management with dedicated branches for the two domains and complementarity among their actors at operational level.

The system has progressively reached such an equilibrium moving from a Cold War-era primacy of civil defence towards the current greater role of civil protection. This evolution has implied frictions among different institutional actors involved in the shift of competences and power. Today, the civil security system still witnesses a certain degree of overlap between the two domains coupled with a substantial complementarity. The president of the council of ministers, being the apex of Italian executive power, ensures the coordination among different institutional actors involved in the two domains (interview, Rome, May 2013).

Italy's national territory is exposed to a wide range of natural hazards and it is one of the Mediterranean countries with the highest seismic risk – due to its position at the convergence of the African and Eurasian plates. Besides, risks of technological and industrial disasters might come from big and small industrial complexes and factories, as well as from transportation of dangerous substances. In the past, disastrous earthquakes³²² and forest fires³²³ have scarred the land and left recognizable signs of recovery and reconstruction.³²⁴ In addition, poor land management and a disregard for town planning have often led to the construction of buildings in highly dangerous areas (as epitomized by the Genova flooding in November 2011, in particular near to the Foce quarter³²⁵). The most important crises³²⁶ affecting Italy's civil security system from 2000 to 2012 are shown by the table below:

Year/month	Crisis description	Site/area of crisis	Crisis category	Damage			
				# of persons killed	# of persons injured	# of persons affected	
09/2000	Flood	Soverato	Natural disaster	12			1
10/2000	Flood	North Italy	Natural disaster	23		40,000	
10/2002	Earthquake	Molise	Natural disaster	29	100	3,000	1
10/2002-01/2003	Volcano eruption	Catania	Natural disaster			1,120	
09/2003	Electricity black-out	Italy	Infrastructure failure			32 milion (electricity consumptions))
04/2009	Earthquake	L'Aquila	Natural disaster	309	1,500	65,000	1
06/2009	Train derailment + leakage of gas and toxic materials	Viareggio	Transportation accident + industrial disaster	31	17		
2009	H1N1	Italy	Infectious disease	260		2,000	1
10/2009	Mudslide	Messina	Natural disaster	37	95	2,000	0
01/2012	Costa Concordia disaster	Isola del Giglio	Transportation accident	32	110	4,232]
05/2012	Earthquake	Emilia Romagna	Natural disaster	28	350	45,000	1
05/2013	Cargo ship accident	Genoa	Transportation accident	9	4		1

Table 6 – List of relevant crises 2000-2013

Besides the relevant crises shown by the table above, the events of the 27th G8 Summit in July 2001 in Genoa are worth mentioning, which culminated with the death of a 23-year-old activist Carlo Giuliani during clashes with the police. Almost 200,000 people demonstrated against the G8 meeting, which was held inside a "Red Zone" in the center of town that had been declared off-limits for non-residents and surrounded by a barricade. Other extreme security measures were taken, such as an air exclusion zone around the city and the suspension of freedom of movement entitled by the Schengen treaty for the duration of the event.

Italy is also exposed to the terrorist threat to a variable degree, depending mostly upon domestic factors. One of the most relevant terrorist attacks since 2000 was the assassination of top Labour jurist Marco Biagi by the Red Brigades in 2002 (Global Terrorism Database 2013). Besides, from 2003 to 2012, there have been several arrests related to Al-Qaeda affiliated or inspired terrorism (EUROPOL Report), although the country has not been affected by major religiously-inspired terrorist attacks.³²⁷

Italy has rather experienced the return of the terrorist threat by the left-wing and, in particular, high attention is paid to anarchist groups such as the Informal Anarchist Federation (*Federazione Anarchica Informale,* FAI). In addition, the recent economic and financial crisis has also intensified this threat against financial institutions, banks and state fiscal agencies (Presidency of the Council of Ministers 2013).

Notwithstanding the absence of an official national security strategy identifying the main security threats and response guidelines at a strategic level (and according to some observers this absence means there is no formal definition for what "civil security" is in Italy), the ongoing evolution of the legal framework for crisis management has developed a common terminology at inter-ministerial level, including (Presidency of the Council of Ministers 2010):

- **Crisis situation**: any situation likely to be able to involve or endanger the national interest, that can originate from the perception of a potential hazard or in coincidence with significant events;
- Emergency situation: a dangerous situation that requires specific, urgent, necessary, and exceptional actions and measures;
- International crisis: events that trouble the relations between states, or at least likely to endanger the maintenance of international peace and security and that may affect or jeopardize national interests;

Italy's civil security system is characterized by the presence of the civil protection and civil defence domain. The latter regards *intentional* acts, such as terrorism or intentional release of CBRN (Chemical, Biological, Radiological and Nuclear) agents, while civil protection mainly concerns safeguarding, rescuing and assisting the population as well as protecting and recovering goods in the event of *involuntary* natural, accidental or man-made disasters.³²⁸

³²⁷ A list of EUROPOL reports from 2003 to 2012 is available from: <u>https://www.europol.europa.eu/latest_publications/25</u>. [Accessed 15 January 2013]

³²⁸ It is noteworthy to mention that in September 2011 the Civil Protection Department has also monitored the reentry into the atmosphere of NASA's satellite UARS (Upper Atmosphere Research Satellite). The UARS entered the Earth's atmosphere with the possibility of the fall of satellite fragments on Italian territory. For this reason, from the 22nd to 24th September 2011, convened by the Head of the Civil Protection Department, an Operating Committee gathered in permanent session in order to follow the UARS.

Civil protection and civil defence depend on two different administrations: the Civil Protection Department is part of the presidency of the council of ministers (within the government), while the Fire Brigades, Public Rescue and Civil Defence Department are part of the Ministry of the Interior, responsible for civil defence. At the operational level, the set of their competences are complementary and coexist. More specifically the Civil Protection Department should be considered in terms of a "function" (exactly the function of civil protection) more than an "administration". In fact the civil protection system encompasses a number of actors (see Figure 2) depending on the kind of crisis including also the Fire Brigades (Ministry of Interior) that are the bulk of the civil defence system.

The civil defence is a system that it is *not* subject to decentralization while civil protection is an open system and it can be *subject* to decentralization to varying degrees (Palmieri 2004). This kind of decentralization entails many civil protection units at municipal, provincial and regional levels³²⁹, which may have different sizes and capabilities, as well as different performances. This decentralization is in line with the aforementioned principle of *subsidiarity*. This represents a double-edge sword. If the local authorities prove to be able to handle a crisis, such a system based on subsidiarity and decentralization works well with a proper involvement of upper levels when and where necessary. In contrast, if the local authorities prove to be unable to fulfil their tasks with respect to a crisis, the functioning of the system is hampered even if the upper levels step in to handle the crisis (interview, Rome, May 2013).

Italy's dominant crisis management approach is primarily based on civilian activities but in some cases (limited to particular and severe situations, see Section 3.1.2 "type c" events) the military contribute to crisis management and this is positively considered (interview, Rome, April 2013).³³⁰ The Armed Forces, especially the Army, play a cooperative role (*concorsuale*) and intervene following a request of the prefect. The coordination with the National Civil Protection Service is ensured by the defence chief of staff at the national level and by the regional military commands at regional level (Ministry of Defence 2002).³³¹

Italy's civil security system seems to adopt an all hazard approach to crisis management, and adjust its interventions to each specific situation. Italy has widespread risks throughout the territory, and has therefore developed a response system based on an up-scaling approach (principle of *subsidiarity*): authority and responsibility rest at local level with an up-scaling of authority when a crisis spreads across administrative entities and/or the crisis overwhelms local capacity. In Italy, disasters are classified as one of three different types based on extension, intensity and responsiveness of civil protection: "type a" municipal level, "type b" provincial and regional, and "type c" national (see Section 3.1.2).

³²⁹ For a list of regional civil protections see, <u>http://www.protezionecivile.gov.it/jcms/it/componenti.wp</u>. [Accessed 14 January 2013].

³³⁰ The use of Armed Forces (Army, Navy, Air Force and Carabinieri) is envisaged both in case of civil protection and civil defence but is limited to particular and severe situations (see below "type c" events) by providing logistical and operational support, personnel and equipment as well as expertise in the prevention phase. The Armed Forces' tasks are defined in law 331/2000 related to "Norms for the institution of the professional military service". The Art. 1 point 5 states that "the Armed Services contribute to safeguarding free institutions and carrying out specific tasks in circumstances of public danger and in other cases of extraordinary necessity and urgency" (Ministry of Defence 2013).

³³¹ In this context, Carabinieri play a twofold role as a military corps with police duties: Carabinieri respond directly to the Ministry of Defence in case of military tasks³³¹, and depend "functionally" on the minister of the interior with regards to law enforcement and public security tasks. Moreover, they act as an operational structure of the National Civil Protection Service in case of calamity and natural disasters (Arma dei Carabinieri 2013).

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

The civil security system is influenced by the evolution of the Italian institutional and legal context, characterized, until 1861, by the presence of different, separated and autonomous statutory authorities. With the 1948 Constitution, the Italian Republic has experienced a strong role of the Parliament and a system strongly limiting the powers of the president of the council of ministers (*Presidente del Consiglio dei Ministri*) who is Italy's head of government.

Governance and administrative structure

Italy is a parliamentary republic with a rigid Constitution, which established a bicameral Parliament featuring the Chamber of Deputies (630 seats) and the Senate of the Republic (315 seats), having the same powers.³³² The characteristics of the Italian political and institutional system seem to match those outlined by Lijphart's theory on consociational democracy.³³³

Italy consists of 8,100 municipalities (*Comuni*), 110 provinces (*Province*), metropolitan cities³³⁴ (*Città Metropolitane*) and 20 regions (*Regioni*), autonomous entities with their own statutes, powers and functions according to the Constitution. Fifteen regions have an *ordinary statute* (*Regioni a Statuto Ordinario*).³³⁵ Five other regions have a *special statute* (*Regioni a Statuto Speciale*).³³⁶ Besides, there are 223 mountain communities (*Comunità Montane*), which are unions of municipalities and local authorities established between mountain municipalities (art. 27 of the Legislative Decree 267/2000).

Italy is characterized by an imbalanced geographical distribution of population.³³⁷ Especially at the local level, the population in municipalities ranges from 30 inhabitants to more than 2,600,000. Italy is also characterized by the presence of the so-called "comuni polvere", meaning the 1,936 municipalities (out of the total of 8,092) whose population is below 1,000 inhabitants.

The prefecture is the local branch of the government with a representative office in each province, responsible for the implementation of ministerial directives as well as for the civil defence and civil

³³² Art. 56 and art. 57 of the Italian Constitution.

³³³ Coalition cabinet; balance of power between executive and legislative power; mutual veto; rigid constitution; equality between ministers with a prime minister only primus inter pares; proportional representation.

³³⁴ The 14 metropolitan cities identified by the government are Italian administrative institutions which will enter into force in 2014. The *metropolitan city*, as defined by law, includes a large core city and the smaller surrounding towns that are closely related to it with regard to economic activities and essential public services, as well as to cultural relations and to territorial features.

³³⁵ That means they have exclusive legislative power with respect to any matters not expressly reserved to state law, European law and international treaties. Regions with *ordinary* statute are Abruzzo, Basilicata, Calabria, Campania, Emilia-Romagna, Lazio, Liguria, Lombardia, Marche, Molise, Piemonte, Puglia, Toscana, Umbria and Veneto. Regions with *special* statue: Friuli Venezia Giulia (1963), Sardegna (1948), Sicilia (1948), Trentino-Alto Adige (1948), Valle d'Aosta (1948).

³³⁶ This provides further legislative powers vis-à-vis the state, i.e. by enabling them to enact legislation on some of their local matters.

³³⁷ According to the latest census, 45.8% of the Italian population live in the northern area of the country, 19.5% in the central part and the remaining 34.7% are located in the south and on the islands.

protection at provincial level. In addition, he/she supervises the coordination of response activities together with the president of the region and with the mayors of municipalities affected by the crisis. Only in case of the declaration of state of emergency (see section 3.1.2), the prefect operates as a delegate of the president of the council of ministers.

Another important actor of the civil security system is the mayor who is responsible for civil protection and manages the volunteers, the local police and other local resources (see section 2.2.3).³³⁸

The Decree of the President of the Council of Ministers adopted on 5 May 2010 represents one of the cornerstones of the Italian crisis management organisation, as it modifies the composition of existing bodies and introduces new ones. From the top of the political and institutional level there are the following national *decision-making* bodies:

- **President of the Council of Ministers** is the head of the government (i.e. the prime minister) and he directs and coordinates the activity of the ministers. The Italian prime minister has less power than some of its European counterparts and acts as a *primus inter pares*.
- **Council of Ministers** is composed of the president of the council of ministers, the ministers and the undersecretary to the presidency of the council.
- **Strategic Political Committee** (*Comitato Politico Strategico*, CoPS)³³⁹ provides national strategic guidance in crisis situations. It meets exclusively during a state of crisis, and builds on the elements previously elaborated by the technical staff. During the sessions, the CoPS includes several representatives of the presidency of the council of ministers, of the Civil Protection Department, of the defence staff as well as military and diplomatic advisers.
- The National Decisional Centre (*Centro Decisionale Nazionale*, CDN), is the support site of the Strategic Political Committee (and alternatively of the council of ministers; this was the case for example in the immediate aftermath of 9/11), devoted to the information flow management and the decision-making. The National Decision Centre supports the consultations with ministries and relevant state administrations, in accordance with the various competences specified by the law.

The government is therefore the main actor involved in crisis management, in consultation with the Parliament. There are also national *coordination* bodies:

The **Situation and Planning Interdepartmental Unit** (*Nucleo interministeriale situazione e pianificazione*, NISP). The NISP supports the CoPS and the president of the council of ministers.³⁴⁰ The NISP performs several tasks related to prevention and preparation activities as well as during crisis situations.³⁴¹

³³⁸ But he/she does not have the power over national agencies.

³³⁹ Formed by the president of the council of ministers and the ministers of defence, foreign affairs, interior, economy and finance.

³⁴⁰ The NISP is composed of two representatives from each of the ministries of Foreign Affairs, Interior and Defence from the Ministry of Economic and Finance and one from the Ministry of Health; one representative from the Department of Civil Protection; one representative from the Security and Intelligence Department as well as one from the internal and external intelligence and security agencies; one representative from the Department of Fire Brigades, Public Rescue and Civil Defence.

³⁴¹ For example, the NISP defines one or more "national positions" within international organizations participated in by Italy. It keeps the situation updated, according to the communications of international organizations, through the exchange of information between ministries and agencies and when deemed appropriate by the Ministry of Foreign Affairs, through the direct exchange of information with the diplomatic missions.

The crisis management structure of civil defence

The NISP can be supported by the **Technical Interdepartmental Commission for Civil Defence** (*Commissione Interministeriale Tecnica per la Difesa Civile*, CITDC). Indeed, the 2010 Decree states that "for specific aims, the NISP can be supported by other interdepartmental commissions, research committees and study working groups" in relation to particular and specific issues.³⁴²

The CITDC is supervised by the Ministry of Interior and chaired by the head of the Fire Brigades, Public Rescue and Civil Protection Department. It includes the representatives of the presidency of the council of ministers, state administrations, of national boards and also private companies.³⁴³ The prefects ensure coordination at the local level, and the operational phase is implemented by the Armed Forces, Carabinieri, police forces and civil protection.

The crisis management structure of civil protection

With the Act n. 225 of 24 February 1992, Italy has organised civil protection as a "National Service", consisting of central and peripheral structures (see Section 2.2.1). The president of the council of ministers provides for the co-ordination of the National Service and for the promotion of civil protection activities through the Civil Protection Department.

The department has a leading role, in agreement with regional and local authorities, on projects and activities for the overall prevention, forecast and monitoring of risks as well as intervention procedures. As far as the intervention proceeds, the Italy Situation Room (*Sala Situazione Italia*, SSI) acts as a national operational room, based within the Department of Civil Protection. The SSI operates 24 hours a day through SISTEMA, its national coordination system. The SSI permanent includes the staff of the Department of Civil Protection and a representative of the National Fire Brigades, Armed Forces, State Police, Carabinieri, Guardia di Finanza, the State Forestry Corps, Port Authority - Coast Guard and Italian Red Cross. In ordinary time the room receives, demands, collects, processes and verifies information on planned responses or ongoing emergencies, in the national territories and abroad, at local and regional level. In case of emergency it becomes essential in order to support the Civil Protection Operational Committee (see Figure 1) and guarantees the implementation of the committee's disposals through the operational structures of the National Civil Protection Service.

The responsibility of civil protection has progressively moved from the state to local authorities: the Legislative Decree n. 112 dated 1998 and the reform of Title V of the Constitution (Constitutional Law 3/2001) redefined the civil protection organization, by transferring important functions to the local authorities – including operative ones – and by restructuring also the remaining state authorities.

³⁴² Art. 29, law of 23 August 1988, n. 400. In addition, the 2010 Decree states that "for specific aims, the NISP can be supported by other interdepartmental commissions, research committees and study working groups" in relation to particular and specific issues.

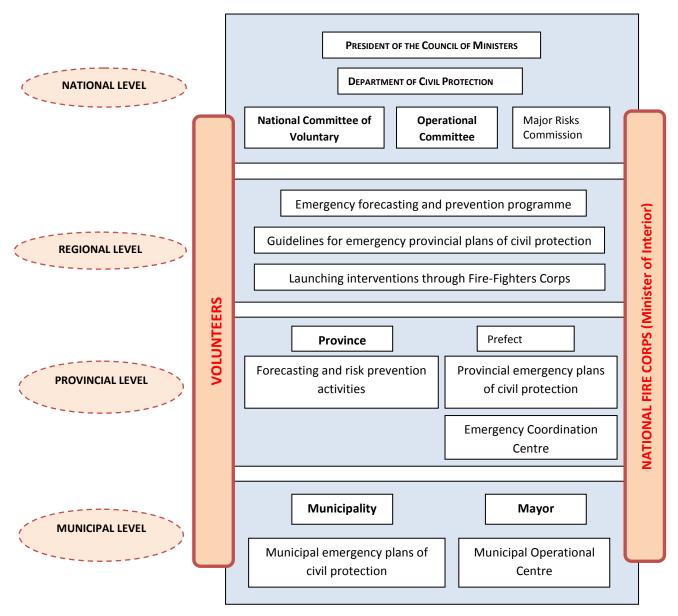
³⁴³ In particular it includes representatives of defence, interior, health and other ministers as needed), of the National Autonomous State Routes Board (*Azienda Nazionale Autonoma delle Strade Statali*, ANAS), the National Inspectorate of the Military Body of the Italian Red Cross (*Ispettorato Nazionale del Corpo Militare della Croce Rossa*, INCMCR), the Institute for Environmental Protection and Research (*Istituto Superiore per la Protezione e la Ricerca Ambientale*, ISPRA), the National Board for Civil Aviation (*Ente Nazionale per l'Aviazione Civile*, ENAC), the National Board for Flight Assistance (*Ente Nazionale di Assistenza al Volo*, ENAV), and relevant private companies participated by state such as *Trenitalia*, *Poste Italiane*, etc.

The regions are responsible for civil protection and in particular for risk assessment, emergency forecasting and prevention programmes for their territory, on the basis of national directives.³⁴⁴ The provinces are mainly responsible for forecasting and prevention activities, as established by regional programmes and plans, through the adoption of the necessary administrative acts. They also draft provincial emergency plans on the basis of the regional guidelines; supervise how the provincial structures of the emergency services are set up for civil protection, including the technical services to be activated in case of disasters. The functions ascribed to the municipalities concern particularly emergency preparedness, setting of plans and response activities such as activation of first relief service to the population and urgent interventions.³⁴⁵

³⁴⁴ The most important regional tasks can be summarised as follows: drafting regional programmes for risk prevention and forecasting; launching interventions through the National Fire Brigades in case of a crisis caused by an emergency or an imminent danger; formulating guidelines for the drafting of emergency provincial plans.

³⁴⁵ The municipalities launch forecasting activities and risk prevention interventions established by regional programmes and plans; adopt decisions, including those concerning emergency preparation, necessary to assure first emergency relief in case of disasters at the municipal level ("type a" of disaster); draft municipal and inter-municipal emergency plans in the form of association or cooperation and through the mountain communities to control that these are implemented on the basis of regional guidelines.





Source: IAI elaboration based on Vademecum – Civil Protection

The Civil Protection Department coordinates the response to natural disasters, catastrophes or other events that by virtue of intensity and extent may require extraordinary powers and means. The department divides its activities following a "risk-based approach": (1) Seismic risk; (2) Volcanic risk; (3) Hydrometeorological risk; (4) Fire risk; (5) Health risk; (6) Nuclear risk; (7) Environmental risk; (8) Industrial risk. In cases of "type c" events, the head of department convenes the Civil Protection Operational Committee which ensures joint management and the coordination of emergency activities.³⁴⁶

³⁴⁶ The Operational Committee is made up of representatives of: Department of Civil Protection; fire department; Armed Forces; each of the police forces; State Forestry Commission; Italian Red Cross; National Health Service; national voluntary organizations; Italian National Agency for New Technologies, Energy and Sustainable Economic Development; National Mountain Rescue and Speleological Corps; Port Authorities; Institute for Environmental Protection and Research; National Institute of Geophysics and Volcanology; National Research Council; Regions

In emergency situations the definition of the chain of command and the coordination take place in a flexible way. In addition, the government may appoint an extraordinary commissioner either through *ad hoc* legislation or by the use of a law decree. Often the extraordinary commissioner coincides with the head of the Civil Protection Department.

designated by the unified State-Regions-Cities conference. In addition, regional and local civil protection interested in specific emergencies can also participate in the operational committee.

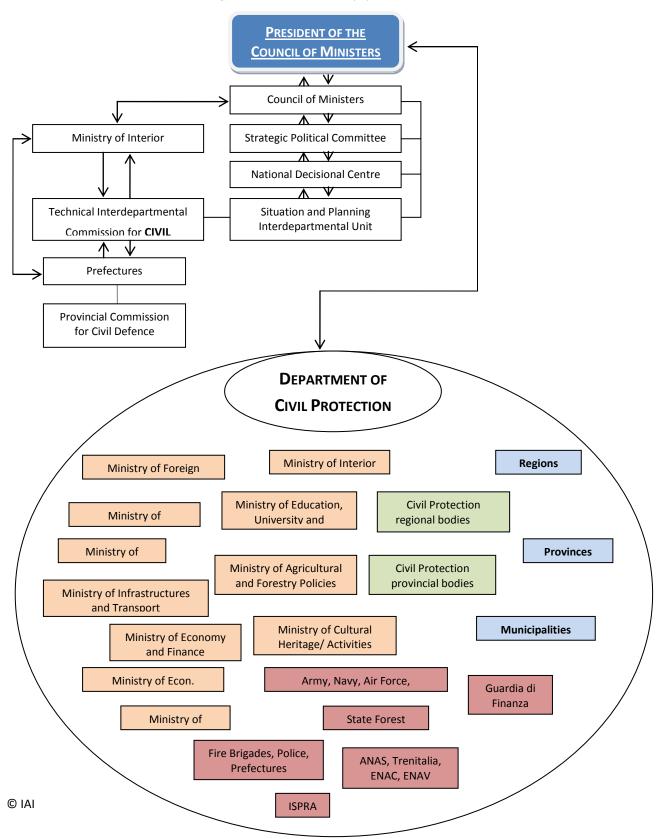


Figure 6 – Italian civil security system overview

2.1.2 Government/social culture

According to the five dimensions analysis provided by the Geert Hofstede's Index, Italian society seems "to believe that hierarchy should be respected and inequalities amongst people are acceptable. Italy as a whole seems to have an individualistic culture, especially in the big and rich cities of the North. In southern Italy, this dimension does vary and less individualistic behaviour can be observed where the family network and the group one belongs to are important social aspects" (Hofstede, G., Hofstede, G.J. and Minkov, M. 2010). Finally, Italy seems to show a high sense of competition, coupled with a high score on uncertainty avoidance which means that Italians are not comfortable in ambiguous situations. As a result of its traditions and history, Italy seems to have a short-term orientation culture. The World Value Survey puts Italy within Catholic European countries with a stable degree of traditional/secular-rational values and with a high degree of self-expression, even if lower than other comparable countries.³⁴⁷

Despite the several calamities which have historically hit the territory, according to opinions recently expressed by managers of civil defence, a weak "emergency culture" characterizes Italy (with few exceptions, see the "Safe School" project in section 2.3.3). Another aspect to mention is the insufficient respect for the prevention rules of town plans of land management, together with the presence of unauthorized buildings in highly dangerous areas. Such cultural aspects weaken the actions of the crisis management system, since they increase vulnerabilities and undermine the effectiveness of management.

On the other hand, from 1960s to 1980s Italy successfully faced a persistent and strong domestic terrorist threat, which has led public opinion to develop a solid awareness and sensibility on this issue. This background has contributed to the acceptance of counterterrorism measures deemed necessary in order to ensure and safeguard their lives, such as those adopted after the 9/11 2001 attacks.

2.2 Legal/constitutional aspect

2.2.1 Statutory basis

The evolution of the legal and institutional framework of the Italian crisis management system was also driven by several disasters (i.e. the earthquakes in Friuli in 1976 and Irpinia in 1980) that struck Italy and posed a significant risk management challenge for the country, leading to the implementation of new institutional arrangements yielding improvements in disaster preparedness, prevention, response and recovery provisions (Lanfranco 2012).

The civil defence legislation

To date, Italy has not developed specific legislation defining the scope of civil defence (Istituto Alti Studi per la Difesa 2001-2002). According to article 14 of Legislative Decree n. 300 dated 30 July 1999, the Ministry of Interior – in its capacity as the institution responsible for security and safety – is entrusted with civil defence. The Central Directorate for Civil Defence and Civil Protection Policies was established within the

³⁴⁷ Such efforts to classify a wide range of extremely different countries worldwide shall be balanced by an in-depth and country-based analysis of national culture, in order to avoid risks of misunderstanding, stereotyping and oversimplification. For example, Italian social culture is used to deal with complexity and uncertainty generated by both different local traditions and a complex legal and institutional framework.

Department for Fire Service, Public Rescue and Civil Defence with the specific aim of carrying out this institutional mission.

The legal framework related to the operational and planning domain of civil defence is composed of confidential documents and dispositions issued by the minister of interior and the Fire Brigades, Public Rescue and Civil Defence Department (Toseroni 2009). However, with regards to the planning level in case of chemical, biological, radiological and nuclear risks, a National Civil Defence Plan has been developed in order to define threats, identify the possible scenarios as well as measures to be undertaken. This plan is the overall framework acting as a cornerstone in order to draft the "descendants" and sector plans (*Piani discendenti e di settore*) as well as the 103 provincial plans prepared by the prefects. In order to test their functionality and operational effectiveness, these plans are subject to periodic exercises (see section 2.2.3).

The civil protection legislation

The law n. 996 dated 1970 is the first law that outlined an overall framework of civil protection interventions, specifying the notion of natural calamity and catastrophe. However, the regulation implementing the law was approved only after 11 years (in 1981) and after disastrous earthquakes hit Friuli in 1976 and Irpinia in 1980, causing respectively 976 and 2,570 victims. The lack of coordination and slow rescue operations paved the way for the creation of the "National Civil Protection Service" which was institutionalized by the law n. 225 adopted on 24 February 1992 (Department of Civil Protection 2012). Historically, law 225/92 represented a move from a centralized phase of crisis management to a decentralized one. As a result, the role of regions, provinces and municipalities was significantly increased with regards to prevention and forecasting. However, operative capabilities remained under the responsibility of the central and peripheral administration of the state, and the government kept the power to declare a "state of emergency" (see section 3.1.2).

The Legislative Decree 112/98 further transferred important civil protection functions to the local authorities, and reformed the state role in this regard. Finally, the Constitutional Law 3/2001, which changed the overall relations between state and regions, for the first time introduced in the Constitution the function of civil protection, under concurrent competence of state and regions.³⁴⁸ The law no. 401 dated 2001 assigned to the prime minister the supervision of state role in civil protection, and the Department of Civil Protection was put within the presidency of the council of ministers. As a counterweight to the re-found centrality of the role of the prime minister, a joint state – regions – local authorities committee was established in the Prime Minister's Office.

2.2.2 Political dimension

The primary responsible person at the local level of crisis preparedness and response is the mayor, who disposes of the resources of its municipality to tackle the specific risks of its territory. He is responsible for coordinating the local operational structures, comprising voluntary groups of civil society which respond to him.

In the event of a national emergency, the primary executive responsible is instead the president of the council of ministers, who, together with the National Civil Protection Department, directs and coordinates the activity of the operational structures of civil protection in accordance with the regional authorities. The

³⁴⁸ That means the state sets the fundamentals of policies, the main guidelines and the general objectives by law, while the Regions determine specific laws and rules to achieve the established objectives.

council of ministers is responsible for declaring the state of emergency (see section 3.1.2). As a consequence, the head of the Civil Protection Department may take "extraordinary powers" and related measures may be taken in derogation from the provisions in force to respond to disasters.³⁴⁹ However, According to the law 24 February 1992, n. 225, the president of the council of ministers can appoint a deputy commissioner to implement civil protection interventions necessary in emergency situations. The president of the council of ministers maintains the responsibility of intervention but he transfers the managing powers to the deputy commissioner.

Regarding civil defence, according to article 14 of Legislative Decree n. 300 dated 30 July 1999 the Ministry of Interior is the competent body (see section 2.2.2). The Central Directorate for Civil Defence and Civil Protection Policies is established within the Department for Fire Service, Public Rescue and Civil Defence with the specific aim of carrying out this institutional mission. At the local level, the Ministry of Interior is supported by the prefectures. In addition, the above mentioned Technical Interdepartmental Commission for Civil Defence (CITDC) is responsible for the assessment of crisis and the planning of measures to be taken.

Civil defence is a service of the Ministry of Interior but civil protection is a department of the presidency, thus its intervention directly reflects on the president of the council and on the government at large. This largely explains the obvious preference demonstrated by many Italian chiefs of the government toward civil protection, especially if it can give a greater visibility and the impression that the personal commitment of the president has been instrumental for increasing the level of aid and its swiftness. Thus the interventions of the department have generally been characterized by a high level of visibility and personalization (the special powers attributed to the department head by the president of the council of ministers increase such visibility). It also allows for the swift utilization of special emergency funds and other reserve funds otherwise immobilized or unavailable, thus giving to the president a great leverage over the ministries normally administering the public budget autonomously.

2.2.3 Operational dimension

Civil defence crisis management

According to available sources, the national civil defence crisis management system has been activated twice, in view of the Millennium Bug – on the basis of the ministerial circular adopted of 3 December 1999 – and during the 9/11 terrorist attack. Beyond these particular cases, civil defence planning (see Section 2.2.1) has been activated several times at provincial level, according to the 103 Provincial Plan established by prefects (interview, Rome, May 2013).

³⁴⁹ Apart from the state of emergency, law 185/92 on the National Solidarity Fund regulates the declaration of state of calamity, concerning the contribution given to face damages to agricultural, productive and commercial infrastructures and activities, following exceptional atmospheric or meteorological events. On such events, the president of the region may request to the minister of agriculture to declare the state of calamity, which allows the affected regions to have access to the National Solidarity Fund. While the state of calamity refers to crises affecting specific sectors, the state of emergency is declared when crisis and disasters undermine the functioning of the majority of society structures. The states of emergency and calamity cannot be declared simultaneously (Bignami 2010). For instance, the state of emergency was declared on the occasion of the earthquake in May 2012, hitting the region of Emilia Romagna, and after the environmental disaster caused by Costa Concordia last year. Instead, the state of calamity was declared in the region of Campania after the exceptional rainfalls of January 2013, and in the region of Lazio as a consequence of a landslide in April 2013.

On that occasion, a specific task force was established at the National Decisional Centre (*Centro Decisionale Nazionale*, CDN) with the tasks of coordinating and monitoring at the strategic level the evolution of the possible crisis deriving from the Millennium Bug. It comprised a committee, named Committee Year 2000, chaired by the under secretary of the presidency of the council of ministers and composed of the ministers of the interior, of defence, transports, communication, health, industry and trade, who monitored the evolution of the situation as concerned their area of competence. The military advisor to the president of the council and the person responsible for telecommunications also contributed with their support.

This task force was in constant contact with the seats of the major national infrastructures (transports, telecommunications, trains, airports, energy) and also with the civil protection. The task force assessed the conditions of all infrastructures over the following three months: phones and radio operators, banks and financial services, defence industry, health system and communication. No damages were recorded in any of them, neither in the seats of the diplomatic and consular services deployed abroad. In the end, the Millennium Bug did not hit the system in Italy and the task force was discharged in March 2000.

Civil protection crisis management

The mayor is the first public authority responsible for civil protection on the territory. He/she has the task to cope with the initial moments of a calamity and provide relief to the population, by coordinating the local operative structures including civil protection volunteers. The mayor responds to emergencies through the activation of the Municipal Operational Centre (*Centro Operativo Comunale*) that coordinates the rescue services and operational forces. Following the up-scaling approach (the principle of *subsidiarity*) if the municipality cannot cope with the emergency on its own, the province, the prefecture, and the region intervene by activating the available resources for the areas affected by the calamity (Department of Civil Protection 2013). In "type c" events, the national government intervenes: the president of the council of ministers assumes direct responsibility operating through the Civil Protection Department.

Emergency actions are planned according to the principles of the "Augustus method" and, above all, on the Directive and the Decree of the President of the Council of Ministers, dated 3 December 2008. The "Augustus method" represents the cornerstone for the planning of emergency response at the various levels of competence. Besides providing flexible guidelines for emergency response, it identifies clearly the working method and the procedures to apply in order to maximize synergy and coordination among the available resources in response. On the basis of the Augustus method the response is organized in three parts: information collection, identification of objectives and of responsibilities, and operational flexibility during support activities. In other terms, the Augustus method defines diversified response plans (according to the types of risks) which eventually combine through flexibility at the operational level (Toseroni 2009).

The 2008 reform established an operative committee to ensure coordination of emergency response activity. The committee is chaired by the head of the Civil Protection Department, and includes representatives of the operative structures of the National Civil Protection Service and of public and private bodies and administrations which manage the emergency together. The reference point of the National Service of Civil Protection is the coordination centre SISTEMA (see section 2.1.1).

Illustration of the civil security system: earthquake

This section covers a typical crisis case that Italy faces on a regular basis. Seismic activity is relatively common in Italy and therefore the functioning of the civil security system in case of earthquake will be

analyzed. In this case, the Department of Civil Protection takes the lead on response activities and the head of department coordinates the response measures in order to assist the population affected by the crisis.

On 6th April 2009 an earthquake of magnitude 5.8 hit the province of L'Aquila claiming the lives of 309 people, injuring thousands of citizens, causing 64,391 displaced persons and provoking severe material destruction. In a few hours, the fire brigades, the volunteer organizations part of the Civil Protection National Service and the Army were deployed in L'Aquila from all over Italy to search and rescue the victims of the earthquake. The very same day a state of emergency was declared by the president of the council of ministers (Decreto del Presidente del Consiglio dei Ministri 2009), and the head of the Civil Protection Department, Guido Bertolaso, was appointed as special commissioner with the extraordinary powers to take any action to assist the population hit by the earthquake and respond to the emergency. Actually, the commissioner took a strong leading role with respect to the local authorities for the following 10 months. On April 6th any taxation or payment or trial involving residents in the municipalities hit by the earthquake were suspended until 31st December 2012, and then until 31st December 2010 (Department of Civil Protection 2009).

Within three days, tents were established to host around 33,000 displaced persons providing accommodation and meals, while another 10,000 displaced people were located in hotels in the Abruzzo Region and in neighbourhood regions (Lazio, Umbria, Marche), organized by the Civil Protection Department. On April 9th seven integrated operational centres were established in the area hit by the earthquake to coordinate response activities. In particular, the Fire Brigades and Civil Protection Department fulfilled the task to check the buildings damaged by the earthquake to determine those safe to be inhabited and those to be repaired, and to put in place the temporary structures to prevent further damage to the latter. People able to rent a flat and/or to find an autonomous accommodation (i.e. hosted by relatives and friends in surrounding areas) were reimbursed up to 400 euros per person. Primary and secondary schools were allowed to complete the academic year earlier in order to let students obtain their degrees. The payment of electricity bills was suspended. (Department of Civil Protection 2009).

On April 15th a military force of 700 units was tasked to patrol the city centre of L'Aquila and other major towns to avoid looting of the abandoned houses. The same day the prefect of L'Aquila was appointed deputy commissioner. On April 21st the commissioner was tasked to launch an information campaign to communicate the measures undertaken to manage the crisis for the local population. The commissioner was also tasked to set up the procedures to build temporary houses (*Moduli Abitativi Provvisori,* MAP), whose areas where identified by 17 July 2009. (Department of Civil Protection 2009). On April 28th, the commissioner was tasked to set up the procedures to build earthquake-proof households, (*Centri Abitativi Sismicamente Ecocompatibili*, CASE) (Department of Civil Protection 2009).

On May 1st, two other deputy commissioners were appointed to support the crisis management, and the mayors of the municipalities hit by the earthquake were tasked to implement the decisions taken by the commissioner (Department of Civil Protection 2009). On May 11th, the 17 areas to build the CASE centres were designated, most of them close the villages hit by the earthquake.

On July 9th, the commissioner was tasked to set up the procedures to build temporary schools (*Moduli ad Uso Scolastico Provvisorio*, MUSP) including kindergardens, primary schools and secondary schools, whose areas where identified on July 31st (Department of Civil Protection 2009). By September 2009, all schools and the university – whose admission fee was cancelled for two years - regularly began the academic year, and 99 percent of students returned to classrooms.

By December, 2009, 17,000 displaced people were located in the 17 CASE centres, and 7,000 were located in the MAP. At the same time, around 18,500 citizens had rented a house, found an autonomous accommodation or stayed in a hotel, whose costs were reimbursed by the Civil Protection Department. Several hundred were located in the police academy of Coppito and in a military barracks nearby. As a result, all tents – which have been hosting up to 33,000 people for eight months – were closed. On February 2010, the Head of the Civil Protection Department handed over the commissioner seat to the governor of the Abruzzo Region. The response phase ended and the recovery phase began.

2.2.4 External dimension

The external dimension of Italy's civil security system is characterized by a multilateral and bilateral approach, in line with traditional Italian foreign and security policy. Italy is a member of the Council of Europe, the EU, NATO, OSCE and UN. Italy participates in the EU Community Mechanism for Civil Protection with the Department of Civil Protection (see section 4).

In addition, Italy takes part in numerous European and international initiatives regarding the improvement and the implementation of specific policies related to civil security, namely in the organization of training activities, exchange of experts and joint exercises. For instance, the Department of Civil Protection was involved in the project on "Strengthening the National Strategy for Forest Fire Fighting" in Lebanon aimed at strengthening Lebanon's forest fire prevention and forecasting capacity (OECD 2010).

In particular, because of its position in the Mediterranean, Italy has established and promoted different kinds of programmes and partnerships with neighbourhood countries. Italy plays a key role in several cooperation frameworks, including for example (Acrimas 2011):

- PICRIT Project: co-funded by the 2007-2013 ALCOTRA Programme, it aims at finding effective measures to cope with natural hazards affecting cross-border areas of Italy and France, by enhancing the effectiveness of established systems of civil protection and management of national emergencies, paying particular attention to the safety of the European Critical Infrastructure (ECI) of this area.
- Force d'Intervention Rapide Européenne (F.I.R.E. 4) is a cooperation project among Mediterranean countries (France, Italy, Portugal and Spain) facing similar typologies of risk, promoted in the framework of the Community Mechanism for Civil Protection. The goal of the initiative is to ensure a better protection of European citizens by developing an EU rapid response facing all risks related to natural disasters. In February 2008 the steering committee of F.I.R.E. 4 decided to include Greece as a partner of the project, so the initiative is now known as F.I.R.E. 5. (Department of Civil Protection 2009).
- EUROMED Programme for Prevention, Preparedness and Response to Natural and Man-made Disasters (PPRD-South EUROMED): it has the objective to develop and reinforce the quality of civil protection services in the Euro-Mediterranean region through institutional cooperation in the field (Official site of EUROMED Programme on Prevention, Preparedness and Response to Natural and Man-made Disasters 2008).
- Adriatic Ionian Initiative (AII): organizes several roundtables to enhance cross-border cooperation on environmental and fire protection.

Italy has also signed a number of bilateral cooperation agreements and/or technical cooperation pacts on civil protection with Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, France, FYROM, Germany, Malta, Montenegro, Russian Federation, Serbia, Sovereign Military Order of Malta and Swiss Confederation. Additionally, the country has established agreements with non-European countries³⁵⁰

Moreover, Italian municipalities, provinces and regions have the authority to establish cross-border cooperation projects with the aim to enhance the preparedness and response activities focused on specific geographic areas³⁵¹ These agreements, which come in different forms (treaty, memorandum, protocol, exchange of letters, etc.), promote the development of joint programmes and projects, in particular in the fields of forecasting, prevention and mitigation of natural and manmade risks, in management of emergency situations and reciprocal assistance in the event of calamities (see table 3).

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

Art. 2 of the Italian Constitution states that "the Republic expects that the fundamental duties of political, economic and social solidarity be fulfilled", connecting, through this expression, the concept of solidarity to that of responsibility of citizens in protecting their life. This sense of solidarity finds one of its best expressions in volunteer organizations. With law n. 225/1992, civil protection assumes the meaning of "widespread culture" by declaring the responsibility of all citizens to effectively contribute to the protection and preservation of territory, environment and society. Moreover, the gradual decentralization of civil protection functions has enhanced the population's awareness, consensus and participation in civil protection activities through the voluntary programmes.

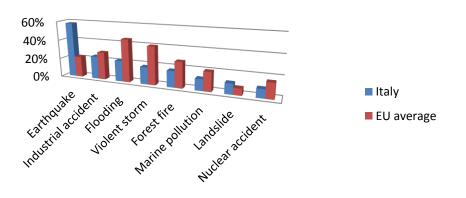
As concerns citizens' expectations towards the government's responsibility, there are no poles related to crisis management, nor specifically to the prevention phase. However, certain episodes (especially related to recent calamities) let us say that citizens' expectations towards the government have hardly been met, especially during the reconstruction phase. For instance, significant protests took place in February 2010 in L'Aquila against the slowness of the reconstruction process: during the so-called "wheelbarrows riot" hundreds of citizens gathered voluntarily to remove tonnes of rubble from the city centre (Özerdem and Ruffini 2013, p. 128). Criticisms have also been made concerning the current lack of prevention plans and the state's inaction in the improvement of safety measures for buildings, in particular schools and hospitals (Mazzantini 2013).

According to the Special Eurobarometer 383 published in June 2012, about half of the Italian citizens (49 percent) perceive natural disasters and man-made disasters as the most likely threat. 36 percent of Italians are very concerned about terrorist attacks and armed conflicts (European Commission 2012). As shown by the figure below, the percentage of Italians concerned about earthquakes (58 percent) is much higher than the EU average (22 percent). Landslide represents a concern for a small percentage of Italians citizens (11 percent) which is nevertheless higher than the EU average (7 percent). In contrast, Italians are less worried

³⁵⁰ Such as Argentina, Algeria, Armenia, Azerbaijan, Belarus, China, Indonesia, Morocco, United Arab Emirates and Venezuela (Official website of the Department of Civil Protection 2012).

³⁵¹ For example, the autonomous Region Valle D'Aosta participates in the 2007-2013 ALCOTRA Programme with 13 projects that encompass the monitoring of seismic events, technological risk and CBRN threats (Region of Valle D'Aosta 2013).

about industrial accidents, flooding, violent storms, forest fires, marine pollution and nuclear accidents than the EU average.





Which of the following natural or man-made disasters, if any, do you feel most at risk in Italy?

Source: IAI elaboration based on Special Eurobarometer 328 data

2.3.2 Information

The 2009 Special Eurobarometer Report 328 reveals that 28 percent of Italian citizens feel informed on crisis preparedness, in line with European average (29 percent) while only 29 percent of Italian citizens feel informed on disaster response (European Commission 2009). With regards to information channels, 47 percent of Italian citizens rely on scientists to receive background information on possible disasters. The next most trusted source for disaster information is the national government (34 percent), followed by European institutions (30 percent), journalists (18 percent), and NGOs (18 percent).

The Department of Civil Protection conducts several activities to increase public awareness about natural hazards, and to improve resilience through campaigns, exhibitions and publications. For instance, the pamphlet *The Civil Protection Handbook for Families* describes various types of natural hazards, emergency procedures, how to prepare for them, what actions must to be taken before, during and after the crisis and what authority to call for help (Department of Civil Protection 2007).

The mayor of a municipality affected by a crisis is responsible for risk communication and information to citizens, while the Department of Civil Protection promotes the dissemination of information.³⁵² It seems that Italy does not have a siren system or a system for radio/tv warnings to alert the citizens in case of calamities.

A recent development in means of communication is represented by social networks. An extensive use of this type of communication is made by citizens: for example, especially in the latest events of the

³⁵² A contact center is dedicated to citizens, institutions, organizations and companies that wish to receive information or give reports on activities of the Civil Protection Department's area of competence. The Civil Protection Department provides information on: local risks and rules of behaviour; national regulations; activities and competences of the Department and of the National Civil Protection Service; initiatives and information material.

earthquake in Emilia Romagna 14,535 tweets containing information on the evolution and on emergency contacts were sent by people in the first two hours following the first shakes. The Department of Civil Protection, which at the time did not have either a Facebook or Twitter account, initially criticized such use of social networks since brief and quick communication in case of emergency might cause panic.

This initial attitude has changed in the recent events of the earthquake that hit the region of Tuscany (January-February 2013): the regional Department of Civil Protection has kept citizens regularly informed by using both Facebook and Twitter. Such information exchanged on social network is also used through open source applications such as "crowd mapping" to locate geographically the origin of a Facebook message or a sent tweet.

2.3.3 Education

Education activities are carried out at various levels, with particular education programs provided by the Department of Civil Protection, by NGOs, by the Ministry of Interior and by its specific departments such as the National Fire Brigades, Public Rescue and Civil Defence. Voluntary organizations also realize education/training programmes for volunteers involved in civil protection (see section 2.4.1) while evacuation drills are organized in schools, private companies and public buildings on the basis of emergency plans.

"Safe School" Project

The Safe School Project, realized by the Ministry of Interior in cooperation with the Ministry of Education and the Department of Civil Protection, was launched as a pilot project in 1992 and has gradually extended to all Italian provinces. It has the objective to educate children and teachers on issues like solidarity, cooperation and self-control, so that they are able to behave correctly during emergency situations. A national committee coordinates the project at the central level and establishes guidelines for local activities, while at the local level the prefectures and a provincial committee define educational programs accordingly (Ministry of Interior 2012).

Training and Exercises

The training activity of the Department of Civil Protection aims in particular to promote the growth of a shared "culture of civil protection", including common operational procedures and methods to be implemented throughout the country. To this end, volunteers, competent local levels and young citizens are the main targets of the department's training (Department of Civil Protection 2012). In addition, Civil Protection organizes relief drills at national, regional, provincial and local levels. Drills are an important tool for prevention and for checking emergency plans, with the objective to test the intervention model, update territorial knowledge and suitability of resources. It also aims to instruct those involved in emergency management and the population on the correct behaviour to adopt.

The National Fire Brigades provide "internal" and "external" training programs. Internal training aims at the qualification and specialization of all National Fire Brigades staff while external training addresses various categories of citizens responsible for the implementation of measures regarding fire prevention and firefighting. Each year an average of 1,000 professional firefighters and 30/40 technical officials are trained

by the National Fire Brigades. Similarly, the Italian Red Cross offers both internal and external training and education programmes.³⁵³

On September 2005 the first official terrorist attack simulation/drill was held in Milan. Four different locations were selected – the Northern Milan Railways station Cadorna, the Cadorna Underground station, Linate Airport and the Milan Town Hall – and the people involved, more than 2,000, belonged to the prefecture, police forces, Armed Forces, Fire Brigades and the Health Service.³⁵⁴ While the expected time of the simulation was 1 hour and 15 minutes, the drill was performed in 2 hours and 45 minutes due to problems related to traffic and vehicles access to the disaster area. However, the civil defence and civil protection forces were reportedly well-coordinated in working together to protect the population.

SERIT platform

In terms of research & development in the fields of security, the government and national research institutions encourage cooperation between stakeholders that operate in security and crisis management (industry, universities, RTOs, end users, etc). For example, Security Research in ITaly (SERIT) is the R&D platform for national security jointly promoted by the National Research Council (*Consiglio Nazionale delle Ricerce,* CNR) and Finmeccanica, Italy's leading industrial group in the defence and security sector. SERIT was launched in 2011 and among its goals it intends to provide input on research priorities in the homeland security domain.³⁵⁵ The SERIT regularly identifies key sectors, deemed as a priority for the country's investments with regards to Italian specificities ("SERIT - SEcurity Research in ITaly 2012", Vol. 2, June 2012), while including input for Horizon 2020 (see the "Food for Thought Paper on H2020", February 2013³⁵⁶).

If we take into account the overall state-funded R&D we should notice that "security" does not seem to be a priority (interview, Rome, April 2013). Even the "Horizon 2020 ITALIA", issued in March 2013, does not modify the previous approach in which the national research program was linked to national technology clusters without a specific cluster related to "security". According to some observers, the point is critical because it would be desirable to reflect the European approach which has led to "security" achieving status and visibility (also in relation to the budget issue) in Horizon 2020 (interview, Rome, January 2013).

2.4 Role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organizations/NGOs

The world of societal/non-profit organizations/NGOs operating in the civil security system is extremely diverse and only some of these provide direct support to crisis management through a formal partnership with the government. This is the case with the Italian Association of Experts on Critical Infrastructures

³⁵³ More detailed information about internal and external training of Italian Red Cross is available from: <u>http://cri.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/647</u>. [Accessed 19 December 2012]

³⁵⁴ In addition, four hospitals, the Italian Red Cross, local transport services and the Civil Protection Dept. took part in the simulation. Other resources included 156 Civil Protection vehicles, CBNR task forces, 70 ambulances, two helicopters and 170 Civil Protection volunteers. The forces engaged in the simulation were coordinated by a prefecture team.

³⁵⁵ The SERIT platform official website is: <u>http://security.cnr.it/index.php/en/serit</u>. [Accessed 14 January 2013]

³⁵⁶Available from: <u>http://server5.iit.cnr.it/~intreg/wordpresstest/wp-content/uploads/2010/02/Position-Paper-on-</u> H2020 v01-1-.pdf

(*Associazione Italiana esperti in Infrastrutture Critiche* – AIIC) which intends to create and sustain an interdisciplinary culture for the developing of strategies, methodologies and technologies able to adequately govern critical infrastructures, especially in crisis scenarios resulting from both natural and manmade disasters.³⁵⁷ The AIIC is aimed at promoting and disseminating a "security culture" by acting as a forum in order to exchange experiences and knowledge. The members of AIIC include also officials of the Civil Protection Department and presidency of the council of ministers.

Undoubtedly, volunteers' organizations – non-profit organizations according to ANVIL terminology – play a decisive role in Italy's civil security system by providing human resources and qualified support both in the preparedness and response phases. The legal framework that regulates volunteers' organizations within the civil security system includes the law n. 266 dated 1991, the law 225/92 and, finally, the Decree of the President of the Republic n. 194/2001. The first recognizes the added value of organized volunteering as an expression of solidarity, participation and pluralism and the second considers the volunteers' organizations as a "national operational structure", part of the National Civil Protection Service. The Decree of the President of the Republic n. 194/2001 completely regulates voluntary organizations.

Overall, the voluntary organizations engaged in civil protection number approximately 3,000.³⁵⁸ The total number of Italian volunteers related to civil protection is growing and currently amounts to approximately 1,500,000; 60,000 of them are theoretically ready to intervene rapidly in case of crisis on their territory (Santoianni 2007). In compliance with the Italian law, in order to benefit from state funding, non-profit organizations have to be entered in the register referred to in Article 6 of the law 266/1991. Consequently, the laws n. 266/1991 and n. 383/2000 point out that non-profit organizations derive economic resources for their functions and activities from contributions of the state, public authorities or public institutions aimed only at supporting specific documented activities or projects. In addition, art. 96, law n. 342/2000, acts as a milestone in financing provisions of non-profit organizations related to civil security. It is declared that since 2001 a share of the national fund for social policies [article 59 (44) of the law 449/1997] is determined annually by the minister for social solidarity, in consultation with the minister of the Treasury, budget and economic planning for the purchase of ambulances and capital goods used directly and exclusively for socially useful activities.

A particular aspect characterizing the Italian civil security systems is the solidarity role of the Catholic Church. Besides the financial aid for reconstruction efforts, during the Emilia earthquake the Italian Caritas – the charitable arm of the Italian Bishops Conference (*Conferenza Episcopale Italiana*, CEI) – has supported the affected population by coordinating the activities of volunteer organizations coming from different regions and by creating the so-called "Community Centers" (*Centri di Comunità*), (Caritas Italiana 2013).

Italian Red Cross

The Italian Red Cross is a non-profit NGO and is part of the International Movement of the Red Cross. During all its activities at the international level, the Italian Red Cross works closely with the International Committee of the Red Cross, with the International Federation of Red Cross and Red Crescent Movement. It works closely with the ministries of Health, Economy and Finance and Defence. The Red Cross has four

³⁵⁷ For more information about the Italian Association of Experts on Critical Infrastructures see <u>http://www.infrastrutturecritiche.it/aiic/index.php?option=com_content&view=article&id=219&Itemid=125</u>. [Accessed 19 January 2013]

For the list of voluntary organizations related to civil protection see, <u>http://www.protezionecivile.gov.it/jcms/it/organizzazioni_volontariato.wp</u>, [Accessed 16 January 2013]

Central Committees and more than 1,000 offices throughout the country. This organization has 160,000 volunteers and 5,000 employees (Italian Red Cross 2012). The Italian Red Cross is mainly involved in the preparation and the response to national and international disasters and acts as the "operational structure" of the National Civil Protection Service. The *Regulations for the organization of emergency activities* is the legal basis regulating the organization of all national and territorial structures with regard to the preparation and response to disasters (Italian Red Cross 2010). The organization is part of the civil protection domain and is involved in assistance to the population and logistics in case of crisis. The Italian Red Cross can utilize its network of local units to gather information on the evolving events and share them with the Civil Protection Department, while at the same time can forward information coming from other institutions to local units. When a crisis occurs, the two main operating structures of the Italian Red Cross are the crisis unit (*Unità di Crisi*) and the coordination and assessment team (*Team di Coordinamento e Valutazione*). The first is the operational centre and defines how to respond according to the type of crisis. It meets only in case of a signature crisis either national or international. The second assesses the situation and supports *delegates* in coordinating the initial response to the event.

Through the role of the *delegates*, the Italian Red Cross coordinates its civil protection activities at regional, provincial and local levels. In particular, the coordination encompasses planning, preparedness and response phases.

2.4.2 Role of profit-oriented organizations

An important premise is that in the past private actors were largely passive (i.e. they expected to be protected by the state). According to law 225/92, private organizations can participate in the implementation of the civil security system but they are not legally obliged. For this purpose, the national and local structures of civil protection can stipulate conventions with public and private subjects. According to available information, it does not seem that public agencies outsource crisis responsibilities to profit oriented organizations. Nowadays the private sector is becoming aware it shall be more active. For instance, there are specific tasks in Italy for private actors regarding the protection of critical infrastructures (interview, Rome, July 2012).

Critical Infrastructure Protection

The case of critical infrastructures (CI) deserves particular attention as in Italy, like in other European countries, private actors are owners of CI and/or manage their security. The overall legal framework on the protection of Italian critical infrastructure is the Legislative Decree n. 61 dated 11 April 2011 that transposes the EU Directive 2008/114/EC. This decree establishes procedures for the identification and designation of critical infrastructures covering the fields of energy and transport. It also defines how to assess the safety of these facilities and their minimum standard of protection against natural and manmade disasters, industrial accidents and voluntary human threats (Information Security 2012). As specified by the EU Directive and by the Legislative Decree n. 61, in order to ensure the protection and the *service continuity*, the CI identified is required to appoint a *liaison* security officer and to draft an Operator's Security Plan (*Piano di Sicurezza dell'Operatore*, PSO) (Associazione Italiana esperti Infrastrutture Critiche, 2011). The PSO identifies the elements that compose the CI and highlights for each of them the existing security measures.

The NISP and the Critical Infrastructures Secretariat (*Segreteria Infrastrutture Critiche,* SIC) play a key role for the identification and designation of CI. The NISP acts as the national contact point with other European states and the European Commission while the SCIC supports the NISP with technical and scientific

activities. The SIC was established in 2010 in order to ensure coherence and synergy between the initiatives and activities of the state administrations involved in the protection of CI (II Giornale della Protezione Civile 2011).

At the national political level, the ministries of Interior, Defence, Economic Development, Infrastructure and Transport and the Civil Protection Department set the relevant actions and measures necessary to ensure the protection of CI located in national territory, keeping the NISP informed. ³⁵⁹ At local level, the responsibility for protection of CI is assigned to the prefect. In case a CI covers the territorial competence of more than one prefect, the Ministry of Interior identifies the responsible one.

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Political and professional inquiries have been carried out respectively by the Parliament, national courts and disciplinary boards, and tend to investigate and analyze the effectiveness of prevention and preparedness measures.

Train derailment in Viareggio

A first case is related to the train derailment that took place in Viareggio on June 29th, 2009. Even in this case an inquiry ministerial commission was established.³⁶⁰ The freight train carrying LPG was passing the station of Viareggio. The structural failure of the axle of one of the two wheel-sets of the first carriage of the first wagon created instability in the equilibrium of the forces acting on the trolley, immediately causing the derailment. Around 345 m farther, a collision with the platform provoked the reversal of the first wagon. Consequently, the other four wagons overturned, their cisterns cracked, resulting in leakage of LPG along the railway centre and in the surrounding areas. Three minutes after the derailment and two minutes after the wreckage came to a halt, a powerful explosion occurred, causing 32 deaths, dozens of injuries, serious damage to rail infrastructure and several houses near the train station.

A Plan of Railway Emergency was declared immediately and included the order of evacuation, rescue operations to isolate the area and block off the movement of trains (communication was launched even before the explosion).³⁶¹ The ensuing investigations proved that the preparation of the train was in

³⁵⁹ In this context, cybersecurity is one of main area of concern and intervention. In January 2013, through a Decree of the President of the Council of Ministers, Italy has released its cybersecurity strategy defining the institutional framework aimed at protecting national security and critical infrastructures, with particular regard to the protection of cybersecurity system at national level. To this end, the strategy has defined the tasks assigned to each actor involved, the mechanisms and procedures in relation to vulnerability, risk prevention, response to the attacks and the timely restoration of systems' functionality in case of crisis (Corriere Comunicazioni 2013).

³⁶⁰ The Commission had to wait until March 2011, when the gathering evidence before a criminal trial was prepared by the judge for the Preliminary Investigation of the Prosecutor of the Republic of Lucca in order to execute a series of destructive laboratory tests on materials and components for the railway wagons, materials and components involved.

³⁶¹ The railway emergency plan provides for the so-called "Extended Emergency Plan", with its main lines of activities identified by the General Plan of Emergency by the station of Viareggio. After a serious train accident, at least four

accordance with the Safety Management System, and that the activities of employees were regular. Furthermore, the equipment, controls, skills and procedures in the maintenance of the rolling stock and accessories responded to current industry standards.³⁶²

The core question placed by the disaster of Viareggio concerns not only the identification of the cause of failure of a structural component of the wagon, but also the reasons why the progression of the fracture was not detected and discovered before complete rupture. In these terms, the Commission proposed recommendations to both the normative and the technical-operational order. The survey highlighted that the safety supervision system should be reviewed, especially in terms of standards for systematic checks and security guarantees even in the operating processes at European level. To increase the active and passive safety levels, it urges to act on the indirect causes, and structural aspects of the rules increasing the likelihood of errors should be enhanced. Additionally, there is the urgency of structuring an effective regulatory framework and providing it with an integrated system of adequate controls. In the operating range, new visual and instrumental inspections should be conducted over sample surveys. Moreover, a system of full traceability of the axles is required, together with the obligation to register the results of the tests carried out on the axles and on all the important components for railway safety. Finally, the Commission considered the importance of laws in the field of wagon leases.

L'Aquila earthquake

One of the most controversial cases concerned the role of the National Commission for the Forecast and Prevention of Major Risks of the Civil Protection Department a few days before the earthquake struck L'Aquila causing 309 victims.

In October 2012, seven Italian earthquake experts – members of the National Commission before the earthquake – were sentenced to six years in jail for failing to give adequate safety warnings to the residents of a seismically active area.³⁶⁴ Six days before the earthquake, the National Commission met to assess the situation after several months of frequent small earthquakes: after the meeting, some commission

levels of intervention are activated: 1. emergency relief; 2. concrete actions, technical and / or prescriptive to prevent the occurrence or continuation of any condition of danger of further damage and to restore of rail traffic; 3. investigation of the judiciary; 4. identification of the technical causes of the accident. According to Directive 49/2004, in Italy the National Agency for the Safety of Railways is the 'safety authority'. In addition, the improvement of railway safety through the pursuit of operational objectives, consisting in identifying the causes of accidents or incidents of exercise, is the general objective of the activities of the Directorate General for Train Investigations.

³⁶² Railway enterprises are subject to the control and supervision of ANSF (*Agenzia Nazionale per la Sicurezza delle Ferrovie*), the company issuing the security certificate – and infrastructure manager. In the Viareggio case, the ANSF with a series of measures (eg provision n °ANSF 03502/09 of 02.07.2009, ref. ANSF 03556/09 of 03/07/2009) imposed carrying out special audits on the axles, aimed at identifying any defects; it imposed for wagons registered in Italy and for those registered abroad but circulating in Italy the obligation on the part of railway companies, the owners / charterers / users to ensure that the traceability of axles of Type "A" (ref. Fiche UIC 510.1) was guaranteed, and otherwise to conduct special audits to check for any defects. (note n ° ANSF 04738/09 of 26.08.2009).

³⁶³ The European Railway Agency (ERA) should be in charge of the maintenance of a register on the EU rolling stock operating on the European Union network, as it happens by analogy to carriage by air; the definition of maintenance standards with related operating procedures valid throughout the territory of the Union; certification of entities authorized to carry out maintenance on rolling stock operating on European territory; procedures and / or systems to monitor and control on the work of the employees authorized to carry out periodic and extraordinary maintenance operations; introduction of a penalty system to be implemented in case of proven violations of the rules and safety standards. Moreover, corrective actions should be directed to the freight sector with particular reference to the transport of dangerous goods.

³⁶⁴ The written explanation of the verdict was issued in January.

members gave encouraging statements to the news media, which prosecutors said gave residents an overly reassuring picture of the risks they faced. According to prosecutors, the commission did not uphold its mandate and consequently did not allow residents and the population to make informed decisions about whether to stay or leave their homes (La Stampa 2013). Such a judgment has been subject to numerous criticisms from the international scientific community which feared that the sentence might pave the way for legal actions against scientists who evaluate the risks of natural hazards which by their very nature cannot be forecast or ruled out with absolute certainty (Corriere della Sera 2012). After the sentence, the members of the National Commission resigned, creating the risk of paralysis in prevention and prediction activities carried out by the commission.

2003 electricity black-out

The third case regarded the electricity black-out that affected the Italian network in September 2003. An inquiry commission was established in order to analyze the events causing the "black-out" of the national electricity system, their causes and development as well as to identify any corrective measures to be undertaken (Ministry of Economic Development 2003).

The chain of events was triggered by a 3,000 MW electricity discharge along the Swiss electric circuit at 3:01 am on September 28th, after a collision with a tree. Despite several manual arrangements aiming at closing the circuit, at 3:11 a request of modification was addressed to the Italian GRTN.³⁶⁵ According to the conventional rules, the entire manoeuvre is required to be concluded within 20 minutes. Italy observed exactly the rule, replying at 3:21. However, Rome underestimated the importance of the request due to the incomplete compliance with the agreed procedure of the Swiss counterpart, ETRANS. In the meantime, the load spread over the other Swiss electric circuits. In the next four minutes, at 3:25, Italy was at a deficit of 6,000 MW.³⁶⁶ Consequently a disconnection between the Italian and the European circuit occurred inevitably, resulting in the black out.

There were three main countermeasures to prevent the case. They are based on automatic and manual alarm systems and automatic instruments for balancing the power capacity. Presumably Italy was able to act promptly in the request-manoeuvres time interval. However, there were several problems, such as the dysfunction of the telecommunication mechanism or ambiguous interpretations of the rules, which led to the mismanagement of the risk.³⁶⁷ What is more, even the commission work lacks completeness due to the limited time at its disposal.

As a result, the commission proposed to complete the investigation and to implement measures in the short and medium term. These measures consisted of strengthening of the "dialogue" on security issues between managers through the knowledge-facility of their networks. Moreover, neighbouring countries should agree on rapid and systematic implementation of the N-1, the capacity limits of the lines associated, the real-time representation of the most significant parts of the neighbouring networks and related measures and alarms. In addition, the commission deemed it necessary to strengthen the direct means of

³⁶⁵ GRTN stands for "Gestore della rete di trasmissione nazionale". It is a joint-stock company aiming to promote, give incentives and enhance developments of renewable resources in Italy.

³⁶⁶ It is a noteworthy reminder that Italy is an importer of electricity and, at that moment, its imports exceeded 300 MW.

³⁶⁷ The first mechanism (Rule No1; N-1) did not work due to the fact that Switzerland did not specify either the urgency of the question or ask for the pumps detachment, leading Italy to underestimate the problem; the second was not successful because of the lack of an EDA mechanism for intervening in due course; the third was only acting "virtuously", in light of its 85% reliability and its deficient functioning in the south of Italy.

reliable communication between managers and neighbouring train staff in the control room; review the systems of protection and control of large thermoelectric units; enhance preventive measures and make the Automatic Detachments Calculator (*Elaboratore Distacchi Automatici*, EDA) more flexible.

3.1.2 Limits to national capacities

As mentioned in Section 2.2.4, bilateral and multilateral mechanisms are activated when national capacities are not sufficient to cope with a certain crisis. The main examples of requested external assistance are related to financial needs.

Declaration of state of emergency

The council of ministers, through its deliberation, declares a state of emergency in case of natural disasters, catastrophes or other events whose intensity and extent require extraordinary powers and means (Camera dei Deputati, n.d.). As mentioned before, in Italy disasters are classified into three different types based on extension, intensity and responsiveness of civil protection: "type a" (municipal level), "type b" (provincial and regional) and "type c" (national).

"Type a" events entail the intervention of single administrations through ordinary measures. In this case, the mayor is responsible for addressing and coordinating the operational activities together with volunteer organizations. "Type b" are natural or man-made events that involve the coordination of different local administrations of two and more municipalities through ordinary measures. In this case, the prefect, the province and the region manage the crisis and coordinate the emergency response by assisting the affected population. Finally, "Type c" events (i.e. natural calamities) require an extraordinary means and power to be exercised for a limited period of time. Following the request of regional administration, the council of ministers declare a state of emergency.

According to the last reform of civil protection (law n. 100 dated 12 July 2012), for the "type c" events the council of ministers declares a state of emergency upon proposal of the president of the council or the president of the region affected by the crisis. Following the declaration, the head of the Civil Protection Department takes "extraordinary powers" and related measures may be taken in derogation from the provisions in force. The law n. 152 of 2005 establishes that even in the event of natural disasters or major events abroad, the Department of Civil Protection may define the measures, approved by the president of the council of ministers, to declare a state of emergency and to respond to disasters (Department of Civil Protection 2013).

3.2 Efficiency

The presence of civil defence and civil protection domains entails two different budgets for the civil security system. The General Directive for administrative activity and management for the year 2012 issued by the minister of the interior, allocates a total of EUR 1,747,977,737 to the Fire Brigades, Public Rescue and the Civil Defence Department. Within this sum, EUR 4,497,208 aims at improving the crisis management's planning of the national civil defence system, while EUR 1,743,480,529 are allocated for risk prevention and public rescue with the objectives to:

- Improve the rescue activities of National Fire Brigades;
- Increase the monitoring of the application of fire prevention's rules;
- Strengthen rescue during major disasters;

• Disseminate and promote the culture of safety to the citizens;

Concerning civil protection, in 2012 the financial resources for the Department of Civil Protection have been EUR 1,670,392,269 distributed as follows (Presidency of the Council of Ministers, n.d.):

- 71 percent of the total to: a) pay mortgage rates contracted by the regions to finance the reconstruction and repair of the damages caused by major natural disasters that have occurred in recent years; b) fund the organization of "Major Events" such as the Mediterranean Games (2009) and World Aquatics Championships (2009);
- 22 percent of the total for other interventions authorized by the legislation;
- 7 percent of the total to: a) finance institutional activities of prevention and forecast of emergency;
 b) cover the costs related to the management of the air fleet; c) the general expenses of the Department of Civil Protection.

In addition, as a consequence of the cuts resulting from the adoption of the Stability Law (the Italian law on the national budget) the budget allocated to civil protection shows a decreasing tendency from 2011 onwards. In fact, in 2010 the amount was EUR 2,072,525,900, decreased to 1,891,846,340 in 2011. Finally the budget allocated for last year (2012) amounted to EUR 1,670,329,269.

Legislative initiatives concerning financial aspects of crisis management have been recently adopted. With the Law Decree n. 59 of 15 May 2012, converted by law 12 July 2012 n. 100, the time-span for a state of emergency for civil protection has been shortened: the period, now, cannot exceed 90 days plus a 60-day extension. In addition, the state no longer finances interventions in support of damages to houses and buildings of citizens who, therefore, may only rely upon private insurances. Regions may also increase the excise tax on fuel by 5 cents to finance civil protection. Moreover, Law Decree n. 195 of 30 December 2009, concerning the management of the response actions in L'Aquila, envisaged the establishment of the socalled "Protezione Civile Servizi Spa", a joint-stock company that was expected to be under the supervision of the presidency of the council of ministers which was also supposed to be its exclusive owner. The aim of this joint-stock company was to make crisis management "more flexible and prompt" (Law Decree n. 195 of 30 December 2009). However, after being largely criticized for attempting to privatize the state's responsibility in crisis management, the relevant article was deleted and not included in the following act converting the Law Decree into law. The most controversial aspects of the project of "Protezione Civile Servizi Spa" were linked to the issue of transparency: the fact that it was supposed to be owned and managed by the presidency of the council of ministers was perceived as a threat to dialogue and confrontation among all political parties. In addition, some argued that the very founding principle of civil protection, that is voluntary solidarity, would be distorted as a result of privatization.

Regarding equipment³⁶⁸ and technology, it seems that no major investments have been made so far: in fact, Italy's CM budget appears to be limited (see also *SERIT Platform* in Section 2.3.3). From an R&T point of view there are two main streamlines for improvements, although constrained by the availability of national funds:

- A better management of the risk evaluation aspects;

³⁶⁸ In terms of equipment, It shall be mentioned that there is an increasing political awareness towards the future utilization of dual-use technologies and assets able to operate both in the civil protection and civil defence domains (interview, Rome, May 2013).

 An improved capability and efficiency for the management of critical, unexpected "black swan" emergencies management "Black Swan"³⁶⁹.

The first line of improvements might provide a better assessment and quantification of the status of natural disaster in order to avoid an underestimation of the threat and possible damages, being limited by the current understanding of the underlying physical comprehension of the phenomena (earthquakes, floods and combination of natural/manmade cascading effects); nevertheless there is room to improve forecasting methods and monitoring networks. Such a development is, however, constrained by the availability of national funds to sustain targeted research and acquisition. The second line relates to the ability to manage unexpected aspects of low probability; a big crisis which overcomes the national capabilities to manages such an occurrence. Example may be a super volcano eruption of the Campi Flegrei or the impact of Tyrrhenian underwater sliding generating high impact tsunami waves. For such contexts the development of new means for crisis management and dedicated infrastructure to train personnel facing complex multidimensional, multidisciplinary operations is a key capability to develop. Serious game technology and environments coupled with new Concept of Operations (CONOPS) might be the right receipt to increase preparedness on such extreme events (interview, Rome, April 2013).

In addition, constrained national funds also affect the implementation of relevant prevention measures by administrative and political authorities: implementation is in fact not mandatory, particularly when it has significant budgetary aspects, and there are no immediate consequences if it is disregarded or only sloppily applied.

3.3 Legitimacy

3.3.1 Political support

As stated in Section 2.2.1, the management of earthquakes in Friuli and Irpinia was characterized by slow rescue operations and lack of coordination. As a result, a debate started on how to overcome the old operative system – more centralized and based on a cause and effect approach – by assuming that civil protection could embrace forecasting and preventing activities. In case of severe crisis, usually "type c", the government and the Department of Civil Protection intervene by adopting legislative dispositions in order to support the response and recovery phases. Usually, these dispositions are aimed at declaring and/or extending the state of emergency and/or at allocating significant financial resources towards the area affected by the disaster (Presidency of the Council of Ministers, n.d.). Following the last reform of civil protection, response measures are adopted by the chief of the Department of Civil Protection and no longer by the president of the council of ministers. Currently, ordinances issued within 30 days from the declaration of the state of emergency are immediately effective, without the need for a preventive control by the Ministry of Economy (Department of Civil Protection 2012). On the one hand, this allows the Department of Civil Protection to act with more flexibility but, on the other hand, it reduces the government's role in emergency response. In addition, the latest reform has also weakened the role of coordination within the presidency of the council of ministers, in favour of other actors at the national and local levels: this was evident, for example, in the case of the recent earthquakes in Emilia Romagna in 2012 if compared with that in Abruzzo in 2009 (Interview, Rome, May 2013).

³⁶⁹ Black Swan type scenarios meaning scenarios that are not fully covered by the current crisis plans and/or may present severe impacts on society due to the domino effect on population, infrastructure, transportation, other.

One of the important innovations of law 401/2001 (see Section 2.2.1) was the introduction of the so-called "Major Events" among the competencies of the Civil Protection Department. A Major Events is an important and public "event of particular organizational complexity in terms of safety, public order, mobility, reception and medical assistance, which requires the adoption of extraordinary and urgent measures, to ensure regular development of the event" (Department of Civil Protection 2012).³⁷⁰ This definition was amended by Law Decree n. 343 of September 2001, which broadened the category of Major Events under the competence of the Civil Protection to include also those events that did not require the declaration of a state of emergency (II Giornale della Protezione Civile 2011). This raised significant criticisms related to the management of funds and tenders by the Civil Protection in case of events that hardly required the adoption of extraordinary and urgent measures for safety reasons. Following the law n. 100 dated 2012, the management of "Major Events" still falls within the competence of civil protection but only for those events requiring the declaration of a state of emergency (interview, Rome, May 2013).

Finally, the complexity of the chain of command, the high number of responsible authorities and Italians' traditional scepticism toward the government's willingness and ability to deal effectively with their problems has favoured the consolidation of a preference for emergency; exceptional measures that greatly shorten the usually very long decision time. In this way, both the traditional individualistic culture and the drive to protect as rapidly and as well as possible its own interests and well-being coalesce in what we may call a "preference for emergency". It is justified by the ineffectiveness of the normal administration, but also suggesting that it may be simpler not to reform and increase the effectiveness of "normality" when the "emergency" can be better manipulated and more rewarding.

3.3.2 Legal support

It seems that no ombudsman petitions concerning civil protection have been filed so far. As outlined in section 3.1.1, seven Italian earthquake experts, members of the National Commission for the Forecast and Prevention of Major Risks of the Civil Protection Department, were sentenced to six years in jail for failing to give adequate safety warning to the residents of a seismically active area. Such a judgment has been subject to numerous criticisms from the international scientific community, which feared that the sentence might open the way to legal actions against scientists who evaluate the risks of natural hazards. Recently, the former mayor of Genoa (Northern Italy) is being investigated by city prosecutors for suspected slander and manipulating documents in an investigation surrounding the 2011 deadly Genoa flood. According to prosecutors, documentation regarding the precise timing of when the city launched a flood alert in the fall of 2011 was tampered with by city officials (Ansa 2013). As concerns the financial management of Major Events, the former head of the Civil Protection Department, together with the head of the Council for Public Infrastructures, was subject to investigation in 2010: they were accused of corruption in the management of tenders for the preparation of the Major Event of the G8 in La Maddalena in 2009. The former head of Civil Protection Department, after rejecting all the accusations, resigned in 2010.

3.3.3 Popular trust and support

According to Special Eurobarometer 371 on Internal Security dated November 2011, 60 percent of Italian citizens believe that Italy is doing enough to fight terrorism while more than half (about 52 percent) think

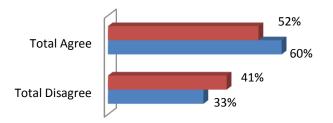
³⁷⁰ For example, events such as the G8 summit involve both security aspects – for example the protection against terrorist attacks – and the coordination of various branches of the civil security system, including different ministries and various levels of local and central authorities. In these circumstances the government could declare a "Major Event" and task the Civil Protection Department to act as point of contact among different actors involved in order to ensure an adequate management of the event.

that the country is doing enough to manage natural and man-made disasters. It shall be noticed that natural and man-made disasters in the last decade have been more numerous and had greater effects than terrorist attacks.

Figure 8 – National actions on fighting terrorism

Italy is doing enough to fight terrorism and manage natural and man-made disasters...

Manage natural and man-made disasters Fight terrorism



Source: IAI elaboration based on Special Eurobarometer 371 data

The popular perceptions during a major crisis tend to not change and the public trust/support remains high in particular during the response phase of the disaster. In general, the public perception towards civil protection is very high and the Civil Protection Department is deemed as one the institutions closer to the citizens' needs. This in turn has caused in some regions a kind of moral hazard for which citizens tend to not be responsible by expecting in any case a public intervention (interview, Rome, May 2013). However, the general perception could radically change negatively especially during the recovery and reconstruction activities (see Section 2.3.1) as happened after the 2009 earthquake that affected L'Aquila (Corriere della Sera 2010).

4. Italy's Civil Security in the EU Context

Following the information provided by the European Community Civil Protection Mechanism, Italy has activated the Commission's Monitoring and Information Centre (MIC) eight times between 2007 and 2011 (Overview of the EU Civil Protection Mechanism activations - 01/2007-12/2011). The MIC activations concerned specific types of disasters, in particular forest fires, landslide, floods and earthquakes and, in some cases, involved the participation of other European Member States such as France and Spain (see section 2.2.3). As analysed in section 3.1.2, Italy has also received significant resources from the EU Solidarity Fund for two major earthquakes, in Emilia-Romagna (2012) and L'Aquila (2009), with a total amount of EUR 1,170 million. From an overall assessment of the EU Solidarity Fund interventions since 2002, it emerges that Italy is the first beneficiary country with a total aid granted of EUR 1,246.6 million.

Occurrence	Nature of disaster	Category	Damage (million €)	Aid granted (million €)	Total aid granted (million €)
October 2002	Earthquake (Molise)	Regional	1.558	30.8	
October 2002	Eruption of Volcano Etna	Regional	894	16.8	
April 2009	Earthquake (Abruzzo)	Major	10.212	493.8	
October 2010	Flooding in Veneto	Regional	676	16.9	1,246.6
October 2011	Flooding in Liguria/Tuscany	Regional	722.5	18.1	
May 2012	Earthquakes Emilia- Romagna	Major	13.274	670.2	

Table 7 – EU Solidarity Fund interventions since 2002: ITALY

Source: EU Solidarity Fund

On 6 April 2009 an earthquake of magnitude 5.8 hit the Italian province of L'Aquila claiming the lives of 309 people, injuring thousands, resulting in 35,000 refugees and provoking severe destruction of infrastructure, private households, public buildings, businesses and the region's important cultural heritage. The European Commission through the Solidarity Fund decided to grant assistance to Italy amounting to EUR 493.8 million:³⁷¹

- EUR 50 million for first emergency operations;
- EUR 350 million for the housing projects in L'Aquila where currently around 12,000 people live.
- EUR 93.8 million for over 3,100 small temporary housing units for up to 7,000 people, in the proximity of the little villages surrounding the city of L'Aquila.
- 32 high quality temporary schools have been built to ensure the education activities of over 15,000 students whose schools have been affected by the earthquake.

In the case of the 2012 earthquake in the region of Emilia-Romagna³⁷², after the financial resources of the Solidarity Fund were originally denied by five EU Member States (Finland, Germany, The Netherlands, Sweden and UK) the EU finally managed to allocate EUR 670 million, the greatest aid ever allocated for natural disasters since the creation of the EU Solidarity Fund in 2002 (European Commission 2012).

Moreover, Italy has contributed to the EU Civil Protection Mechanism especially in terms of training, exercises and exchange of experts programs, organized by the participant states with co-financing from the Commission. Between 2010 and 2012, the Civil Protection Department has coordinated one EU-level exercise in 2010, EU TEREX in Tuscany that simulated an earthquake scenario, and has taken part in four EU-level simulations. Another exercise organized by the department was ES-2008 ERMES, related to a *seismic* event in the Messina Strait. It shall be noted that in 2013 the Department of Civil Protection will

For an overview of the EU Solidarity Fund see <u>http://ec.europa.eu/regional_policy/thefunds/solidarity/index_en.cfm#6</u>. [Accessed 9 January 2013]

³⁷² A first earthquake with a magnitude of 5.9 on the Richter scale hit the area north of Bologna, towards Ferrara, causing fatalities and massive destruction to ancient buildings in surrounding towns. The second, with a force of 5.8 on the Richter scale hit the same region, this time towards the north of the city of Modena, on May 29th. The earthquakes caused 27 deaths; an estimated 350 people were injured and over 45,000 people had to be evacuated. There was serious and widespread damage to buildings, infrastructure, businesses, industrial facilities, agriculture and to the important cultural heritage sector. By far the biggest part of the damage (nearly 92%) was recorded in Emilia-Romagna, particularly in the provinces of Modena, Ferrara, Bologna and Reggio Emilia. Lombardy and Veneto were affected to a lesser extent with nearly 8% and 0.4% of total damage respectively.

organize a further exercise, i.e. TWIST, and will participate in the EU TARANIS exercise coordinated by Austria (European Commission, Humanitarian Aid and Civil Protection website). In addition, for the period 2007-2011 Italy has offered assistance to other countries through the Mechanism, as reported by the Table 3 (see below).

Section II and section III of the Eurobarometer 383, dated June 2012, analysed the attitude and the general awareness of European citizens with regards to the EU coordination of civil protection. More than a half of Italian citizens, about 54 percent, are not aware that EU coordinates the civil protection both inside and outside the Union. This lack of awareness is confirmed by the fact that about 69 percent of Italian citizens declare to be not "Well informed" or "Not very well informed" about civil protection activities of the EU. The correspondent European averages on the same data are even worse (respectively 57 percent and 80 percent), nevertheless we cannot deny that EU visibility on the ground as concerns civil protection is lacking. Regarding the EU role in civil protection, 34 percent of Italians "totally agree" that a coordinated EU action in dealing with disasters is more effective than action by individual countries, with respect to the 42 percent EU average. Almost half of the Italians, 48 percent, tend to agree on this statement, vis-à-vis 40 percent for the EU average. By adding the percentages related to "Totally agree" and "Tend to agree", an overwhelming majority of Italian citizens (82 percent) believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states, perfectly in line with the EU average (82 percent).

Period	Crisis type and country	Contribution
28.06-30.06.2007	Forest fires in Greece	2 Canadairs CL-415
05.07-9.07.2007	Forest fires in Greece	2 Canadairs CL-415
25.07-14.08.2007	Forest fires in Albania	2 Canadairs CL-415 IT has been awarded with a Transport Grant
16.08-24.08-2007	Earthquake in Peru	Italy sent bilateral assistance
24.08-07.09.2007	Forest fires in Albania	2 Canadairs, Italy has been awarded with a Transport Grant
24.08-05.09.2007	Forest fires in Greece	1 Canadair
12.11-10.12.2007	Oil spill (marine pollution)	Italy was part of a MIC assessment team deployed in Kiev on 18.11
13.05- 27.06.2008	Earthquake in China	Italy was part of a MIC assessment team deployed on 17.05.2008
13.06-16.06-2008	Forest Fires in Norway	Italy offered aerial firefighting capacity
24.07-28.07.2008	Forest fires in Greece	2 Canadairs CL-415
23.07-20.08.2008	Forest fires in Montenegro	1 Canadair
4.09-3.10.2008	Haiti stor cyclones "Fay", "Gustave", "Hanna" and "Ike"	Italy was part of a MIC assessment team deployed on 13.09.2008
13.08-14.08.2009	Forest fires in Albania	Italy offered 1 Canadair CL 415 but it was not accepted due to availability time
2226.08.2009	Forest fires in Greece	2 Canadairs
31.08-3.09.2009	Forest fires in Portugal	2 Canadairs

Table 8 – Italy's assistance to other countries between 2007-2011

7.01-21.01.2010	Floods in Albania	2 helicopters CH47, medicines, 500 kitchens sets x 5 pers. each, 4,400 blankets, 15 generators , 8 water pumps, 6 boats, 80 tents (22 m ²), 5 WP units, 30,000 sandbags
13.01-06.04.2010	Earthquake in Haiti	Italy provided water purification tablets and tents; 12 experts in assessment team, was part of an EC co-financed Preparatory Action Module;
01.03-07.06.2010	Earthquake in Chile	Mobile hospital and experts for MIC assessment and coordination teams
27.07 – 2.08.2010	Forest fires in Portugal	2 Canadairs C-415
04.08-30.11.2010	Floods in Pakistan	In-kind assistance; Italy was part of a EUCP team deployed on 19.08
03.08-20.08.2010	Forest fires in Russian Federation	Italy contributed to air-crews and water discharges
4.10-18.10.2010	Speleologic Relief in France	1 divers team composed of 7 people
21.10.2010-14.12.2010	Haiti cholera outbreak / hurricane Tomas	Italy delivered four Inter Agency Diarrheal Disease Kits (IDDK) as well as medical equipment and material for the treatment of cholera (9.5 tons of material) on 7.12.2010
01.12.2010-05.01.2011	Floods in Albania	Food supplies (80 m3-25 tons.), hygienic material (40 m3-4 tons), suits and rainproof suits (80m3-5 tons); 1 high capacity suction pump; 2 light towers; 2 generators
02.12- 08.12.2010	Forest fires in Israel	12 tons of "Fire Troll 931" (flame retardant foam); 69 tons of "Fire Troll 931" and 2,000 It fire foam (total value of € 300,000)
		4.000 blankets; 2 boats 10 rolls (plastic, 4x60 mt); 504 kitchen sets
08.12-22.12.2010	Eloods in Montonogro	5 Generators 5 Kva
08.12-22.12.2010	Floods in Montenegro	3 Generators 10 kva
		2 Generators 18 Kva
		120 Tents 25 m2
25.02-14.03.2011	Earthquake in New Zealand	8 experts for DVI – offer declined by NZ later on
01.03-01.08.2011	Repatriation of TCNs (Lybia conflict)	Contribution to air transports capacity; to EUCPT Bravo deployed on 12/13/04; medical kits, medicines, tents, blankets, kitchen sets, hygiene kits
26.06-29.07.2011	Argentina-eruption of the Puyehue – Cordón Caulle volcano in Chile	Geology, volcanologist
11.07-13.07.2011	Explosion/power shortage in Cyprus	Contribution to EUCPT team
25.08- 08.09.2011	Forest fires in Albania	3 Canadairs
25.08-30.08.2011	Forest fires in Greece	Italy sent one plane for a cascade system
24.10-22.11.2011	Earthquake in Turkey	Tents

5. Conclusion

As a whole, the Italian civil security system proves to be tailored to national specificities. It deals mainly with natural disasters and particularly with earthquakes because these are the major crises affecting the country. It is based on a complex but flexible framework, which couples the principle of *subsidiarity* with

coordination at government level, and is implemented by various bodies and actors, because this reflects the Italian polycentric institutional landscape. It is primarily civilian but with a significant military contribution in line with the country's history. It benefits from a strong role of volunteer organizations, and only to a lesser extent from profit organizations' activism, building on the strong social ties of Italian society. It is making a significant effort in terms of information, education and training but not on a systematic basis. It has a strong bilateral, multilateral, Mediterranean and above all EU dimension, in line with traditional Italian foreign policy. It shows citizens' perception and support similar to the EU average, as in many other fields, and a specific, active scrutiny by the Italian judiciary system – as for other domestic policy areas. Finally, it passed the dramatic test of the L'Aquila earthquake by meeting very high response standards.

The Italian civil security system presents two further significant characteristics linked to the country's recent history. First, as outlined in this report, the system has been subject to several waves of reforms, sometimes heading towards opposite direction across the continuum between centralization and decentralization poles. This reflected the political competition in the last two decades between those pushing for a stronger power of local authorities and those keen to enhance the role of the president of the council of ministers; a fight which led to a series of constitutional, legal and regulatory changes – as well as attempted changes. A second feature of the Italian civil security system is the role of legal frameworks. Italy is a civil law country where, generally speaking, state and local authorities heavily regulate almost every aspect of social life, thus empowering various bureaucracies. This sort of overregulation theoretically poses a huge amount of constraints to public and private activities. In this context, the legal framework is particularly important to define roles, competencies and hierarchies among various actors involved in the civil security system. At the same time, in case of emergency it may be necessary to overcome constraints posed by such a legal framework through extraordinary measures. This situation was epitomized by the appointment of a special commissioner by the president of the council of minister to deal with the 2009 earthquake in L'Aquila, who de facto directed and speeded up the crisis response through his special powers.

Annex I – Coded Data



1	Introduction	Scoring instruction	Score	Source	Com ment s (in case of specif ic probl ems with data)
1. a	Is there an official/form al definition of crisis?	No = 0 Yes = 1	1	See section 1	
1. b	Is the crisis managemen t approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	See section 1	
1.c.	If civilian operations dominate, is the military used for support for crisis managemen t operations?	In exceptional situations =	2	See section 1	
1.d	Does the country take MAINLY an all hazards/gen eric or MAINLY a specific/func tional threats approach to crises and	hazard = 1 Mainly specific threats = 2	1	See section 1	

	disasters?				
2	Analytical dimensions	Scoring instruction	Score	Source	Com ment s (in case of specif ic probl ems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrati ve tradition				
2.1.1 .a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	See section 2.1.1	
2.1.1 .b	ls the political system parliamentar y or presidential?	Parliamentar y system = 1 Presidential system = 2	1	See section 2.1.1	
2.1.1 .c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	See section 2.1.1	
2.1.1 .d	Is the political system a consociation al or a majoritarian democracy?	Consociation al democracy = 1 Majoritarian democracy = 2	1	See section 2.1.1	
2.1.1 .e	Is delegation constructed in a top- down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	2	See section 2.1.1	
2.1.2	Culture				
2.1.2 .a.i	Geert Hofstede country national cultural score - DPI		50	http://geert-hofstede.com/countries.html	
2.1.2 .a.ii	Geert Hofstede		76	http://geert-hofstede.com/countries.html	

I	country				
	national				
	cultural				
	score - IDV				
2.1.2	Geert		70	http://geert-hofstede.com/countries.html	
.a.iii	Hofstede				
	country				
	national				
	cultural				
	score - MAS				
2.1.2	Geert		75	http://geert-hofstede.com/countries.html	
.a.iv	Hofstede				
	country				
	national				
	cultural				
	score - UAI				
2.1.2	Geert		34	http://geert-hofstede.com/countries.html	
.a.v	Hofstede				
	country				
	national				
	cultural				
262	score - LTO		0.42		Max
2.1.2	World Value		0.13	http://www.worldvaluessurvey.org/	Year
.b	Survey's national				2006
	score on dimension 1				
	- traditional				
	vs. secular				
2.1.2	World Value		0.6	http://www.worldvaluessurvey.org/	Year
.C	Survey's		0.0		2006
	national				2000
	score on				
	dimension 2				
	- survival vs.				
	self-				
	expression				
2.2	Legal &				
	constitution				
	al aspects				
2.2.1	Statutory				
	basis				
2.2.1	To what	Highly	1	See Executive Summary, section 1 and 2.2.1	
.a	extent is the				
	legal	(1-2 key laws			
	framework	regulates			
	that	civil security)			
	regulates	= 1			
	civil security				
	centralized	centralized			
	versus	nor			
	fragmented?	fragmented			
		(3-5 key laws			
		regulates			
		civil security) = 2			
		= 2			

		fragmented (6 or more			
		key laws regulates			
		civil security) = 3			
2.2.1 .b	When was the last major reform in the civil security field undertaken?	Provide the	2012	Section 3.1.2 and 3.2	
2.2.1 .c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	legislation = 1 Executive	1	See section 2.2.1	
2.2.1 .c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1	1	See section 3.1.2	
2.2.1 .d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism) ?	No = 0 Yes = 1	1	See section 2.2.3	See Note 30 of Sectio n 2.2.3
2.2.2	Political dimension				
2.2.2	On what	At the	3	See Executive Summary, section 2.1.1 and 2.2.1	
.a	level of government does executive	national level = 1 At the regional			

1	responsibilit	level = 2 At the local			
1	security	level = 3			
	FIRST AND				
	FOREMOST				
	rest?				
2.2.2	On what	At the	2	See section 2.2.1	
.b	level of	national			
	government	level = 1			
	does policy	At the			
	formulation	regional			
	for civil	level = 2			
	security	At the local			
	FIRST AND	level = 3			
	FOREMOST				
	rest?				
2.2.3	Operational dimension				
2.2.3	ls there a	No = 0	1	See section 2.1.1 and 2.2.3	
2.2.3 .a	specialised	Yes = 1	T		
	agency for				
	crisis				
	response at				
	the national				
	level?				
2.2.3	Are there		1	See section 2.1.1 and 2.2.3	
.b	specialised	Yes = 1			
	agencies for				
	crisis response at				
	the regional				
	level?				
2.2.3	ls the	No = 0	0	See section 2.3.3	
.c	exercise	By law = 1			
	system	By executive			
	formalised	mandate = 2			
	by law or				
	executive mandate?				
2.2.3	How many	Register the	1	See section 2.3.3	
.d	major	number	Ŧ	Jee section 2.3.3	
<u> </u>	exercises				
	with a				
	national				
	dimension				
	have been				
	organised in				
	the period 2008-2012?				
2.2.3	How many	Register the	2	See section 4	
.e	major	number	-		
	exercises				
	with an				
	international				
	dimension				
	have been				

	orgonica - L. i.				l
	organised in the period				
	2008-2012				
2.2.4	External				
2.2.7	dimension				
2.2.4	Has the	No = 0	1	See section 2.2.4	
.a	country	Yes = 1			
	signed				
	bilateral				
	agreements				
	with all				
	neighbourin				
224	g countries?	Desister the	10	Conception 2.2.4	
2.2.4 .b	How many countries	Register the number.	10	See section 2.2.4	
.0	has the	number.			
	country				
	signed				
	bilateral				
	agreements				
	with OTHER				
	THAN the				
	neighbourin				
224	g countries?	De sisten dhe			
2.2.4	How many regional/mul	Register the number.	4	See section 2.2.4	
.c	tilateral	number.			
	agreements				
	on				
	RESPONSE				
	oriented				
	disaster				
	managemen				
	t (i.e. not				
	general conventions				
	on				
	environment				
	al				
	protection)				
	is the				
	country part				
2.2.4	of? Has the	No = 0	3	See section 4	
2.2.4 .d	country	One or two	C	שלב אבנוטון 4	
	received	times = 1			
	assistance	More than			
	from	two times =			
	partner/neig	3			
	hbouring				
	country/ies				
	in response to MAJOR				
	to MAJOR DISASTERS				
	(not day to				
	day cross-				
	border help)				

	during the period 2000-				
	2012?"				
2.3	State- citizens				
	relations				
2.3.1	Expectations				
2.3.1 .a	Do citizens have a formal/legal obligation or responsibilit y in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibiliti es for disaster	4	See section 2.3.1	
2.3.2	Information	_			
2.3.2 .a	Does the	No = 0 Yes = 1	0	See section 2.3.2	
			0	See section 2.3.2	
	Doesthecountrymaintainasirensystem?DoesDoesgovernmenthavea	Yes = 1 No = 0 Yes, at the	0	See section 2.3.2 See section 2.3.2	

2.3.2 .d	Does the government make use of social media (Facebook, Twitter etc.) to update	Yes, at the local/region al level = 1 Yes, at the national	2	See section 2.3.2	
	citizens on relevant crisis issues?	Yes, at both local/region al and national levels = 3			
2.3.2 .e	Does the government have a mobile application for reaching citizens with vital crisis/securit y information?	Yes, at the local/region al level = 1 Yes, at the national level = 2 Yes, at both local/region al and	0	See section 2.3.2	
2.3.3	Education				
2.3.3 .a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	Yes = 1	1	See section 2.3.3	
2.3.3 .b.	Do societal/volu ntary actors offer civil emergency training?	No = 0 To members/pr ofessional = 1 To members and limited public outreach = 2 To members and wide- spread training programmes for general	3	See section 2.3.3	

2.3.3 .c	Does the government run TV	population = 3 No = 0 Yes, moderately	2	See section 2.3.3	
2.3.3	campaigns to raise awareness of crisis issues	(once per year) = 1 Yes, extensively (more than once per year) = 2	1	See section 2.3.1	
.d	government provide for a budget for sponsoring research/tec hnological developmen ts on civil security/crisi s managemen t?	Yes = 1	1		
2.3.3 .e	If yes, please provide the overall volume of research funding for civil security	Register the number	N.A.		
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisation s				
2.4.1 .a	Do societal/non -profit actors play an official/legall y mandated role in EXCEPTIONA L crises?	No = 0 Yes = 1	1	See section 2.4.1	

2.4.1 .b	role in the REGULAR provision of civil security?	emergency medicine) =1 In (almost) all aspects of civil security	2	See section 2.4.1	
2.4.2	Role of profit- oriented organisation s				
2.4.2 .a	Do for- profit/privat e actors play an official/legall y mandated role in EXCEPTIONA L crises?	No = 0 Yes = 1	0	See section 2.4.2	
2.4.2 .b	Do for- profit/privat e actors play an official/legall y mandated role in the REGULAR provision of civil security?	In parts of civil security (e.g. emergency medicine) = 1 In (almost)	1	See section 2.4.2	
3	Quality measures	Scoring instruction	Score	Source	Com ment s (in case of specif ic probl ems with data)
3.1	Effectivenes s				uataj
3.1.2	Limits to national capacities				
3.1.2 .a	How many times has external assistance	-	N.A.		Data availa ble only

3.1.2 .b	been received during a crisis? How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	number for 2000-2012. If there are no legal provisions for state of emergency/ disaster,	N.A.		from 2009 Data availa ble only from 2009
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a	number for 2000-2012. If there are	N.A.		Data availa ble only from 2009
3.3	Legitimacy				
3.3.1	Political				
5.5.1					
3.3.1 .a	support	Register the number for 2000-2012.	2	See section 2.2, 3.2 and 3.2	
3.3.1	support How many major reforms have been	number for 2000-2012.	2 N.A.	See section 2.2, 3.2 and 3.2	

	civil security have been undertaken at the national level?				
3.3.1 .d	Has there been a premature change in the government (replacemen t of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0	See section 3.3.2	
3.3.2	Legal				
3.3.2 .a	support How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	0	See section 3.2.2	
3.3.2 .b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0		
3.3.2 .c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e.	defined leeway for operational crisis managemen	1	See section 2.1 and 3.1.2	

	cases of exceptional	Extensive (e.g. no civilian jurisdiction over military actors in crisis managemen t) = 2			
3.3.3	Popular trust and support				
3.3.3 .a	Based on Eurobarome ter data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	sum percentage for "Agree" and "Tend to agree"	52	Special Eurobarometer 371 (2011)	
3.3.3 .b	Based on Eurobarome ter data, what percentage of respondents feel that their country is doing enough to fight	Record the sum percentage for "Agree" and "Tend to agree"	60	Special Eurobarometer 371 (2011)	
3.3.3 .c	terrorism? Do official actors maintain registers for volunteers in crisis managemen t?	No = 0 Yes=1	1	http://www.nonprofitonline.it/docs/dottrinarapporti/71 8.pdf	
3.3.3 .d	above, list number if accessible	for 2011			
3.3.3 .e	If no to 3.3.3.c. or 3.3.3.d is unreliable,	Register the number per 1000 capita for 2011.	more than 1 millio		

4	how many volunteers are estimated to be in the non-profit sector? Civil security in the EU context	Scoring instruction	n	Source	Com ment s (in case of specif ic
					probl ems with data)
4.a	How many times has your country activated the Commission' s Monitoring and Information Centre (MIC) – 2007-	Register the number for 2007-2011	To be compl eted by UI/IF HS	http://ec.europa.eu/echo/files/policies/disaster_respons e/EUCPM_activations_since_01012007.pdf	
4.b	2011? How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be compl eted by UI/IF HS	http://ec.europa.eu/echo/files/policies/disaster_respons e/EUCPM_activations_since_01012007.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximate ly how many practitioners participated in the EU civil protection mechanism's training	Register the number for the 2009- 2010 training cycle	44	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	

	programme in the 2009- 2010 training cycle?		45		
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	15	http://ec.europa.eu/echo/policies/prevention_prepared ness/preparedness_en.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	6	http://ec.europa.eu/regional_policy/thefunds/doc/interv entions_since_2002.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?		1246. 6	http://ec.europa.eu/regional_policy/thefunds/doc/interv entions_since_2002.doc	
4.h	Based on Eurobarome ter data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for	Register the percentage	36	Special Eurobarometer 383 (2012)	

awareness)				
Based on Eurobarome ter data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	82	Special Eurobarometer 383 (2012)	

Annex II – H1N1 in Italy

In Italy the arrival of the 2009 pandemic influenza A (H1N1) virus was faced with an integrated response, mainly based on the 2006 National Pandemic Preparedness and Response Plan (Ministry of Health 2006). Overall, from week 31 (27 July – 2 August) of 2009 to week 17 (26 April – 2 May) of 2010, there were approximately 5,600,000 cases of influenza-like illness (ILI) which received medical attention (with almost 2,000 laboratory-confirmed cases of influenza from May to October 2009). A total of 1,106 confirmed cases were admitted to hospital for serious conditions, of which 532 were admitted to intensive care units. There were 260 reported deaths due to pandemic influenza, a much smaller number compared to deaths caused each year by seasonal influenza (Rizzo et al. 2010).

Approximately 870,000 first-doses of the pandemic vaccine were used, representing a vaccine coverage of only 4 percent of the target population.

Italian health authorities at national and regional levels share the responsibility for public health. In particular, the National Centre for Disease Prevention and Control (CCM)³⁷³ acts as a bridge between the Ministry of Health and regional governments regarding surveillance, prevention and responding to emergencies. The Strategic Committee is the political steering committee of the CCM, chaired by the health minister and including representatives of the regions, the Department for Civil Protection and the Ministry of Defence.

After the first pandemic influenza alert was announced by the World Health Organization (WHO) in late April 2009, a National Crisis Management Committee, headed by the minister of health, was established with the aim of coordinating the strategies related to preparedness, response and communication during the pandemic. The surveillance of seasonal influenza is based on a nationwide sentinel surveillance network called INFLUNET.³⁷⁴ The system covers about 1.5–2 percent of the general population, with the aim of monitoring the incidence of medically attended ILI.

Phase I – Containment measures

Containment measures were implemented in April 2009, including social distancing measures and antiviral prophylaxis for close contacts of cases. A stockpile of 40 million doses of antiviral drugs stored by the Ministry of Health was distributed to the regions, together with recommendations for their correct use. This recommendation remained in force until July 2009.

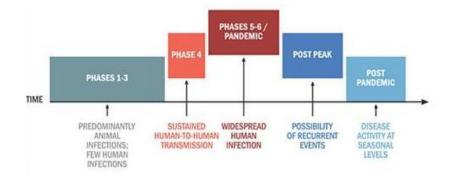
Phase II – Mitigation measures

When WHO raised the influenza alert level from phase 5 to phase 6,³⁷⁵ regions were required to deliver a report illustrating the number of probable, possible and confirmed cases and deaths. At the same time, the existing surveillance systems were enhanced and expanded.

 ³⁷³ It was set up by Law 138 of 26 May 2004 and by the Decree of Ministry of Health 1 July 2004, then amended by the Labour, Health and Social Policy Ministry Decree of 18 September 2008, which redefined its structure.
 ³⁷⁴ For the INFLUNET website see <u>http://www.iss.it/iflu/</u>, [Accessed 14 December 2012].

³⁷⁵ Phase 6 is characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in phase 5. Designation of this phase will indicate that a global pandemic is under way.

Figure 9 – Pandemic influenza phases in 2009





In September 2009, according to the National Pandemic Plan, the Ministry identified the categories to be vaccinated with the now-available pandemic vaccine. As mentioned before, about 870,000 first doses of the pandemic vaccine were put into use, representing a vaccine coverage of only 4 percent of the target population.

An evaluation of the Italian response to the 2009 influenza H1N1 reveals that regional authorities implemented *local* pandemic plans in terms of logistics, strategy of the vaccinations and general practices. As a consequence, the Italian response to H1N1 was not carried out in a uniform and homogeneous way but it enhanced the collaboration between central and local levels. Communication activities to the citizens were centralized at the national level and the Ministry of Health decided to publish daily and weekly reports on the official website. However, communication strategy has been a problem as uncertainty in data about affected individuals and deaths caused a high degree of frustration that influenced the vaccination campaign. As analyzed, in fact, the vaccinations covered only 4 percent of the target population, 15 percent of the healthcare personnel and 1.5 percent of the general population (Rizzo et al. 2010).

The media coverage on the early cases of H1N1 – in Italy and abroad – was extremely high and marked by over-estimated forecasts on the diffusion and lethality of the influenza. As a result, part of the Italian citizenry and public opinion supported the proposal to close kindergartens and primary schools, but the government deemed it a too drastic and unnecessary measure. At the end of the day, neither the number of deaths due to H1N1 nor the number of ILI were higher than normal yearly influenza. Both the available anti-flu drug stockpiles and the amount of vaccine acquired were more than sufficient to deal with the H1N1. The crisis did not have a structural impact on the functioning of Italian society, for example in terms of services disruption; neither has it drastically changed the way the civil security system deals with this kind of threat. Nevertheless, as a consequence of the low vaccination coverage at the national level, the vaccine stock at the Ministry of Health remained high and part of the doses (2.4 million) were donated to WHO for developing countries.

Annex III – Resources

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Latvia

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Executive Summary

During the past two decades, Latvia has gone through an enormous socio-economic reform. It has joined two major regional security organizations as a full member, the European Union and the North Atlantic Treaty Organization. The Latvian competent civil security agencies and other actors for crisis management have gone through a profound reform process between 1991 and 2013. Establishing the National Security Council under the Office of the President of Latvia has been a major development on the politic-strategic level.

The Latvian civil security system is a mixture of one level or institution centric coordination (Prime Minister's Office) and, on the other, a combination of multilevel inter-agency preparedness and response. A guiding principle is an all-hazards response in case of a crisis situation. It is mainly comprised by state institutions, local governments, merchants, as well as citizens (also non-citizens) of Latvia. The civil security is based on an administratively divided territorial framework which means that the municipalities and city administrations have essential roles at the tactic-operational level.

It resembles a model of specialized multi- and inter-agency cooperation in preventing and responding to hazards of man-made and natural origin. There is no clear-cut ministry or other instance which would have the overall responsibility about the operational and strategic level.

The main tasks of the civil security system are to carry out disaster and crisis management; to provide aid to victims of disasters; and to reduce the possible damage to property and the environment caused by disasters. The prime minister has the main responsibility for the operation of the civil security system and the implementation of its tasks thereof.

The overall legal basis of the Latvian civil security system lays on two major laws: the *National Security Law* adopted in 2000 and the *Civil Protection Law* adopted in 2006.

The tactic-operational level and political guidance of the Latvian civil security system has been enhanced by establishing the National Security Commission within the Parliament of Latvia. This has a dual role of conducting the laws and monitoring the national civil security system and its implementation by the government and prime minister.

The first and highest level in the Latvian civil security system is the state level which is coordinated by the *Crisis Management Council*. It is convened only in cases of major and complex emergencies. The MOI is the leading institution in responsibility for policy formulation in the area of civil security. It comprises subsectors like fight against crime, protection of public order and security, protection of individual rights and lawful interests, state border security, fire safety and security, rescue services, civil protection, record keeping and documentation of population, as well as migration.

The Latvian civil security agencies are seeking more enhanced cooperation in the field of crisis information and they regard it as useful to create a unified information system containing data on registered events in order to provide for the development of analytical, planning, statistical and other activities and strengthen the collaboration among the services.

Key Findings

1. **The Latvian civil security system is a mixture of one level or institution centric coordination** (Prime Minister's Office) and a combination of multi-level inter-agency preparedness and response. A guiding principle is an all-hazards response in case of a crisis situation. It is mainly comprised by state institutions, local governments, merchants, as well as citizens (also non-citizens) of Latvia. The civil security is based on an administratively divided territorial framework which means that the municipalities and city administrations have an essential role at the tactic-operational level.

2. The Latvian civil security system is still based heavily on a total defence system. It has been enhanced by establishing the National Security Commission within the Parliament of Latvia. This has a dual role of conducting the laws and monitoring the national civil security system and its implementation by the government and prime minister. The Crisis Management Council is chaired by the prime minister and it serves as a central coordinating body in case of crises. The Crisis Management Council coordinates also the civil-military cooperation. The Latvian security system, includes a territorially organized voluntary Home Guard (subordinated to the National Armed Forces), with battalions in each district or municipality. The Home Guard battalions have agreements with fire brigades and police departments to provide assistance in civil emergencies, and in this sense there are some signs of the on-going integration of volunteers into civil protection activities.

3. **Project: Electronic Journal of Events**. Realized by the *Information Center of Ministry of Interior* in February 2006, the aim of the *Initial GIS Pilot Project* was to visualize on the digital map of Riga the information regarding registered events which are in competence of the State Police and SFRS. The aims of the project are to provide written data representation, to provide connection with the State Police IS on registered events "Electronic Journal of Events", to analyze the contact data quality in the State Police and SFRS information systems, to present the project to the State Police and SFRS administration and officers, in order to show examples of the actual and potential GIS functionality and the possibilities for use in law enforcement and other related activities.

4. **Improving system by learning from crisis situations.** The Department of the Strategy at the *Ministry of the Interior* has made several suggestions on how to improve the Latvian civil security system and its *risk-mapping* as a result of recent crisis experiences. These include efforts to improve the coordination between state institutions and local municipalities; there is an evident need to declare responsibilities of each institution in the case of natural hazards. The MOI has also indicated a need to include resources allocated in the budget planning process as reserve funding that would

be available in the case of storms, flooding and similar hazards. It was suggested that allocation of these resources needed primary for institutions directly responsible for emergency situations. The need to develop a system of public training and education in the area of civil defence has also been listed by the MOI. Furthermore, the MOI has underlined the need to study possible threats of storms, natural hazards and to increase applied research to develop an optimal system of hazard mitigation have been underlined. There is also an evident need to improve work in hazard identification within *the Latvian Environment, Geology and Meteorology Agency*.

List of Abbreviations

CBRN	Chemical, biological, radiological and nuclear
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
EOC	Emergency Operation Centre
HELCOM	Helsinki Commission
LRC	Latvian Red Cross
MIC	Monitoring and Information Centre
MOD	Ministry of Defence
MOI	Ministry of the Interior
NDP	National Security Council
SEOC	State Emergency Operations Commission
SFRS	State Fire and Rescue Service

1. Introduction

The most common crises in Latvia since the end of World War II have been caused by natural disasters, most recently extreme temperatures, storms and floods. The two major crises during the past decade have been extreme temperatures in January 2006 and February 2012.³⁷⁶ Otherwise the Latvian risk map is characterized by floods, heavy snowfalls, strong winds, chemical accidents, infrastructure accidents, oil spills or other hazardous materials spills and large fires.³⁷⁷

When summing up the recent emergencies and signature crises which have either changed or developed the Latvian civil security system during the past decade we can list the following incidents: Chemical accident in Riga (2009), Oil spill in the Daugava River (2007), Extreme temperatures causing 40 deaths (2006), Strong storm (Erwin), est. damage USD 325 m (2005), Floods in the Daugava River caused by melting snow (2003), Extreme temperature in Riga, 15 people dead (2003), Extreme temperature in the Riga region, 21 people dead (2001), Epidemic diphtheria in Riga, where 102 persons affected (2000), and Storm (Anatol), 6 people dead, est. damage USD 0.5 m (1999).

Year/ Month	Crisis description	Crisis category	Damage		
			# of persons	# of persons	# of persons
			killed	injured	affected
08/2000	Epidemic (diphtheria)	Natural disaster			102
10/2001	Extreme temperature	Natural disaster	21		
01/2003	Extreme temperature	Natural disaster	15		
01/2005	Storm (Erwin)	Natural disaster	6		
01/2006	Extreme temperature	Natural disaster	40		
02/2012	Extreme temperature	Natural disaster	10		

Table 1: List of Crises (2000-2010)

Latvia has no nation-wide and coherent definition of crisis situations or major emergencies. The overall crisis management structure in Latvia contains functions which have been defined as "civil security" or "civil protection". The tasks of the major ministries which are included in these definitions are multiple, covering fields such as operational-tactical planning and exercises, maintenance and development of national civil security resources.³⁷⁸

 ³⁷⁶ EM-DAT. 2013. For quantitative data, see <u>http://www.emdat.be/country-profile</u>. For a qualitative listing of major crises see <u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/</u>
 ³⁷⁷ <u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/lv/2-lv.html</u>

³⁷⁸ CIVPRO Civil Protection Network. 2013. Available from: http://www.helsinki.fi/aleksanteri/civpro/publications/EurobalticII Civil Protection Research.pdf, p 23.

The civil security system in Latvia is mainly comprised of state institutions, local governments, merchants, as well as citizens and interestingly also non-citizens of Latvia. The civil security is based on an administratively divided territorial framework which means that the municipalities and city administrations have essential roles at the tactical-operational level.

The main tasks of the civil security system are to carry out disaster and crisis management; to provide aid to victims of disasters; and to reduce the possible damage to property and the environment caused by disasters. The prime minister has the main responsibility for the operation of the civil security system and the implementation of its tasks thereof.

The Latvian civil security system resembles a model of specialized multi- and inter-agency cooperation in preventing and responding to hazards of man-made and natural origin. There is no clear cut ministry or other instance which would have the overall responsibility for the operational and strategic levels. For instance, the leading institution in preventing the leakage of dangerous substances is the Ministry of Economy, in case of a gas leak in the gas pipeline system, whereas the Ministry of Interior and the Ministry of Environment share the responsibility of being leading institutions in case of escape of petroleum products and other hazardous substances. However, if this kind of leakage takes place at sea, then the leading instance would be the two power ministries: the Ministry of Defence (MOD) in cooperation with the Ministry of Interior.

When one adds other kinds of accidents to the analyses, the mapping of Latvian civil security actors becomes even more complex and multidimensional. It might not be so different from the European civil security mainstream where the ministries of interior have always either a leading or supporting role. However, as an essential difference to the Nordic models, the substance ministries such as the Ministry of Agriculture, the Ministry of Transport, the Ministry of Health and the Ministry of Economy have all leading roles in their fields of expertise when it comes to institutional cooperation in the event of crisis in Latvia. For instance, depending on the character of the forest fire the Ministry of Interior and the Ministry of Agriculture will be leading instances. So the challenge here might come from the definition of crisis at hand, or whether the most immediate task is to save lives or property.

The institutional civil security system of Latvia could be characterized as prime minister -centric which resembles the overall and emerging European crisis management tradition after the Cold War era. This can be seen clearly in the way the command and control responsibilities are divided around the pm cabinet both in vertical and horizontal ways. The official division of competence of institutions/persons is based on the structure of state, rules of parliamentary democracy and the principles of division of state powers as defined by the Constitution of Latvia.

The municipalities have a relatively strong role in the tactical-operational level of crisis response. One could assume that this mandate is increasing due to financial strains at the state level as well as everhindering line between external and internal security. For combating flooding, tackling storms or dealing with emergencies related to heating systems, water supply or sewerage systems, it is municipal administration which is expected to be in charge and lead the institutional cooperation per se. The national security system is built on institutions implementing state powers and security governance. The citizens of Latvia are seen as an additional resource to which the law delegates obligations and rights in the field of national security within specified competences. The national security system has been given several tasks such as to forecast and prevent internal and external danger to the state; to guarantee state defence, public safety and democratic development of society; and to ensure effective management to overcome situations dangerous to the state.

Civil-military cooperation is based on the active participation of the armed forces in the performance of preventive and response measures, performance of emergency measures for the elimination of consequences, as well as providing support in search and rescue work. As in the Nordic countries, also in Latvia the civil protection system supports the armed forces with resources in case of a military invasion or war.

The National Security Council (NDP) is charged with correlating and unifying national policies determined by the state's highest-ranking government institutions and officials in the area of national security; with overseeing the implementation of those policies and problems related to it, with reviewing plans and conceptual documents that are related to national security; and with handling other security issues, as defined by law.³⁷⁹

The NDP is chaired by the president of Latvia, who summons the council's meetings during normal conditions. Other members of the council are the speaker of the Saeima, the chairman of the Saeima's National Security Commission, the chairman of the Saeima's Defence, Interior Affairs and Corruption Prevention Committee, the prime minister, the defence minister, the foreign minister and the interior minister. The Latvian prosecutor-general also has the right to attend NDP meetings. The president of Latvia, as chairman of the NDP, submits decisions and proposals to the Saeima or the cabinet of ministers.

NDP decisions are only recommendations and do not exempt the relevant officials from their responsibility for the decisions that are subsequently taken. This does not, however, apply to recommendations which the NDP makes to the Saeima vis-à-vis the appointment or dismissal of the director of the Bureau to Protect the Constitution.

NDP meetings are closed, and discussions therein are state secrets. The NDP may, however, hold open meetings, as well. Council decisions are taken by absolute majority vote. The operations of the NDP and its secretariat have been part of the presidential chancery of the Republic of Latvia since 2002. The secretariat is run by a secretary who is appointed by the NDP on the basis of a proposal by the president.

The Latvian civil security system aims to promote democratic values and human rights, stability, social security and sustainability. It aims to develop closer cooperation between governmental and public institutions and the third sector (NGOs and private enterprises). These tasks could also be included in the Latvian concept of civil protection as it is defined to refer "to the protection of

³⁷⁹ Latvijas Valsts Prezidents. 2013. Available from: <u>http://www.president.lv/pk/content/?cat_id=8886&lng=en</u>

people, the environment and property in the event of natural and technological disasters, terrorist attacks, as well as other risks such as pandemics".³⁸⁰

2. Analytical Dimensions

2.1 Cultural and historical aspects

2.1.1 Administrative tradition

An independent Latvian state emerged from the turbulent times of World War I as the Russian empire broke up, but it was annexed by the USSR in 1940. This was never legally recognized by many western countries including the United States. Latvia gained back its independence in 1991 following the disintegration of the Soviet Union. Still some 28 percent of the population of 2.2 million in Latvia and over 50 percent of the inhabitants in the capital Riga are Russian speaking people. Latvia joined both NATO and the EU in the spring of 2004³⁸¹.

Latvia is a parliamentarian and unitary republic administrated with a government which is responsible to the Parliament. The function of policy-making in public administration is assigned to the state chancellery of the Republic of Latvia.³⁸² Latvia is divided into 119 administrative areas of which 110 are municipalities and 9 cities. Additionally, there are five planning regions: Kurzeme, Latgale, Riga, Vidzeme and Zemgale. The cities under state jurisdiction are Riga, Daugavpils, Liepaja, Ventspils, Valmiera, Rezekne, Jelgava, Jurmala and Jekabpils.

The Parliament, in Latvian *Saeima*, is elected in direct elections for a term of four years. The Saeima elects a Presidium that is composed of chairperson, two deputies and secretaries. It functions continuously during the mandate period of the Parliament. The Saeima shall establish committees and determine the number of members and their duties. Committees have the right to require of individual ministers or local government authorities relevant information and explanations necessary for the work of the committees, and the right to invite to their sittings responsible representatives from the ministries or local government authorities to furnish explanations.

The Latvian government cabinet is composed of the prime minister and the ministers chosen by the prime minister. The cabinet shall be formed by the person who has been invited by the president to do so. The number of ministries and the scope of their responsibilities, as well as the relations between state institutions, are provided by law. The administrative institutions of state are under the authority of the cabinet.

 ³⁸⁰ Ministry of Foreign Affairs. 2013. Available from: <u>http://www.am.gov.lv/en/cbss/priorities/civil-society1</u>
 ³⁸¹ CIA.2013. Available from: <u>https://www.cia.gov/library/publications/the-world-factbook/geos/lg.html</u>, <u>http://en.wikipedia.org/wiki/Latvia</u>

³⁸² The Cabinet of Ministers of the Republic of Latvia. 2013. Available from: <u>http://www.mk.gov.lv/en/valsts-</u>parvaldes-politika

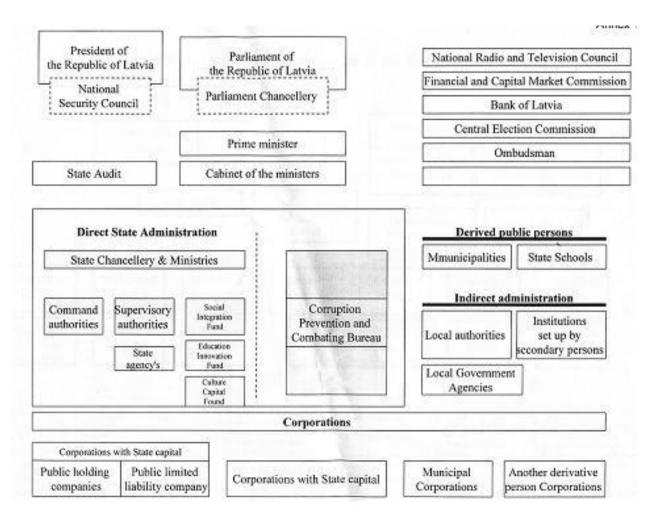
The prime minister and other ministers need to enjoy the confidence of the Saeima (Parliament) and they are accountable to the Saeima for their decisions and actions. Once the Saeima expresses no confidence in the prime minister, the whole cabinet will resign. The cabinet deliberates draft laws prepared by individual ministries as well as matters which pertain to the activities of more than one ministry and issues of state policy raised by individual members of the cabinet.

If Latvia is threatened by an external enemy, or if an internal insurrection which endangers the existing political system arises or threatens to arise in the state, the cabinet has the right to proclaim a state of emergency. In that case it shall inform the presidium within 24 hours, and the presidium shall, without delay, present such decision of the cabinet to the Saeima.

The president is elected by the Saeima by a secret ballot for a period of four years. The president represents the state in international relations, appoints the diplomatic representatives of Latvia, and also receives diplomatic representatives of other states. The president implements the decisions of the Saeima concerning the ratification of international agreements. The president has also right to initiate legislation and is entitled to propose the dissolution of the Saeima.

The president is also the commander-in-chief of the armed forces of Latvia. During wartime, the president appoints a supreme commander. The president can declare a war on the basis of a decision of the Saeima. The president has the right to take "whatever steps are necessary" for the military defence of the state should another state declare war on Latvia or an enemy invade its borders. Concurrently and without delay, the president shall convene the Saeima, which shall decide as to the declaration and commencement of war.

Figure 1: Latvian overall state administration³⁸³. The Latvian civil security system represents a centralized feature, being prime minister centric.



2.1.2 Government/societal culture

Latvia's political culture shows approval rates for democratic values and institutions. Geert Hofstede's grid-group country scores do not provide information about Latvia. However, some conclusions have been made in a recent study "*Political Culture in Latvia – empirical evidence*" (January 2007) conducted by IIze Ostrovska. Here a basic question has been: "If you have to choose in what kind of a state you would like to live what would you prefer – authoritarian state but with a higher living standard, democratic state but with a lower living standard or something else?" Only 22 percent independently composed the answer: "I would prefer to live in a democratic state with higher living standard". More than 40 percent chose "authoritarian state with higher living standard" which could be regarded as an answer typical for a country which has recently passed the transition stage, which means that the older generation and state organisations often demonstrate high power-distance index (PDI) tendencies. At the same time almost thirty percent preferred a "democratic

³⁸³ Foreign Ministry of Latvia 2012.

state but with a lower living standard".³⁸⁴ The World Value Survey for 2005-2007 puts Latvia in the group of protestant European countries characterized by an average degree of secular-rational values. Latvia ranks also considerably lower than other comparable countries in terms of self-expression values.³⁸⁵

Earlier works from cultural theory conducted by Ilze Ostrovska show respondents' attention on the qualities characterizing democracy. Respondents had to choose only one – that which, to their opinion, is the most attractive democratic quality. It came out that the respondents value most of all human rights (40 percent), leaving freedom the second (18 percent) and rule of law third (13 percent). Such qualities as responsibility, participation of citizens in the political processes and control of the citizens over the state institutions seem less attractive to the population. Here we meet a rather widespread phenomenon in the post-socialist countries – a democratic political system is accepted as an ideal of the state management, but at the same time demands that the democratic system puts before the state's citizens to participate in the decision-making process, are not welcomed. One of the conclusions is that the state thus is perceived as a major supplier of services and security.³⁸⁶

During the past two decades, Latvia has gone through an enormous socio-economic reform and revolution after the collapse of Soviet Union. It has joined two major regional security organizations as a full member: the European Union and North Atlantic Treaty Organization. Besides the intergovernmental cohesion which has emerged, the citizens of Latvia have regained their former freedom which was taken from them as a result of the Second World War.

In a recent survey, *The Political Participation and Culture of Latvian Residents* by Mihails Rodins (lecturer of comparative politics in the University of Latvia), the general attitudes towards political participation in Latvia have been studied from civil security perspectives. In his study special attention was given to the attitudes of respondents about neighbouring Russia and the relationship between Russia and the Baltic countries. An important question in terms of inter-ethnic attitudes and security in Latvia was the perception of a threat to peace and security. About half of the Latvians respondents felt that Russia posed a real threat, but this view was shared by very few of the others not holding Latvian citizenship.

'Ethnic minorities expressed a rather strong motivation toward integration into the Latvian political community. Public opinion polls confirmed signs of a strengthening of the orientation of ethnic minorities toward political identification with the Latvian state. Almost

³⁸⁵ For the statistical date see <u>http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_111</u> [last_accessed_15 November 2012]. ³⁸⁶ Ostrovska, I. 2007. *Political_Culture_in_Latvia_— empirical_evidence*, Riga_January_2007:

³⁸⁴ Ostrovska, I. 2007. *Political Culture in Latvia – empirical evidence*, Riga January 2007. Available from <u>http://ebookbrowse.com/ilze-ostrovska-political-culture-in-latvia-pdf-d378924786</u>

http://ebookbrowse.com/ilze-ostrovska-political-culture-in-latvia-pdf-d378924786

all non-citizens were motivated to apply for Latvian citizenship. They were ready for political integration, and they expressed their political feelings toward the fate of Latvian independence. Meanwhile, political inequality and limitations on political citizenship, sometimes constructed on the basis of national stereotypes, had not allowed for equal participation in the distribution of national resources (in the form of national elections, for example). Political inequality had produced a serious gap in terms of privileges, social rights and opportunities. Modern ethno-centric nationalism and limits on citizenship are barriers to representative democracy and political stability in Latvia.

The main conclusion that one can draw from the attempt to qualify political identity and mass political participation in Latvia is that there has been a noticeable increase in ethnopolitical tolerance, an absence of motivations for ethnopolitical conflict, and a visible increase in the incidence of conventional political actions aimed at achieving stability and order. Both the ethnic majority and the ethnic minorities in Latvia identify themselves with the re-established Latvian political identity, a fact which creates the fundamental basis for consensual democracy.³⁸⁷

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The statutory basis of civil security in Latvia is fragmented and rests upon distinct bodies of formal legislation at the state, regional and local level. From the functional perspective, the statutory basis is divided into laws for different emergency response services, sector specific regulations, and provisions for a formal state of emergency and for other kinds of disasters and crises.

The Latvian civil security system is a mixture on the one hand of institution centric coordination (prime minister's office) and on the other, a combination of multilevel inter-agency preparedness and response. A guiding principle is an all hazards response in case of a crisis situation.

The overall legal basis of the Latvian civil security system rests on two major laws: the *National Security Law* adopted in 2000 and the *Civil Protection Law* adopted in 2006. These laws set the overall legal and constitutional framework for the civil security system as a whole. The National Security Law defines the national security system and its tasks, the competence of institutions responsible for the national security system (incl. crisis management), and the principles and procedures of coordination as well as implementation and control of their activities.³⁸⁸

Section 36 of the National Security Law defines the *National Civil Protection Plan* to include measures for the implementation of the national civil protection system, and preventive, readiness and response measures intended for states of emergency, and measures for the elimination of

³⁸⁷ Rodins, M. 2011. "The Political Participation and Culture of Latvian Residents", *Baltexpert* 16.1.2011: <u>http://www.baltexpert.com/2011/01/16/the-political-participation-and-culture-of-latvian-residents</u>

³⁸⁸Ministry of Foreign Affairs. 2013. Available from: <u>http://www.mfa.gov.lv/en/security/basic/4536</u>

consequences of such situations, and shall determine the actions of the civil protection system in case of military aggression or a state of war.

The National Civil Protection Plan shall be drawn up by the Ministry of the Interior (MOI) in cooperation with other ministries, and approved by the Cabinet of Ministers. The *Civil Protection Law*³⁸⁹ creates a system of civil protection for disaster management, ensuring the legal and organizational grounds for the protection of persons, property and the environment in cases of disasters and when there are threats of disaster.

Besides these two laws, there are multiple sectoral laws and other regulations affecting the Latvian civil security system. However, the State Civil Protection Plan which sets the basis for civil protection measures and operational level development, and the civil protection plans of municipalities cover the local and municipal level cooperation and tasks.

The *Constitutional Court* reviews cases concerning the compliance of laws with the Constitution, as well as other matters regarding which jurisdiction is conferred upon it by law. The Constitutional Court has the right to declare laws or other enactments or parts thereof invalid. The appointment of judges to the Constitutional Court is confirmed by the Saeima for the term provided for by law, by secret ballot.

The president is in charge of the National Security Council, and the Parliament of Latvia coordinates the duties of the National Security Commission and its parallel organ Defence, Interior and Corruption Prevention Commission. These two have a role to play in legal and constitutional aspects. The prime minister has a key role in strategic-operational and coordination work with the cabinet of ministers and their sub-organs.

The Latvian statutory framework and division of competent agencies and actors for crisis management has gone through a profound reform process between 1991 and 2013. Establishing the National Security Council under the Office of the President of Latvia has been a major development on the political-strategic level.

The tactical-operational level and political guidance of the Latvian civil security system have been enhanced by establishing the National Security Commission within the Parliament of Latvia. This has a dual role of conducting the laws and monitoring the national civil security system and its implementation by the government and prime minister.

The Crisis Management Council is chaired by the prime minister and it serves as a central coordinating body in case of crises. The Crisis Management Council coordinates also the civil-military cooperation.³⁹⁰

The recent emergency situations in Latvia have proven that the country is still linked to Soviet era infrastructures, like in neighboring countries. This is particularly the case with the pipelines built to

 ³⁸⁹ European Commission. 2013. <u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/lv/2-lv-1.html</u>
 ³⁹⁰ European Commission. 2013. <u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/lv/2-lv-1.html</u>

^{1.}html#over

carry Russian oil to the ports of the Baltic. Much of this infrastructure is worn out and needs rapidly to be renovated and secured. Also in case of the Daugava River accident, ageing was a main reason of the accident.

The major challenge with the current Latvian civil security system seems to be the continuous need for the "development of a national crisis management system towards maximized effectiveness." This is an understandable evolution of the system itself but when the goal seems to be streamlining the administration at the cost of the efficiency, there are clearly some challenges appearing. This is also a fact which has been stated unofficially at several recent forums and expert meetings.

Another remaining challenge for the Latvian statutory system is the elaboration of a new law on emergency situations. By implementing a new law the Latvian authorities are seeking better interoperability and "efficiency" in their civil security operations.

2.2.2 Political dimension

Executive and political responsibility for civil security provision primarily rests at the local and regional levels. The Latvian fire brigades and rescue services are accountable to mayors, which are in central roles in coordinating operational crisis management in their counties and municipalities.

The municipal authorities are responsible for establishing and managing the Civil Protection Commission of the municipalities and cities under state jurisdiction. The Civil Protection Commission coordinates civil protection measures in the event of a disaster on the relevant administrative territories.³⁹¹

The MOI is the leading institution having responsibility for policy formulation in the area of civil security. It comprises subsectors like fight against crime, protection of public order and security, protection of individual rights and lawful interests, state border security, fire safety and security, rescue services, civil protection, record keeping and documentation of population, as well as migration. The minister of the Interior performs political management of the Ministry and is responsible for his or her actions to the Parliament. The minister gives orders to the state secretary and political officials as well as to officials and employees of the ministerial management and employees of the state administration institutions that are subordinated to either the minister or the ministry. The minister has the right to issue legislative acts which are binding for these officials and in the scope of his or her competence performs oversight of actions of the state administration institutions that are subordinated to either state administration institutions the minister or the minister.³⁹²

The State Fire and Rescue Service (SFRS) is responsible organization to analyze the state of fire safety and possibility of emergency situations and, on the basis of such analysis, provide the MOI, local governments, as well as other natural persons and legal persons with recommendations regarding improvements of the situation in the field of fire safety and rescue. It also organizes and performs

³⁹¹ European Commission. 2013. <u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/lv/2-lv-</u> <u>1.html#over</u>

³⁹² Ministry of the Interior. 2013. http://www.iem.gov.lv/eng

state supervision of fire safety. These tasks are a kind of combination of traditional fire and rescue service tasks by the relevant civil security authorities and on the other more central and coordinating role to produce comprehensive situational awareness and intelligence data for the government. In traditional sense the SFRS also performs fire-fighting as well as rescue operations in fire-fighting. The SFRS implements policy in the field of fire safety, fire-fighting and civil protection, supervises compliance with the fire safety requirements specified in regulatory enactments, co-ordinates the activities of fire safety, fire-fighting and rescue services established by institutions, organisations, commercial companies and local governments, and voluntary fire-fighter organisations which activities are related to fire safety and fire-fighting.³⁹³

The traditional rescue operations by the SFRS also include road accidents and rescue operations in internal waters. In co-operation with other authorities, the SFRS also plans measures in order to ensure readiness for prevention of accidents in the field of activity related to CBRN sources. This highlights its essential tactic-operational role in the field of chemical, biological, radiological and nuclear (CBRN) safety requirements specified in regulatory enactments.

The SFRS also takes part in the evaluation and state supervision of measures taken for assessment and reduction of the risk of industrial accidents. Particular emphasis is paid on emergency rescue operations and operations for the elimination of consequences after chemical accidents, including accidents of hazardous freights and other accidents related to the storage and use of chemical substances or chemical products.

The SFRS participates in the development of regulatory enactments regulating fire safety, firefighting, rescue and civil protection, as well as in conformity with the competence thereof, to participate in the preparation of opinions regarding the drafts of regulatory enactments developed by other authorities. It produces training to persons serving and working at the institution, as well as to persons to be involved in fire safety, firefighting and rescue operations, as well as civil protection measures and to organise the training thereof. Interestingly, it also performs (with its own words) "propaganda of fire safety, firefighting, rescue and civil protection." As a holistic all hazards type of civil security institution, it also performs scientific research in these fields .

The *Latvian State Police* is an institution to protect the state and society from "criminal and other illegal threats to life, health, rights and freedoms, property and interests." The central authority of the state police organizes and co-ordinates activities of the structural units of the state police. The central authority includes the administrative department, Complaints and Discipline Branch, Personnel and Recruitment Board, Secret Regime Guarantee Unit, Special Correspondence Unit, and

³⁹³ Ministry of the Interior. 2013. Available from: <u>http://www.iem.gov.lv/eng/ministry/institutions under subordination of the ministry</u>

Planning and Finance Board. However, the Main Criminal Police Department, Main Public Order Police Department, Railroad Police Board, Pre-trial Investigation Board, Forensic Centre of the State Police, police school of the state police, and territorial police boards of the cities and regions are subordinated structural units.³⁹⁴

The *Latvian Security Police* is a state security institution that is subordinated to the minister of the interior. The security police perform state policing in the field of state security, and it is the entity for carrying out investigative operations. The main competencies are: counterintelligence, counterterrorism, protection of classified information, and protection of high state officials.³⁹⁵

The State Border Guard protects and keeps watch of the state border and supervise foreigner observation of residential regulations within the state. The state border guard is armed and its main functions are to maintain the inviolability of the state border and to prevent illegal migration.³⁹⁶

Pursuant to the By-Law from 2003, the MOD is the leading state administrative institution in the field of defence, and second power ministry in civil security. The MOD is responsible for developing the National Defence Policy. Ministry activities are overseen by the minister of defence – a civilian who is politically responsible before the Saeima (Parliament) and the prime minister. The MOD state secretary is a state civil service official who oversees the administrative work of the ministry and ensures the continuity of operations when the political leadership of the ministry changes.³⁹⁷

2.2.3 Operational dimension

Institutional responsibilities in the civil security of Latvia could be divided into four levels: the state level, the sector level, the local level, and the private/voluntary level. The private/voluntary level will be highlighted in chapter 2.4.1. There are no distinct civil security agencies in Latvia. Operational crisis management responsibility normally rests with the counties and municipalities. After declaring a state of emergency, the counties and municipalities form task forces which are led by the highest local political actor.

The MOI has the overall co-ordinating responsibility for civil security in Latvia. It provides specialised assistance to the local level along with other specialized agencies. It is also a major agency enhancing the preparedness and response capacities.

The winter storm Gudrun created heavy flooding and destructive winds in the period of 7-9 January 2005. The economic losses included forest damage losses of over 7 million m³, more than the normal annual harvest; timber prices fell and the normal harvesting was delayed; the length of affected shore line was 200 km (40 percent of the total length of the marine border of Latvia); the total damage was put at 192 million EUR (1.5 percent of GDP of 12789.1 million EUR in 2005), of which 9.5 million was covered by the fund; 54,000 km of distribution lines were damaged, leading to a 23 day

³⁹⁴The State Police of Latvia. 2013. <u>http://www.vp.gov.lv</u>

³⁹⁵ Ministry of the Interior. 2013. http://www.iem.gov.lv

³⁹⁶ The State Border Guard. 2013. Available from: <u>http://www.rs.gov.lv/index.php?top=0&id=1099</u>

³⁹⁷ The Ministry of Defence of Latvia. 2013. Available from: <u>http://www.mod.gov.lv/Ministrija.aspx</u>

long emergency situation. Since Gudrun, definite technical improvements have been made in the sectors where the shortages have been observed and reported. Shortly after the storm, several new generators were purchased for provisional electric power supply in the case of power cuts in most critical sectors.

The department of strategy at the *MOI* has made several suggestions on how to improve the Latvian civil security system and its *risk-mapping* as a result of recent crisis experiences. These include efforts to improve the coordination between state institutions and local municipalities; there is an evident need to declare responsibilities of each institution in case of natural hazards. The MOI has also indicated a need to include resources allocated in the budget planning process as reserve funding that would be available in the case of storms, flooding and similar hazards. It was suggested that allocation of these resources needed primarily for institutions directly responsible for emergency situations. The need to develop a system of public training and education in the area of civil defence has also been listed by the MOI. Furthermore, the MOI has underlined the need to study possible threats of storms, natural hazards and to increase applied research to develop an optimal system of hazard mitigation. There is also an evident need to improve work in hazard identification within the *Latvian Environment, Geology and Meteorology Agency*.³⁹⁸

On 23 March 2007 the Latvian government received some early warning information about leakage from the oil product pipeline "Unecha-Ventspils" in Belarus about 130 kilometres from the border of Latvia. The government of Belarus officially informed Latvia of the spill on the Ulla River on 24 March 2007. This was 17 hours after the spill occurred and the slick began its drift toward the downstream Daugava River. Leakage occurred in the Vitebsk area (northern Belarus) close to the Ulla River – a Belarusian tributary stream of the Daugava River - the biggest river of Latvia. The Daugava is Latvia's largest river and before reaching the Gulf of Riga - an offshoot of the Baltic Sea - flows through both Riga and the country's second city, Daugavpils.

The rupture of the oil pipeline for 5 hours resulted in approximately 120 tonnes of diesel fuel spilled into the Ulla River and then into the Daugava River. The pipeline owner did not comment on the spill, perhaps because of the complex situation in terms of causes and consequences of this accident. The pollution affected 2 countries – Latvia and Belarus. Leakage of 120 tonnes of diesel fuel also contaminated 1.2 hectares of land at the source. The oil slick extended over 100 kilometres downstream, around 30 percent of the river's width has been affected by the spill. The cleaning operation prevented much significant long-term damage from the spill. Cooperation started with several requests for help from neighbouring countries. Estonia and Lithuania sent rescue workers and for instance Sweden donated some river booms.³⁹⁹ The overall emergency and rescue operation went well in this case. The response stage required rapid assistance in terms of assessing and decontaminating pollution. The clean-up methods of damage of the environment were successful. It was decided between Latvian and Belarus state consultations that the legal framework needs to be expanded in order to prevent and resolve similar situations in the future.

³⁹⁸ Haanpää 2. et al. 2005. *Impacts of winter storm Gudrun of 7th – 9th January 2005 and measures taken in Baltic Sea Region*, Centre for Urban and Regional Research (YTK) TKK, Finland: <u>http://www.astra-project.org/sites/download/ASTRA_WSS_report_final.pdf</u>

³⁹⁹ Petuhova, J. 2013.: Provision of mutual assistance at regional level in case of transboundary emergencies in Baltic region, State Fire and Rescue Service of Latvia, 2013.

The *MOD* is a civilian institution, politically responsible to the Parliament and subordinated to the prime minister. The minister of defence develops defence plans and implements them in the military field, concludes international agreements on military issues, and being a government member is responsible for ensuring democratic civil control of the armed forces.

Civil control of the national armed forces is carried out by the Parliament (Saeima) which adopts necessary legislation. It approves the National Security Concept and the National Defence Concept, decides on and assesses the validity of a declared emergency situation, state of exception and mobilisation, and reviews the prime minister's annual report on national security.

However, the first and highest level in the Latvian civil security system is the state level which is coordinated by the *Crisis Management Council*. It is important to stress that the Crisis Management Council is convened only in cases of major emergency, if the crisis is multi-sectorial and requires coordination. The council has a coordination function. It coordinates operational crisis management (in the case of threats to the state) between institutions and civil-military cooperation which means it serves as a major inter-agency body between ministries and their sub-agencies and private sector operators. As it is chaired by the prime minister and comprised of several ministers, it coordinates the implementation of political decisions "by institutions of state governance" (in the case of threats to the state). It also coordinates the development of preventive plans in general. The Crisis Management Council is supported by a secretariat which oversees the work of the council and provides support in coordination and cooperation of institutions responsible for development of crisis management system.

The second *level of institutional responsibilities* is covered by the sector ministries, services and agencies, and it is the main functional (operational) crisis management level. The main task of ministries within the civil security system are: forecasting and prevention of possible threats in their sector, to coordinate and control the operational response, to secure fulfilment of the *State Civil Protection Plan*, and to maintain and further develop the tactical-operational response and mitigation capacities. They also produce action plans and report on their implementation within civil security issues at hand. Ministries also coordinate their subordinated authorities in cases of crises. For instance, the State Fire and Rescue Service (SFRS) is subordinated to the Ministry of Interior. The ministry conducts surveillance and monitoring of crises in Latvia and supports the SFRS as the main operational manager and coordinator for all kinds of civil emergencies (floods, fires, accidents etc). It has thus the main responsibility for the civil emergency planning. Each ministry has several subordinated agencies dealing with issues either directly or indirectly related to civil security of Latvia.

The Ministry of Interior coordinates several other agencies and the emergency logistics such as: The State Emergency Medical Service which is the main actor in case of general public health threats and emergencies, The Centre for Disease Prevention and Control which is the main actor in case of outbreak of an influenza pandemic and in case of public health threats involving communicable diseases, The Security Police which is main actor in case of simultaneous terrorist attacks, the Coast Guard Service of Naval Forces which is the main actor in case of accidental and deliberate marine pollution as well as search and rescue works at the sea.

The administrative manager of the Ministry of Interior is the state secretary. The state secretary organizes the sectoral policy and strategy implementation on civil security. He/she is also in charge of conducting the financial planning of civil security that is subordinated to the Ministry of Interior.

The third level of Latvian institutional responsibilities lays within *municipalities and local governments*. They are responsible for maintaining the emergency communication system and to conduct certain civil security tasks in their administrative territories: to develop cooperation and resilience with local enterprises and NGOs, to establish and maintain the civil protection commissions of the municipalities, to coordinate mutual civil protection response and consequence management such as evacuation. Private companies are expected to maintain their own civil protection capacities and resilience (see chapter 2.4.1.).

2.2.4 External dimension

Latvia has not officially requested disaster assistance through regional and international arrangements. Nonetheless, Latvia has entered into mutual civil security and civil protection agreements to receive and provide assistance in the emergency and crisis situations with Estonia (in force since 2001), Lithuania (2001), Sweden (2002), Belarus (2002), Hungary (2003), Ukraine (2006), Uzbekistan (2008), Russia (2010) and Azerbaijan (2011).⁴⁰⁰ Latvia has signed related regional and multilateral provisions of the United Nations, the European Union, the Council of Europe, NATO, the Organization for Security and Cooperation in Europe, the International Monetary Fund and the World Trade Organization. Latvia is also an active member of regional intergovernmental forums such as the Council of the Baltic Sea States and the Helsinki Commission (HELCOM).

The cooperation with the European Union is under the responsibility of the Latvian Ministry of Foreign Affairs. It implements the state external security policy and coordinates the policy of civil security cooperation with international organizations. It has also key role in organizing humanitarian assistance and has an essential role in developing the legal framework related to the civil security system. Latvia takes part in the EU-MIC and NATO-EADRCC systems and the OSCE Observer Mission to Georgia. In 2008 Latvia participated in various international missions with 25 civilian experts. In 2013 Latvian experts participated in the EU civilian operations in Georgia and in Afghanistan, as well as in EU naval operation EUNAVFOR Atalanta.

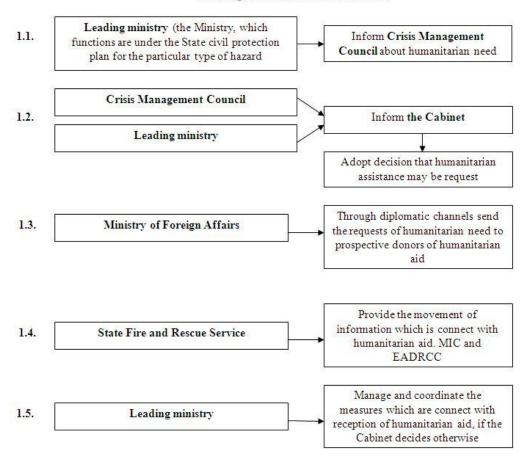
The agreement on *Europol* has been signed, and it aims at enhancing cooperation between Europol and Latvia in a fight against international organized crime. It contains cooperation in the field of information exchange, transmission of personal data, confidentiality procedures and sending liaison officers.

The National Bureau of Interpol operates under supervision of the International Cooperation

⁴⁰⁰ Petuhova, J. 2012. *State Fire and Rescue Service of Latvia*, PowerPoint presentation 11.12.2012 on provision of mutual assistance at regional level in case of trans-boundary emergencies in Baltic region.

Department of Central Criminal police department. The aim of Interpol is to provide a unique range of essential services for the law enforcement community to optimize the international effort to combat crime. Latvia is also a member of the *International Police Association* since 1994. It is an independent organization consisting of members of the police service, whether on active duty or retired. It promotes interaction and international co-operation and hosts a Nordic-Baltic Network of Policewomen (NBNP) which was constituted in Riga in April 2001. All the Nordic and Baltic countries are members. The NBNP aims to strengthen professional relations and contacts between the participating countries and to improve equal opportunities within the national police organisations.

Figure 2: Reception of humanitarian aid by Latvian government.⁴⁰¹



1. Reception of humanitarian aid

The Latvian model for *receiving* external assistance in case of a civil emergency or disaster situation is based on horizontal power division between the Ministry of Foreign Affairs and the Ministry of Interior. The leading ministry (such as the Ministry of Health in case of epidemics) will inform the Crisis Management Council about the assistance needed. The Crisis Management Council together with the leading ministry will inform the government Cabinet which adopts a decision to request external assistance. Once the decision is made, the Ministry of Foreign Affairs will send requests through diplomatic channels to the prospective donor countries.

The Latvian model at the operational level of *receiving* and *providing* assistance is established by the SFRS under the Ministry of Interior which serves as a liaison agency with the Monitoring and Information Centre (MIC), which is operated by the European Commission within the Framework of Community Mechanism to facilitate reinforced cooperation in civil protection assistance

⁴⁰¹ Petuhova, J. 2013. Provision of mutual assistance at regional level in case of trans-boundary emergencies in Baltic region, State Fire and Rescue Service of Latvia, 2013.

interventions and the Euro-Atlantic Disaster Response Coordination Centre (EADRCC/NATO). The Latvian contribution to the international disaster relief operations is provided on a case-to-case basis following the decision of the cabinet of ministers.⁴⁰²

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

Civil security is a primary function of public entities and specialized agencies in Latvia. Citizens are expected to contribute and follow multiple guidelines and restrictions in this field.

It is clear that disasters and emergencies are a relatively major concern for Latvian citizens compared to other problems. According to Eurobarometer poll 383 for February to March 2012, 43 percent of Latvian citizens feel very concerned about natural disasters (e.g. floods, earthquakes) and 32 percent are fairly concerned. This is well above the average EU level in terms of fear about natural disasters. Regarding man-made disasters, 49 percent of Latvians are very concerned and 33 percent are fairly concerned. On the other hand, Latvia ranks high also when comparing citizens' concern on terrorist attacks. Although the country has not witnessed any terrorist strike, 41 percent are very concerned and 26 percent are fairly concerned.

Alienation in the society is one early warning signal of emerging civil security problems and this is confirmed in Latvia by answers to the suggestion that one can rely only on oneself in this society. Good examples of alienation and its causes can be seen in recent studies on school shootings. More than 70 percent agree with that opinion and only one fourth of the population disagrees with it. 83 percent of Latvians, 78 percent of Russians and 75 percent of the third ethnic group representatives prefer technocratic experts as the executive politicians, not connected with political parties at all.⁴⁰⁴

2.3.2 Information

According to a Eurobarometer poll of September-October 2009, only 15 percent of the respondents felt informed about disaster preparedness (EU average 29 percent) and 18 percent about disaster response. This very low level of positive responses could be explained by a lack of available information. The Latvian civil security system has also gone through multiple administrative, political and cultural reforms during the recent decade which has had an impact on citizens' definition of safety and security in their country.⁴⁰⁵

⁴⁰² European Commission. 2013. Available from: http://ec.europa.eu/echo/civil protection/civil/vademecum/lv/2-lv-2.html#inter Eurobarometer.2013. European Commission, Available from: http://ec.europa.eu/echo/files/eurobarometer/reports/CP.pdf (Latvia ranks also in 3rd place of the European countries when studying citizens' fear of armed conflicts) Ostrovska, I. 2007. Political Culture in Latvia – empirical evidence, Riga January 2007: http://ebookbrowse.com/ilze-ostrovska-political-culture-in-latvia-pdf-d378924786 European Commission. 2013. Available from: http://ec.europa.eu/public opinion/archives/ebs/ebs 328 en.pdf

Each civil security institution in Latvia has their specific crisis management proceeding. This means that they share a position of semi-unique status of being a public institution. They have also their own risk mapping services including event management portals. Emergency services have their own event (risk) registration systems. Digital maps of Latvia are also available, including the capital Riga (mostly 1:2000) which are quite good quality. The *Latvian Geospatial Information Agency* was created with an operation goal to implement state policy in the field of geodesy, cartography and geospatial information.

Also an *Electronic Communications Office* has been established. The operational goal is to manage the resources of radio-frequency range and numeration in the field of electronic communications. All the emergency services recognize the necessity for development of common solutions and to increase the overall interoperability.

The emergency number conception of "112" is being finalized in Latvia and the conception of the State GIS (Geographical Information Systems) is being currently further developed. It describes the coordination of provision of GIS services, collection of metadata, creation of the state GIS portal and, probably, creation of a data warehouse containing primary data layers. GIS solutions are being developed by the *Information Center of Ministry of Interior and State Fire-fighting and Rescue Service.* Experimental projects regarding GIS based vehicle tracking and a task control system are also developed along with a project called "Unified Journal of Events" which is an aim to track and learn from past incidents. Operative vehicles are planned to be equipped with mobile data transmission/GPS devices.

Realized by the *Information Center of Ministry of Interior* in February 2006, the aim of the *Initial GIS Pilot Project* is to visualize on a digital map of Riga the information regarding registered events which are within the competence of the State Police and SFRS. The aims of the project are to provide written data representation, to provide connection with the State Police IS on registered events "Electronic Journal of Events", to analyze the contact data quality in the State Police and SFRS information systems, to present the project to the State Police and SFRS administration and officers, in order to show examples of the actual and potential GIS functionality and the possibilities for use in law enforcement and other related activities.⁴⁰⁶

The Latvian civil security agencies are seeking more enhanced cooperation in the field of crisis information and they regard it useful to create a unified information system containing data on registered events in order to provide for the development of analytical, planning, statistical and other activities and strengthen the collaboration among the services. The achievements of this project are different cartographic layers and classes which have been already defined for visualization on the map of Riga. This visualization of information regarding events registered by the State Police is made according to predefined types of offences/events (4 static and 1 dynamic periods). Another advantage point with this project is the fact that it is possible to have simultaneous visualization of information regarding events (registered by the State Police) related to several static

⁴⁰⁶ Kairiss, A. 2006. Analytical Division of the Latvian MOI: PowerPoint presentation at the seminar "Risk evaluation in emergency centres, using GIS information in ERC's and in the field units", 3-5 May 2006, Turku Finland.

periods. Also simultaneous visualization of information regarding events registered by the SFRS according to predefined types of events is possible. When the address of the event is being entered into the information system of the SFRS, the dislocation is being automatically visualized on a connected digital map. Information on all the active calls as well as SFRS brigades is visualized on the digital map of Riga and in the future, there will be visualization of information on objects of high fire danger and other importance, fire hydrants and places of natural water availability (for firefighting needs). There have also been challenges such as incomplete address data within the State Police and the SFRS information systems. Also the digital map used for the pilot project has been to some extent out of date. The key agencies involved are the Information Centre of MOI, the SFRS and the State Police. They are considering possibilities to develop the electronic data exchange (including GIS data) among the emergency services.

2.3.3 Education

Educational activities are mainly organized by the Ministry of Interior and its subordinate the SFRS. These training courses are aimed to involve also citizens as volunteers. They also involve key civil security stakeholders such as heads of state institutions, local governments and commercial companies. These activities include exercises and simulations of possible crisis incidents. Apart from this work, the state-accredited institutions of higher education and vocational secondary educational institutions provide vocational training in this field. These include mandatory courses in civil security to students and other volunteers. The requirements for the civil security training are basically set by the government but also the local counties and municipalities can conduct their complementary courses.⁴⁰⁷

The Fire Safety and Civil Protection College provides education for civil security specialists who are aiming to join the SFRS or any other civil security institution in Latvia. The minimum requirements for the contents of the civil protection education for employees are determined by the Regulations of the Cabinet of Ministers (No 612 of 11 September 2007).⁴⁰⁸ The civil security training of citizens in Latvia is supported by social media and electronic mass media. The usage of these new appliances and solutions is carried out by all state institutions and local level administrations. Latvia conducts also extensive scientific research in the area of civil security and emergency management. Besides the Universities and the above mentioned Fire Safety and Civil Protection College there are numerous private sector actors and consultancies which generate applied research in the field of civil security.

The Latvian civil security system has a special character in terms of taking part in and hosting several cross-border exercises in the Baltic Sea Region. The most recent international exercises include EU Joint Assistance in 2006 (Ukraine), a consequence management field exercise Uusimaa in 2008 organised by the Euro-Atlantic Disaster Response Coordination Centre (EADRCC) in cooperation with Finland, field exercises in 2009 in the case of chemical pollution of the Daugava River, field exercises

407	European	Commission.	2013.	Available	from:
http://ec.eu	uropa.eu/echo/civil	protection/civil/vademect	um/lv/2-lv-3.html#t	trai	
408	European	Commission.	2013.	Available	from:
http://ec.eu	uropa.eu/echo/civil	protection/civil/vademect	um/lv/2-lv-3.html#t	trai	

in 2009 in the case of a chemical spill in Grodno Azot and an annual Latvian-Estonian exercise under the bilateral Rescue Services Agreement.⁴⁰⁹

2.4 Role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organizations/NGOs

The Latvian civil security system does not award any special importance to non-profit relief organizations. Their role is more visible in the field of preparedness than in responsive matters.

The role of non-profit relief organizations is relatively small and limited as this sector has not yet developed extensively after the new independence of Latvia in 1991. Nevertheless, the existing non-profit organizations are included in all public crisis management structures and major exercises. They also have a growing role in the field of education, training and applied research. There are, additionally, voluntary fire-fighting units in some municipalities. The main NGO in Latvia is the the Latvian Red Cross which is a non-profit volunteer-based humanitarian organization. Its operations cover the whole territory of Latvia. The LRC Committees are located in each district having their branches in cities, municipalities and organisations all around Latvia. LRC provides assistance as close as possible to the places of residence of the population. LRC supports the public authorities in their humanitarian tasks, according to the needs of the people of Latvia.⁴¹⁰

2.4.2 Role of profit oriented organizations

The Latvian civil security system is based on a growing role of the private sector entities which belong to the third level institutional responsibility in the Latvian crisis management system. The role of the private sector is based on a traditional way of protection of critical infrastructures (or vital *functions/services*). The enterprises are expected to inform authorities of a disaster that has occurred on their territory or field of businesses. They are also obligated to develop civil protection plans which include both protection for their personnel and property. They are obligated to carry out preventive and response measures of other related businesses and to maintain good information with the local civil security authorities. The authorities and governmental agencies on their behalf are maintaining a stable and predictive business environment and security for the operational framework of businesses in Latvia. This is done with taxation, incentives and a regular flow of risk information. Also some short listing is used but not to an extent which would hinder the market economy and open competition of government tenders.

During the past decade, private security companies have become more and more essential in maintaining civil security in Latvia. In 1995 there were only five security companies operating in Latvia. In 1999 there were 255 and by 2003 already 270 independent registered companies with personnel of 5,000. During that time there was only one law regulating this field of civil security (Security Guards Activities Law 1998). In 2007 there were already about 300 private security

⁴⁰⁹EuropeanCommission.2013.Availablefrom:http://ec.europa.eu/echo/civil protection/civil/vademecum/lv/2-lv-3.html#trai400from:from:410Latvian Red Cross. 2013. Available from:http://www.redcross.lv/start.php?lang=en&id=1from:

companies with personnel of 10,600, but the new Security Guards Activities Law had been taken into force in 2006 (changed many times since then); also a law on the handling of weapons in 2003 (changed many times since then), and a law on detective activities in 2001 (changed many times since then).⁴¹¹

The trend of growing privatization of the Latvian civil security system has been evident. A clear indication is an increase in the amount of security companies which can be explained both by European integration (such as joining the Schengen Visa-free area) and on the other with the growing uncertainty of civil security in Latvia, such as the dissolution of Public Safety Guards.⁴¹² In 2010 there were already 500 private security companies; the number of private security guards in 2010 was 21,500.⁴¹³

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Political inquiries

The Latvian civil security model stands out as rather coherent and independent as it is based on rules of parliamentary democracy and the principles of division of state powers as defined by the Constitution of Latvia. This means that Parliament is not taking direct political control of matters of crisis response and disaster management. However, there are few cases where public debate has triggered severe political discussion in the Parliament, such as in the case of the River Daugava oil spill in 2007. Political control and guidance is limited in Latvia as the command and control responsibilities of the actual *management* of operations is divided between the government agencies.

The National Security Council (NDP) is the central body and is chaired by the president of Latvia, who summons the council's meetings during normal conditions. Other members of the council are the speaker of the Parliament, Saeima, the chairman of the Saeima's National Security Commission, the chairman of the Saeima's Defence, Interior Affairs and Corruption Prevention Committee, the prime minister, the defence minister, the foreign minister and the interior minister. The Latvian prosecutor-general also has the right to attend NDP meetings. The president of Latvia, as chairman of the NDP, submits decisions and proposals to the Saeima or the cabinet of ministers.

⁴¹¹ CoESS – Private Security in Europe. 2008. Available from: http://www.coess.eu/ Uploads/dbsAttachedFiles/CoESS Facts and Figures 2008(1).pdf

⁴¹² Einiks, E. 2011. "The Democratic Civilian Control of Private Security companies in Latvia", Individual Study Paper for the 2009-2010 Joint Command and General Staff Course, *Baltic Security and Defence review volume 13, 2, 2011*: <u>www.bdcol.ee/files/BSDR%20VOL13%20issue1.pdf</u>

⁴¹³ Delfi. 2013. Available from: <u>http://www.delfi.lv/news/national/politics/sogad-licences-anuletas-61-apsardzes-firmai-pern-gada-laika-trijam.d?id=42379960</u>

NDP decisions are only recommendations and do not exempt the relevant officials from their responsibility for the decisions that are subsequently taken. This does not, however, apply to recommendations which the NDP makes to the Saeima vis-à-vis the appointment or dismissal of the director of the Bureau to Protect the Constitution.

NDP meetings are closed, and discussions therein are state secrets. The NDP may, however, hold open meetings, as well. Council decisions are taken by absolute majority vote. The operations of the NDP and its secretariat have been part of the presidential Chancery of the Republic of Latvia since 2002. The secretariat is run by a secretary who is appointed by the NDP on the basis of a proposal by the president. In 2005 the Latvian Parliament passed a decision to create an Aircraft Accident and Incident Investigation Bureau of the Republic of Latvia (AAIIB).

Professional inquiries

There have been only a few professional inquiries concerning civic emergencies and disasters. Mainly these are conducted by the Transport Accident and Investigation Bureau (TAIIB) which is a government agency investigating transport accidents. It is functionally independent and unlike the Latvian Civil Aviation Agency which is under the supervision of the Ministry of Transport.

The major civil security disasters which have had potential implications for professional inquiries are the oil spill disaster in the Daugava River (2007) and some extreme temperatures such as in the Riga region (2001) when 21 people died. However, information of these has not been available and is difficult to obtain.

3.1.2 Limits to national capacities

Latvia has not officially requested disaster assistance through regional and international arrangements. The Latvian Defence Forces can provide assistance when needed. So far, Latvia has not declared a state of emergency after the Second World War. The country has faced several special situations in the field of civil security but the preparatory measures and response mechanisms have been sufficient to carry out independent and holistic crisis management.

The current mechanisms for the declaration of alerts and emergency have been sufficient. The fact that parts of the old Soviet era infrastructures are facing some needs for replacement in years to come might raise the need to modernize the whole system of citizens' awareness. Also increasing privatization of the vital functions and structures of the society might reflect a need to reform the alerting mechanisms and related technologies.

Latvia has recently gone through profound economic reform which has affected the state of the civil security system as a whole. EU and NATO membership has taken much of the resources and focus has been in more traditional defence rather than civil security issues per se.

3.2 Efficiency

Latvia witnessed the devastating consequences of the global financial meltdown of 2008 and the recession of 2009. However, Latvia has accomplished a profound structural reform of many of its civil security sectors and related activities. Referring to the World Bank report "Latvia – From Exuberance to Prudence" (27 September, 2010. Report No 56747-LV) it seems that the Latvian civil security sector i.e. public order and safety has faced a steady growth in government expenditure since 2005. The sector of public order and safety has surpassed in fiscal sense some other essential civil security related sectors such as military defense and environmental protection. However, together these three pillars of domestic security compose a major part of the government spending (see figure below).⁴¹⁴

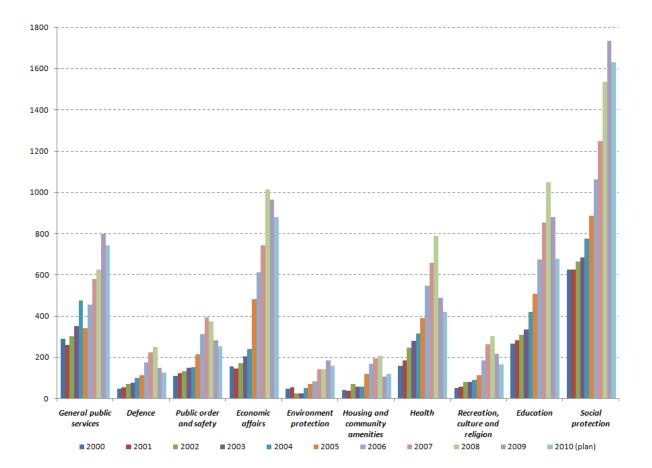


Figure 3: General Government Expenditure by Function (LVL millions)⁴¹⁵

⁴¹⁴ The World Bank. 2010. Latvia From Exuberance to Prudence. Report No. 56747-LV. 13

⁴¹⁵ The World Bank. 2010. Latvia From Exuberance to Prudence. Report No. 56747-LV. 13

3.3 Legitimacy

3.3.1 Political support

The legitimacy of the Latvian civil security system can be argued to be sustainable. There have been few exceptional civil security situations such as the H1N1 epidemic in 2009 and earlier mentioned oil spill disaster in the Daugava River (2007). These have tested the government system resilience and its response to hazardous substances and risks of both natural and man-made origin. There has also been wide interaction with the public demand for immediate counter-measures. However, the political support has been coherent and sufficient for the ruling party in the past civil security cases.

3.3.2 Legal support

The overall legal basis of the Latvian civil security system rests on two major laws: the *National Security Law* adopted in 2000 and the *Civil Protection Law* adopted in 2006. These laws constitute the legal and constitutional infrastructure of Latvia. The National Security Law defines the national security system and its tasks, the competence of institutions responsible for the national security system (incl. crisis management), and the principles and procedures of coordination as well as implementation and control of their activities.⁴¹⁶

3.3.3 Popular trust and support

The new (118) local administrations at the municipal level (down from earlier 530 in 2009) have done well in assuming their broader role of the local governance in Latvia. Referring to the World Bank report on Latvia (World Development Indicators 2011), a clear minority of the population has experienced changes after the major governance reorganization. However, local governments are still enjoying higher popular trust and support than the institutions of the national government.⁴¹⁷ The World Bank report states that more than the Latvian government the Latvian legal system enjoys popular trust (26 per cent). Also regional and public authorities have enjoyed high trust among the public (41 per cent in 2009). This controversy might be a result of the necessary laws which have been passed during recent years. Latvia has also gone through a massive integration processes of various minorities of the popular trust of the civil security sector as a whole.

⁴¹⁶ The Ministry of Foreign Affairs. 2013. Available from: <u>http://www.mfa.gov.lv/en/security/basic/4536</u>

⁴¹⁷ The World Bank. 2011. World Development Indicators 2011. Drafted by Juris Dreifelds.

4. Latvian Civil Security in the EU Context

Latvia is actively taking part in the further development of an effective EU crisis and emergency management system. It is notable that Latvia scores with only 10 percent positive responders in the Eurobarometer survey (September-October 2009) when asked do they feel informed about disaster response at the EU level. The average EU level is 18 percent. This can be explained by the relatively recent NATO accession which has taken most of the attention and media coverage in the country. The line between civil security and traditional military security is still somewhat undefined and this might affect the attentions and feelings of the Latvian citizens towards the EU role as well.

When it comes to the interaction of Latvian NGOs and other citizens' associations with their European counterparts it is worth noting that they are actively taking part in EU funded research programmes in the field of civil security. Latvian Universities and enterprises are both taking part in these projects as partners and coordinators. These projects consist of applied research, exercises and vocational training.

The Latvian government is supporting civil security cooperation with the European Union and this can be seen in a multiple exercises conducted in this field, both with neighbouring countries and within regional organizations such as HELCOM and the CBSS (Council of the Baltic Sea States).

5. Conclusion

In Latvia, the main civil security agency is the State Fire and Rescue Service (SFRS). Coordinated and supervised by the MOI, it acts as a central body for both information exchange and operational management of security affairs. In case of regional or state-level emergency, the State Emergency Operations Commission (SEOC) will be called together. The chairman of the commission is the minister of the interior, while the secretary is the chief of the SFRS.

Administratively, Latvia is divided into 26 districts and seven larger cities. Each district is divided into several municipalities (*pagasti, novadi*). The municipal civil security system in Latvia is not autonomous but is rather subordinated to the SFSR, thus the system can be described as being centralized.

The chief of the district brigade of the SFRS is responsible for the functioning of the civil protection system in that district. He is subordinated to the chief of the SFRS. Additionally, EOCs

are organized at the district level, and are led by the chief of district (or big city) brigade of SFSR or, in some districts, by the head of district (or big city) administration.

While the voluntary organizations' role in the Latvian civil security system is not very essential, the importance of the civil-military cooperation in the field of civil security has been increasing. The Latvian armed forces provide assistance in civilian emergencies in terms of manpower, logistics, communication, life-support equipment, the maintenance of public order, rescue service, and in specific tasks such as clearing mines, decontamination etc.

The Latvian security system, includes a territorially organized voluntary Home Guard (subordinated to the national armed forces), with battalions in each district or municipality. The Home Guard battalions have agreements with fire brigades and police departments to provide assistance in civil emergencies, and in this sense there are some signs of the on-going integration of volunteers into civil protection activities.⁴¹⁸

At the same time some national operational services are in need of new equipment and technical solutions, including mobile data transmission and GPS devices. Also existing information exchange among operative service dispatchers is not effective as there is no comprehensive electronic information exchange, or the integrated dispatchers' information system does not exist. Furthermore, there is the consolidated information system, containing data on registered events, still under development.

In order to achieve a more effective and tangible crisis management and sustainable civil security environment, Latvia may need to strengthen its work on integration and interoperability of multiple civil security actors both at the strategic and operational levels.

⁴¹⁸ Pursiainen, C., Hedin, S. and Hellenberg, T. 2005. Civil Protection Systems in the Baltic Sea Region, Towards Integration in Civil Protection Training, Eurobaltic Publications, 2005.

Annex 1: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 LATVIA

1	Introduction	Scoring instruction	Score	Source	Comments
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	0		
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2		
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1		
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1		
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1		
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1		
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2		
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	1		
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down=1Bottom-up=2	3		

		Both = 3			
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0.72	http://www. worldvaluess urvey.org/	Year 2000
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		-1.27	http://www. worldvaluess urvey.org/	Year 2000
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?				

2.2.1.b	When was the last major reform in the civil security field undertaken?		2006	http://www. mfa.gov.lv/en /security/basi c/4536	
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	_	1		
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1		
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		1		
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?		1		
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?		1		
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?		1		
2.2.3.b	Are there specialised agencies for crisis response at the regional level?		1		
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No=0Bylaw=1By executive mandate = 2	1		
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?				
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number			
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	1		

2.2.4.b 2.2.4.c 2.2.4.d	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries? How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of? Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during	Register the number.	0	
	the period 2000-2012?"			
2.3	State-citizens relations			
2.3.1	Expectations			
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).			
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1		
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3		
2.3.2.c	Does the government have a central website with updated information on crisis events?			

2.3.2.d 2.3.2.e	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues? Does the government have a mobile application for reaching citizens with vital crisis/security information?	Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3 No = 0		
		and national levels = 3		
2.3.3	Education			
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?			
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To member ands wide- spread training programmes for general population = 3		
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?			
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?	Yes = 1		
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number		
2.4	Role of private sector			
2.4.1	Role of societal/ non-profit organisations			
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?			

2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2			
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?				
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2			
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.			
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA			
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?				
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.			

3.3.1.b	political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.			
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	2000-2012.			
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?				
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	2000-2012.			
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.			
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?				
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	43	Special Eurobaromet er 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	35	Special Eurobaromet er 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes=1			
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011			

3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector? Civil security in the EU context	Register the number per 1000 capita for 2011. Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be complete d by UI/IFHS	http://ec.eur opa.eu/echo/ files/policies/ disaster resp onse/EUCPM _activations_ since_010120 07.pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	complete	http://ec.eur opa.eu/echo/ files/policies/ disaster resp onse/EUCPM _activations_ since_010120 07.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009- 2010 training cycle?	Register the number for the 2009-2010 training cycle	13	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	

4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	2	http://ec.eur opa.eu/echo/ policies/prev ention_prepa redness/prep aredness_en. htm
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	1	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions since 2002. doc
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	9.5	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions since 2002. doc
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	36	Special Eurobaromet er 383 (2012)
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	82	Special Eurobaromet er 383 (2012)

Annex II: H1N1 in Latvia

Latvian citizens felt a serious threat of the new H1N1 influenza in autumn 2009, the so called swine flu.⁴¹⁹ On 23 June 2009 Reuters reported that Latvia had registered its first H1N1 case, based on

⁴¹⁹ FluTrackers.com, 2009.

information given by the Public Health Agency. Like in neighboring Estonia, the first positive case was a person who had visited North America and returned to Latvia on 21 June. Latvia thus became the second Baltic country after Estonia of having a confirmed case of the new flu strain.⁴²⁰ The first death was reported in November 2009 by the Pauls Stradins University Hospital in Riga. Jazeps Keiss, director of the Latvian Epidemiology Centre pointed out that the victim had caught the infection while visiting the Russian enclave of Kaliningrad.⁴²¹ Soon after, two more people were confirmed dead and an epidemic *special situation* was declared in five regions - Gulbene, Daugavpils, Jelgava, Riga and Rezekne – in which the infection rate exceeded the limit of 100 infected people per 100,000 inhabitants.⁴²²

The Latvian H1N1 situation got worse in November 2009 when a severe outbreak took place in Russia and Ukraine. As a result of people travelling between these countries the flu alerting increased. On 5 November alone there were 10 new cases registered, increasing the total number of cases to 63. By 9 November, the number of positive cases reached 89. While the situation got more serious by the end of 2009, the Latvian government was struggling with response measures. It is acknowledged that pharmacies weren't supplied in sufficient manner.

By November 11, the number of registered cases reached 132. The next day, with another 33 new cases, the total amount reached 165 people.⁴²³ Soon after the Baltic Times reported (16 November) that positive H1N1 cases had "skyrocketed" in Latvia from about 80 to more than 380. The situation was worst in Daugavpils where an *epidemic* was declared.⁴²⁴

Besides Poland, Latvia is the only European country that did not have a pandemic vaccination program⁴²⁵. During the Latvian H1N1 situation, the Latvian media reported that the government was not going to purchase vaccinations at all and was in practice giving up. Shortly after this news, official information was released from the Latvian Health Ministry that the country was preparing countermeasures at the same pace as its Baltic neighbors Estonia and Lithuania.⁴²⁶ However, referring to the 2009 Eurobarometer on Influenza H1N1, when asked "whether person is intending to get vaccinated against seasonal influenza this year" the share of those vaccinated against H1N1 was lowest (at 4 per cent) in Latvia as compared with European countries where vaccine was available.⁴²⁷

⁴²⁰ Reuters. 2009. Latvia has a confirmed case of H1N1 flu.

⁴²¹ Dalje.com.2009. Latvia reports first swine flu death. 9 November 2009.

⁴²² BalticReports.com. 2009. Two swine flu deaths in Latvia, epidemic declared.

⁴²³ Wikipedia. 2013. 2009 flu epidemic in Europe.

⁴²⁴ The Baltic Times. 2009. H1N1 cases skyrocket.

⁴²⁵ Mereckiene J, Cotter S, Weber JT, Nicoll A, D'Ancona F, Lopalco PL, Johansen K, Wasley AM, Jorgensen P, Levy-Bruhl D, Giambi C, Stefanoff P, Dematte L, O'Flanagan D, the VENICE project gatekeepers group. Influenza A(H1N1)pdm09 vaccination policies and coverage in Europe. Euro Surveill. 2012;17(4):pii=20064. Available online: http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20064

⁴²⁶ Turun Sanomat. 2009. Valtaosa sikainfluenssakuolemista edelleen Pohjois-Afrikassa. 6.11.2009

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Annex III: Resources

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Lithuania

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Executive Summary

The civil security system of Lithuania has been organised at three main levels: national, county (regional) and municipal (local). It can be characterized as rather centralized, and government can lead operational emergency management measures. Civil security is a key function of the state and directs the civil emergency preparedness and response measures undertaken by public institutions, local authorities and the private sector.

The Lithuanian civil security sector is being developed within two development lines: civil preparedness and capacities. There is no clear distinction between external and internal security in Lithuania. However, there is clear distinction in decision making with mobilization of the civilian and military forces in civil security situations. The system tends to move from sector specific dimensions towards an all-hazards approach but this will take some time due to the old administrative and political structures based on civil defence system.

Today, the civil protection and rescue system in Lithuania is an integral part of the national security and state management mechanisms. The aim of the civil security system is to prepare society for emergencies, to guarantee a smooth transition from everyday activities to crisis, reducing possible economic casualties in case of emergencies, providing necessary assistance to military command from the civilian authorities, as well as protecting people's lives, health, property and the environment.

The new civil protection law entered into force on 1. January 2010 and covers the civil protection System at two levels: national (state) and municipal (local). It regulates prevention, preparedness, response and mitigation of incidents, emergency events and emergencies. It lays down provisions on request, acceptance and rendering of civil protection assistance.

The civil security system and the civil protection system of Lithuania comprises the government, the state and municipal institutions, economic entities, public organisations, civil protection forces (fire and rescue, police, state border guard, medical services, public security service, state food and agriculture service, other emergency services, forces of economic entities, volunteers), ECs and emergency operation centres (EOC). Also the environmental monitoring network is included. It is

managed by the government through the Fire and Rescue Department under the Ministry of the Interior.

Key Findings

An exceptional concept of Emergency Commissions (see country paper on Lithuania, 1. chapter 2.2.3). The main operational bodies of the civil security system in Lithuania are the Emergency Commissions (EC), which are technically assisted by the Fire and Rescue Service. The Emergency Commissions can be formed on two levels: the first level is the municipal commission chaired by the director of the municipal administration; the second level is the Government Emergency Commission (GEC). The GEC is in overall charge of the condition of the civil protection system and evaluates the preparedness of the state and municipal institutions. It also submits to the government proposals on the use of civil protection supplies of the state reserve in the event of an emergency. It is also in charge of government level information sharing and situational awareness. It also facilitates discussion of the condition of civil security system, evaluates the preparedness of state and municipal institutions and other agencies for emergency response and takes measures to improve it. The GEC's work is directed by the minister of the interior. The other members are viceminister of the Interior (deputy chariman), viceministers or chancellors of other ministries, chief of Joint Headquarters of the Lithuanian Armed Forces, representative of Prime Minister's Office, police commissioner general, director of the Fire and Rescue Department, director general or deputy director general of State Security Department and commander of State Border Guard Service.

The *Municipal Emergency Commission* is in charge of the municipal civil protection system and the preparedness and response actions during an emergency situation. It also submits requests to the Fire and Rescue Department on the use of civil protection supplies of the state reserve in the event of emergency. It is also in charge of informing the public about the actual emergency and related response mechanisms. There are 60 municipal emergency commissions in Lithuania.

2. **Role of citizens in civil security exceptionally well maintained and praised.** The Lithuanian civil security system awards special importance to non-profit relief organisations across all levels and fields of civil security. Their role is more visible and documented in a responsive manner than in the field of prevention and preparedness. The Civil Protection Law which entered into force in 2010 also regulates the role of non-profit organisations by regulating prevention, preparedness, response and mitigation of emergencies. The municipalities conclude forehand agreements with the NGOs, such as the Lithuanian Red Cross, the Lithuanian Riflemen Union, etc. in emergency mitigation activities.

Civil security is a primary function of public entities and specialized agencies in Lithuania. The citizen's role is growing in terms of coherent risk awareness but also in terms of producing items for the government situational awareness. This can be seen in several IT related projects where risk information is disseminated via Internet, social media and even SMS messages. In Lithuania, citizens are seen as a valuable source of collecting civil security data and compiling it to data bases. Citizens are also expected to contribute and follow multiple guidelines and restrictions in this field. The State Emergency Management Plan refers to the principle of protecting the population from emergencies

but also to efforts in providing social and psychological assistance, education and other services in case of disaster. This is an indication of a wide range of services which are derived from the civic society instead of being conducted by the civil security entities themselves.

3. Lithuania has been very active in donating international assistance in various crisis situations. This is particularly evident as Lithuania does not have exceptionally large financial resources in this field. It has donated assistance to floods in Poland (1998), floods in Georgia (2005), earthquake in Pakistan (2005), forest fires in Macedonia (2007), oil spill in the river Daugava in Latvia (2007), floods in Ukraine (2008), floods in Moldova (2008), floods in Romania (2008), armed conflict in Georgia (2008), forest fires in Russia (2010), floods in Pakistan (2010), floods in Poland (2010) and floods in Moldova (2010). In particular, Lithuania is an active participant in the EU mechanisms for disaster assistance and response. The main modules for this co-operation are within the Lithuanian Emergency Response Team (LERT) which is comprised of medium urban search and rescue, ground fire-fighting specialists, search and rescue in CBRN conditions and other technical assistance.

List of Abbreviations

BA	Baltic Assembly
BSSSC	Baltic Sea States Subregional Cooperation
CBRN	Chemical, biological, radiological and nuclear
CBSS	Council of the Baltic Sea States
CIVPRO	CIVPRO Civil Protection Network
EADRCC/NATO	Euro-Atlantic Disaster Response Coordination Centre
EOC	Emergency Operation Centre
EC	Emergency Commission
FRD	Fire and Rescue Department
GEC	Government Emergency Commission
LERT	Lithuanian Emergency Response Team
MOI	Ministry of the Interior
NCM	Nordic Council of Ministers
SFRS	State Fire and Rescue Service

1. Introduction

Lithuania has not faced any large scale natural or technological disasters during its two decades of modern independency. Natural disasters are rare due the mild climate ranging between maritime and continental, and the rather flat, solid soil. The most usual natural disasters are floods and storms as well as forest and peat-bog fires. Technological disasters are seen as more evident among citizens. However, the closing down of the nuclear power plant *Ignalina* in 2009 has reduced the major risk of technological disasters. As the neighbouring countries Russia and Belarus are proceeding with their nuclear power plant projects to Kaliningrad Oblast and Astravets district, a nuclear factor still remains alive in the area.⁴²⁸ The usual man-made and technological disasters have been caused by the 43 hazardous chemical establishments (SEVESO II), transportation and storage of dangerous chemical substances, and communication systems, oil industry, gas and oil pipeline networks.⁴²⁹

There are also a considerable number of diverse cross-border risks affecting Lithuania. These include floods in the basin of the Nemunas River, which creates risk also to the Russian Kaliningrad district and forest and peat-bog fires created and affected by the Russian Federation. Additionally, Baltic Sea pollution and related oil spills are regarded as a major risk factor. Table 1 provides an overview of crises between 2000 and 2012 and the number of persons killed, injured and affected, according to the available data.⁴³⁰

Year/ Month	Crisis description	Crisis category		Damage	
			# of persons killed	# of persons injured	# of persons affected
12/2001	Extreme temperature	Natural disaster	20		
01/2005	Storm	Natural disaster			
2007	Accident	Technological	25		

Table 1: List of Crises (2000-2010)

⁴²⁸ The Kaliningrad Oblast nuclear power plant aims to replace natural gas-based power generation. The Belarussian project foresees construction of two nuclear reactors between 2016 and 2020, and probably two more reactors by 2025.

⁴²⁹ State Fire and Rescue Service of Lithuania, presentation 15. June 2012 (PowerPoint 17 March 2011).

⁴³⁰ ⁴³⁰ For quantitative data, see <u>http://www.emdat.be/country-profile</u>. For a qualitative listing of major crises see <u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/</u>

		disaster		
08/2010	Flood	Natural disaster	10	
11/2010	Extreme temperature	Natural disaster	5	
01/2012	Extreme temperature	Natural disaster	24	

Lithuania has no nation-wide and coherent definition of crisis situations or major emergencies. The Lithuanian civil security system is being developed in two directions: civil preparedness, and rescue preparedness. There is no clear distinction between external and internal security in Lithuania. However, there is a clear distinction and line between using the civilian and military forces in civil security situations. The Lithuanian defence forces and voluntary defence can assist in civilian emergencies if needed.⁴³¹

During the 1990s the civil security system in Lithuania was profoundly changing from the Soviet era structure to an independently working civil protection system. It applied itself to EU standards and modern crisis communication methods. The Lithuanian civil security system tends to move from sector specific dimensions towards an all-hazards approach but this will take some time due to the old administrative and political structures based on civil defence system.

Today, the civil protection and rescue system in Lithuania is an integral part of the national security and state management mechanisms. The aim of the *civil security system* is to prepare society for emergencies, to guarantee a smooth transition from everyday activities to crisis, reducing possible economic casualties in the case of emergencies, providing necessary assistance to military command from the civilian authorities, as well as protecting people's lives, health, property and the environment.

The Civil Protection and Rescue System is responsible for ensuring that all national and economic institutions undertake preparedness measures in order to protect property and human life, and to mitigate possible damage by encouraging citizens to act in case of emergency.

At the different levels of state, counties and municipalities, responsibilities for civil security become more differentiated. The civil protection and rescue system of the Republic of Lithuania has been created in order to reach a status of preparedness for emergency which can protect the population,

⁴³¹ Pursiainen, C. Hedin, S. and Hellenberg, T. 2005. *Civil Protection Systems in the Baltic Sea Region. Towards Integration in Civil Protection Training*, Eurobaltic Publications, 2005.

property and environment of the country. At the same time the civil protection and rescue system is obliged to ensure an adequate preparedness level against cross-border risks.

The Fire and Rescue Department (FRD) is responsible for the administration and co-ordination of civil protection at all levels of the state administration. Its role is to implement the government's civil protection measures and co-ordinate the activities of governmental institutions and economic bodies. In addition, it prepares civil protection work-plans for the management of emergencies, major accidents or natural disasters in both peace and war, and organizes the training and education of emergency officers.

2. Analytical Dimensions

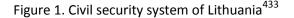
2.1 Cultural and historical aspects of the civil security system

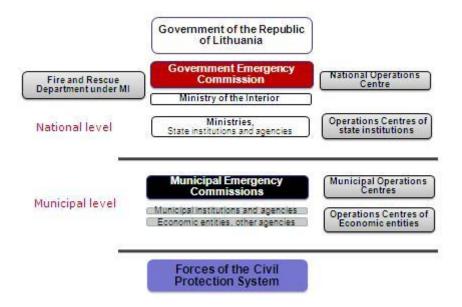
2.1.1 Administrative tradition

Lithuania is a parliamentary republic with a unicameral *Parliament* (Seimas). It has 141 seats: 71 members are elected in single-member districts, 70 elected by proportional representation. The members serve four-year terms. The *state president* is elected directly for five-year terms and can serve a maximum of two consecutive terms. The main policy functions of the president include foreign affairs and national security. The president is also the supreme commander of the armed forces. The president, with the approval of the Parliament appoints the prime minister and other ministers of the cabinet as well as a number of top civil servants and the judges. There are 10 administrative *counties* and 60 municipalities.

The capital Vilnius has 530,000 inhabitants and four other cities have a population over 100,000. The counties are ruled by governors which have been appointed by the central government. They ensure that the municipalities adhere to the laws and the Constitution. County government oversees local governments and their implementation of the national laws, programmes and policies. *Municipalities* are the most important administrative units. Each municipality has its own elected government for four year periods. The council elects the mayor and appoints elders to the elderships which are the smallest units for local duties. They provide necessary public services close to their homes. They are most active in the socio-economic sector including civil security.

The civil security system of Lithuania stands out as a centralised model. It has been organised at three levels: national, county (regional) and municipal (local).⁴³² In the renewed civil security system the county level should be passed so that crises can be managed mainly at the local level or by the government cabinet measures, as is shown in figure 1. At the *national level*, the government, the government Emergency Commission (EC), the FRD under the Ministry of the Interior (MOI) and the subordinated agencies, ministries and other state institutions make strategic decisions regarding the implementation of civil protection measures.





At national level, the civil protection objective is to ensure emergency preparedness and the development of capabilities at all levels of the civil protection management system to meet the main requirements for national security and civil protection in emergencies, encompassing response and recovery after emergencies.

At *county level*, the county governors, county civil protection departments and county emergency management centres organise preparedness for emergencies and assist, where necessary, in response thereto. At *municipal level*, the municipal administrators, civil protection departments (divisions and services), civil protection personnel, municipal emergency management centres, fire

⁴³² European Commission. 2013. *EU Commission Vademecum on civil protection, disaster management structure*: http://ec.europa.eu/echo/civil_protection/civil/vademecum/lt/2-lt-1.html

⁴³³ Civil Protection System in Lithuania – Emergency Management, PowerPoint presentation at emergency management seminar in Helsinki, 6.03.2013..

prevention and other civil protection services, economic entities and agencies organise preparedness for emergencies and, when necessary, respond thereto.

2.1.2 Government/societal culture

Lithuania was together with Poland and Belarus a large empire until the end of the 18th century. It regained independence following the First World War but was annexed by the USSR in 1940. In 1991 it again regained its independence internationally recognized, and the last Russian troops withdrew in 1993. Lithuania subsequently restructured its economy for integration into Western European institutions, and it joined NATO and the EU in the spring of 2004. This development of administrative and political reforms has naturally affected heavily the civil security system of Lithuania. At the same time, public risk awareness increasingly reflects the changing culture and citizen's role as a legitimate part of the wider national civil security system.

Lithuania's political culture shows approval rates for democratic values and institutions. Geert Hofstede's grid-group scores do not provide information about Lithuania. However, the Lithuanian system resembles those in its neighbouring countries which are administratively centralized but functionally decentralized based on ad hoc arrangements with some political leverage of composition and decision making proceedings. The World Value Survey for 2005-2007 puts Lithuania in the group of Catholic European countries characterized by an average degree of secularism and self-expression.⁴³⁴ Lithuania ranks in the middle on secular-rational values but very much lower than other comparable countries in terms of self-expression values.

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The statutory basis of civil security in Lithuania is fragmented and rests upon distinct bodies of formal legislation at the state, county and municipal levels. From a functional perspective, the statutory basis is divided into laws for different emergency response services, sector specific regulations, and provisions for a formal state of emergency and for other kinds of disasters and crises. Lithuanian civil security could be therefore described as a multilevel system with a large number of somewhat overlapping actors.

⁴³⁴Forthestatisticaldateseehttp://www.worldvaluessurvey.org/wvs/articles/folderpublished/articlebase111[lastaccessed15November 2012].

The new civil protection law entered into force on 1. January 2010 and covers a *civil protection system of two levels*: national (state) and municipal (local). It regulates prevention, preparedness, response and mitigation of incidents, emergency events and emergencies. It lays down provisions on request, acceptance and rendering of civil protection assistance. It establishes the legal and organizational framework for the organization and functioning of the civil protection system, the competence of state and municipal institutions and its agencies. It also defines the role of economic entities and citizens in the field of civil security. Besides this, there is the Law of the Republic of Lithuania on Maritime Safety and the Law of the Republic of Lithuania on Protection of the Marine Environment.

In implementing the tasks of the civil protection system, the government can establish, declare and lift the so-called emergency prevention procedure. This includes also the work for preparedness of the civil protection system. The government also has the right to approve emergency event criteria which means allocation of resources and use of exceptional decision making rights in case of an emergency event.

The *Parliament* (Seimas) approves the overall civil protection programme. Based on this the government approves the national emergency management plan. It can also establish the procedure for performing obligatory operations in the event of an emergency and compensating for their performance. This can be a case when taking over the private sector resources or other privately owned capacities such as seaports and electricity networks and other critical infrastructures.

Declaring and lifting emergencies shall be done by the government. It is also in charge when lifting a national level of emergency; establishing the procedure for organizing rescue, search operations and urgent actions and responding to emergencies and mitigating their consequences. The government is also in charge of evacuation measures and shelters and other collective protection mechanisms in Lithuania.

The Lithuanian civil security system has partly been based in principle on the comprehensive national defence concept, though it is mainly managed by government and the MOI The system can also be characterized as being rather centralized because the government can lead effectively also operational emergency management measures. Civil emergency preparedness is a key function of the state and directs the civil emergency preparedness and response measures undertaken by public institutions, local authorities and the private sector.

The civil security system and the *civil protection system of Lithuania* comprises the government, the state and municipal institutions, economic entities, public organisations, civil protection forces (fire and rescue, police, state border guard, medical services, public security service, state food and agriculture service, other emergency services, forces of economic entities, volunteers), ECs and emergency operation centres. Also the environmental monitoring network is included. It is managed by the government through the FRD under the MOI (hereinafter referred to as the FRD).

The Lithuanian emergency situation management system is divided into two parts, one for the *prevention* of emergencies and the other for *response* purposes. Furthermore, a crisis management s ystem exists to deal with questions relating to critical infrastructure protection.

2.2.2 Political dimension

Executive and political responsibility for civil security provision primarily rests at the local county and municipal level. The Lithuanian civil security operators i.e. fire brigades and rescue teams are accountable to mayors and county commissioners, which hold the central responsibility for operational crisis management and head the crisis information exchange between state and local levels.

The *MOI* implements and coordinates the tasks of the civil protection system (above) with the exception of the government. The *minister of the interior* approves the national civil protection exercises and is in charge of information exchange on an incident or emergency event. The ministry submits to the government draft laws, legal acts of civil protection and proposals on the need for state budget appropriations for the civil protection system.

The *FRD* is an essential institution of the Lithuanian civil security system which directs the activities of the civil protection system and coordinates the overall national organization of emergency prevention. In implementing the tasks of the civil security system the FRD has the main responsibility of early warning and public information in case of an emergency. It is also the main body to organize civil protection training, to coordinate the evacuation of citizens and to mobilize inter-agency resources.

The FRD also coordinates the organization of national civil protection exercises, informs neighbouring states of imminent emergencies, establishes a national emergency operations centre and manages

the civil protection supplies of the State Reserve. Besides these multiple tasks, it drafts the national emergency management plan. It leads the activities of the civil protection and rescue system and is responsible for organising disaster prevention, coordinating the civil protection activities of public institutions and economic entities and ensuring preparedness to implement the planned civil protection measures in emergency situations during peacetime and war.

The *director of the FRD* is in charge of maintaining the comprehensive early warning system and civil protection signals of citizens, state and municipal institutions and economic entities in case of an emergency. He/she also approves civil protection recommendations, regulations of municipal ECs, regulations of the national emergency operations centre and the methodological recommendations for emergency management plans.

Other essential civil security institutions in Lithuania are: the *Office of the Seimas* of the Republic of Lithuania, the *Prosecutor General's Office*, the *Bank of Lithuania*, the *Communications Regulatory Authority*, the *Special Investigation Service*, the *State Security Department* and the *National Courts Administration*. They shall, upon performing an analysis of potential threats and emergencies, draw up and approve an emergency management plan and implement it.

The major civil security actors of Lithuania are listed as fire and rescue forces, the forces of police, the forces of the State Border Guard Service under the Ministry of the Interior (State Border Guard Service), the forces of personal and public health care agencies of the Lithuanian national health care system, the forces of the Public Security Service under the MOI (Public Security Service), the forces of the State Food and Veterinary Service, the forces of the community emergency services (water supply, waste management, electricity supply, heating, gas sector, road maintenance services, sanitary treatment), the forces (employees) of an economic entity, and the forces of appropriately trained volunteers and associations.

The *commander of rescue operations* will be either a civil servant or employee of the forces of the civil protection system who is the first to arrive to the spot of the incident or emergency event. All forces of the civil protection system, irrespective of their subordination, will be subordinated to the commander of rescue operations or the operations commander.

Evacuation of citizens can be managed by directors of municipal administrations, heads of other agencies or even economic entities. The urgent removal of residents from emergency areas will be

taken by the commander of rescue operations. Interestingly, in the event of a nuclear accident, residents will be evacuated in "compliance with the national plan of protection of the population in the event of a nuclear accident as approved by the government."

2.2.3 Operational dimension

The management of civil security in Lithuania is being performed at two levels: national and municipality (local). The private/voluntary level will be discussed in 2.4.1. The national level involves the government of the Republic of Lithuania, the Commission of Emergency Situations, FRD, ministries, other governmental institutions, aeronautic search and rescue and maritime search and rescue co-ordination centres, and regional forces of civil protection. The county level consists of the county administration, the county emergency management centre, other territorial warning, information and evacuation as well as supporting services. The municipality (local) level takes account for the executive institutions of local authorities, the local emergency management centre, fire and rescue services, warning, information and other services of civil protection as well as industrial brigades, and forces of civil protection.⁴³⁵

The main operational bodies of the civil security system in Lithuania are the ECs which are technically assisted by the State Fire and Rescue Service (SFRS). The *emergency commissions* can be formed on two levels: the first level is the municipal commission chaired by the director of the municipal administration; the second level is the government EC chaired by the minister of the interior.

The *government* EC is in overall charge of the condition of the civil protection system and evaluates the preparedness of the state and municipal institutions. It also submits to the government proposals on the use of civil protection supplies of the State Reserve in the event of an emergency. It is also in charge of government level information sharing and situational awareness. It facilitates discussion of the condition of the civil security system, evaluates the preparedness of state and municipal institutions and other agencies for emergency response and takes measures to improve it.

The government EC work is directed by the *minister of the Interior*. The other members are viceminister of the interior (deputy chairman), viceministers or chancellors of other ministries, chief of Joint Headquarters of the Lithuanian Armed Forces, representative of prime minister's office,

⁴³⁵ Hellenberg, T. & Hedin, S. 2006. Cross Border Risks in the Baltic Sea Region, Lessons to be learned, Eurobaltic Publications 4, Helsinki, 2006.

police commissioner general, director of the Fire and Rescue Department, director general or deputy director general of State Security Department and commander of the State Border Guard Service.⁴³⁶

The *municipal EC* is in charge of the municipal civil protection system and the preparedness and response actions during an emergency situation. It also submits requests to the FRD on the use of civil protection supplies of the state reserve in the event of emergency. It is also in charge of informing the public about the actual emergency and related response mechanisms. There are 60 municipal ECs in Lithuania.

The state commander of operations will be appointed by the prime minister from the government cabinet, and the national operations centre will be convened. It is important to point out here that the relationship between ECs is based on the principle of supremacy of decisions: the municipal level EC is the lowest level and the government EC the highest level.

The *ministries and other state institutions and agencies* will continue their normal time duties and operations "in the sphere of their competence" in case of an emergency. They will also set up operation centres based on an approval by the government to handle civil protection, preparedness and response in the event of an emergency. If a disaster happens at sea, the *Maritime Rescue Coordination Centre* of Lithuania takes care of the rescue works at sea. In all other cases, the *FRD* and its subordinate services are responsible for performing rescue actions. At ministerial level, the heads of ministries and state institutions or the persons authorised by them direct the activities of the ministries and state institutions in the field of civil protection.

In general, the civil security management authority will be in charge of multiple and versatile civil protection forces such as fire and rescue, police, state border guard, medical services, public security service, state food and agriculture service, other emergency services, forces of economic entities, and even volunteers.⁴³⁷ The *Ignalina Nuclear Power Plant* and its civil security dimensions illustrated this three level (state/county/municipal) system of the Lithuanian civil security. The Ignalina Nuclear Power Plant was one of the most risk-bearing objects in Lithuania, requiring most of attention as regards the civil security system. The first reactor was closed in 2004 and the second one in 2009. Ignalina required an extensive civil security organisation of its own and co-ordination of multiple actions. Lithuania harmonized procedures of preparedness for nuclear accidents with neighbouring

⁴³⁶ Mikalauskiene, K. 2013. Civil Protection System in Lithuania – Emergency Management, 6.3.2013, PowerPoint presentation in Helsinki.

⁴³⁷ Mikalauskiene, K. 2013. Civil Protection System in Lithuania – Emergency Management, 6.3.2013, powerpoint presentation in Helsinki.

countries as much as possible. Nevertheless it should be noted that procedures (notification, population protection, decision making and etc.) with Latvia have been harmonised at a higher level than with Belarus.

Another kind of *risk-mapping* in Lithuania includes possible accidents at dangerous chemical sites. On 17th of August 2004, the government of Lithuania approved the Provisions on Major Industrial Accidents Prevention and Consequences Liquidation. These provisions were prepared according to the SEVESO II Directive as well as to the Lithuanian Civil Protection Law. According to these provisions all dangerous objects (economic entities) are obliged to perform safety analysis, emergency plans, etc. Nevertheless, vulnerability analysis is not obligatory and as a rule is not being performed.⁴³⁸

A recent example of a cross sectoral response operation and successful preparatory work in the case of a natural disaster has been related to the flooding of the Lithuanian Nemunas River due to spring thaw, rainfalls and low gradient of delta salience. Flooding reaches catastrophic levels in the lower course of the Nemunas approximately every 12-15 years, submerging a territory of about 50,000 hectares in the regions of Klaipeda and Taurage with over 50 villages and 700 farms with some 4,000 inhabitants. The largest flooding occurred in 1958 affecting a territory of 57,000 hectares. In 1979 some 30,000 hectares were submerged. The most recent incident took place in 1994 when some 40,000 hectares was affected as 19 villages, 168 farms and over 600 persons suffered from the flooding. The Nemunas flooding has resulted in improvements of the preparedness and response mechanisms of the Lithuanian civil security system as a whole. These have included building of summer and winter polder systems and establishing a permanent Programme of Preparedness to Flooding and Effects Elimination. The aim of this initiative is to reduce effects and economic losses caused by floods. The Nemunas case has been an example of civil-military cooperation as the Lithuanian Army has taken active part in the rescue and response efforts in cooperation with the SFRS Also the national defence voluntary forces have accomplished some reconnaissance missions and air rescue operations.439

Unlike the civil security system itself (state/county/local), the *level of emergencies* in Lithuania have been categorized at municipal and national levels. Those at the municipality level are tackled with forces of the civil protection system located within a municipality with the material resources held at

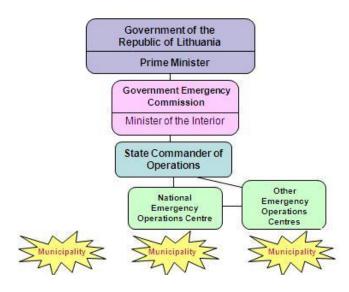
⁴³⁸ Hellenberg, T. & Hedin, S.; Cross Border Risks in the Baltic Sea Region, Lessons to be learned, Eurobaltic Publications 4, Helsinki, 2006.

⁴³⁹ Tamasauskas, E. 2004.; Preparedness of the Lithuanian Civil Protection and Rescue System to eliminate effects of flooding in Nemunas delta, PowerPoint presenatation, 20.9.2004, Lithuanian Fire and Rescue Department, Vilnius.

the disposal of the municipality or obtained from other municipalities. If the emergency concerns territory covering more than three municipalities, then it is called a national level emergency. Also *emergency management* per se is divided into *national and municipal levels*, regarding the scope of its effects. If the effects of an emergency remain within the territory of a single municipality, then a municipal EC shall be formed. The director of municipal administration will also appoint a municipal operations commander and the municipal operations centres will be convened. In the event of a national level emergency the government EC will be convened.

Once an emergency has been declared at the municipal level, the *director of the municipal administration* will be responsible for carrying out response of the civil security system within the municipality. He/she also carries out preparedness mechanisms and forecasting of potential emergencies. The director also forms a municipal EC and establishes a municipal emergency operations centre. He/she declares and lifts a municipal level of emergency and organizes municipal level civil protection exercises. In the event of an actual emergency the director organizes search and rescue operations and mobilizes other forces of the civil protection system, including relevant economic entities. He/she is also in charge of sanitary treatment and decontamination mechanisms of chemical, biological and radioactive threats.

Figure 2: Levels of emergency management in Lithuania⁴⁴⁰



The Lithuanian civil security system is also in the process of moderating its emergency communication systems. The prime minister as leader of emergency management gets all the information needed through the communication network and also can give instructions on the basis of this situational awareness. The most important information line goes via the MOI and its FRD. *The Emergency Response Centre* was established in 2003 by the MOI. Its duties included the coordination of issues relating to the adoption of 112 emergency phone call system.⁴⁴¹ Today it is integrated with the 112 centre in Vilnius. It also recently opened a new 112 Centre in Klaipeda. The centre is equipped with a new ICT system and it receives up to 6,500 calls a day. It provides some 800 dispatches of police, fire rescue services and ambulances per day. The future perspective of the Vilnius 112 centre includes a forthcoming integration with the TETRA digital network as well as connection of 112 centres as redundant to each other.⁴⁴²

2.2.4 External dimension

Lithuania has entered into extensive amount of bilateral and multilateral agreements. It is typical that the first bilateral agreements in the field of civil security will be signed with the neighbouring countries. In the case of Lithuania, the closest cooperation has been with the Baltic and Nordic countries which share the land and maritime border and are close to the strategic and operational sphere of the Lithuanian civil security system.

⁴⁴⁰ Mikalauskiene, K. 2013. Civil Protection System in Lithuania – Emergency Management, 6.3.2013, PowerPoint presentation in Helsinki.

⁴⁴¹ Hellenberg, T. 2006. Information Technologies and Decision Support Systems in Civil Protection, *Eurobaltic Publications*, 2006.

⁴⁴² See <u>http://www.sos112.lt/index/en/news/?id=219</u> and <u>http://www.bpc112.lt/index/en/description</u>

Lithuania, Estonia and Latvia signed bilateral agreements already in 1992. In 1993 Lithuania signed an agreement with the Swedish Rescue Services Agency. In 1998, similar agreements were signed with Finland, Denmark and Ukraine. In 2000, the Lithuanian fire and rescue service signed an agreement with the fire service of Hamburg Meckelburg-West Pomerania. This was an interregional agreement. In 2002, agreement was made with the Emergency Ministry (EMERCOM) of Russia⁴⁴³. Further and additional bilateral agreements have been made with Belarus (2003), Poland (2003), Sweden (2003), Hungary (2001), Latvia (2001), Ukraine (2003) and Germany (1994).⁴⁴⁴ Also agreements with Czech Republic (2004), Georgia (2008) and Azerbaijan (2010) have been signed. There is also a separate agreement with the Pennsylvania Emergency Management Agency (2007).⁴⁴⁵

In addition, there are special agreements on nuclear safety: an agreement on early notification in case of nuclear accident and cooperation in the field of nuclear safety and radiological protection has been signed with Poland (1995) and Norway (1995), and an agreement on information exchange and cooperation In the spheres of nuclear safety and radiological protection has been signed with Denmark (1993).⁴⁴⁶

Besides these numerous bilateral agreements, Lithuania has signed related regional and multilateral provisions of the Baltic Assembly (BA), the Baltic Council of Ministers, the Council of the Baltic Sea States (CBSS), the Nordic Council of Ministers (NCM), the Baltic Development Forum, and the Baltic Sea States Subregional Cooperation (BSSSC).⁴⁴⁷

So far, Lithuania has not officially requested disaster assistance through any international or regional arrangements. However, Lithuania has been very active in donating international assistance in various crisis situations, such as: floods in Poland (1998), floods in Georgia (2005), earthquake in Pakistan (2005), forest fires in Macedonia (2007), oil spill in the Daugava River in Latvia (2007), floods in Ukraine (2008), floods in Moldova (2008), floods in Romania (2008), armed conflict in Georgia

⁴⁴³ Cooperation with the Kaliningrad Region is based on the Intergovernmental Long-Term Cooperation Agreement between Lithuania and Russia for the regions of the Republic of Lithuania and the Kaliningrad Region of the Russian Federation.

⁴⁴⁴ Hellenberg, T. & Hedin, S. Cross Border Risks in the Baltic Sea Region, Lessons to be learned, Eurobaltic Publications 4, Helsinki, 2006.

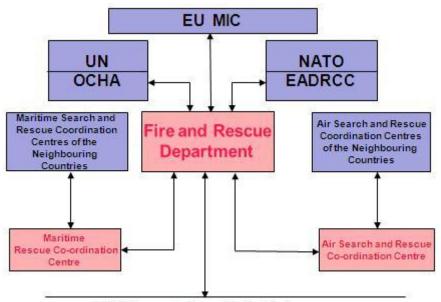
⁴⁴⁵ State Fire and Rescue Service of Lithuania, presentation 15. June 2012 (PowerPoint 17 March 2011).

⁴⁴⁶ Hellenberg, T. & Hedin, S. 2006. Cross Border Risks in the Baltic Sea Region, Lessons to be learned, Eurobaltic Publications 4, Helsinki, 2006.

⁴⁴⁷ European Commission. Vademecum for Civil Protection. Available from: http://ec.europa.eu/echo/civil_protection/civil/vademecum/lt/2-lt.html

(2008), forest fires in Russia (2010), floods in Pakistan (2010), floods in Poland (2010) and floods in Moldova (2010). ⁴⁴⁸

Figure 3. International cooperation and coordination.⁴⁴⁹



Ministries and other state institutions

International co-operation in Lithuania is coordinated by the FRD which cooperates with the disaster response monitoring and coordination centres of the United Nations. It represents Lithuania in the Working Party on Civil Protection of the Council of the European Union, EU directors general for civil protection meetings, EC Civil Protection Committee, EC SEVESO II Implementation and it is also a member of the European Union Fire and Safety Network. Lithuania is also an active member of NATO and its civil emergency planning committee.

Individual ministries and other state civil security institutions participate in other additional activities of international civil protection. International assistance in civil protection and civil security is provided by dispatching an international emergency response team, experts and/or by providing assistance supplies. An international emergency response team is formed by the minister of the Interior and the procedures for requesting, accepting and providing international civil protection assistance are laid down by the government.

⁴⁴⁸ State Fire and Rescue Service of Lithuania, presentation 15. June 2012 (PowerPoint 17 March 2011).

⁴⁴⁹State Fire and Rescue Service of Lithuania presentation 15. June 2012 (PowerPoint slides from 17 March 2011).

2.3.1 Expectations

Civil security is a primary function of public entities and specialized agencies in Lithuania. The citizens' role is growing in terms of coherent risk awareness but also in terms of producing items for the authorities' situational awareness. This can be seen in a number of IT related projects where risk information is disseminated via Internet, social media and even SMS messages. In Lithuania, citizens are seen as a valuable source of collecting civil security data which in turn are entered into the authorities' data bases. Citizens are also expected to contribute and follow multiple guidelines and restrictions in this field. The State Emergency Management Plan refers to the principle of protecting the population from emergencies but also to efforts in providing social and psychological assistance, education and other services in case of disaster. This is an indication of a wide range of services which are derived from the civic society instead of being conducted by the civil security entities themselves.⁴⁵⁰

According to the Eurobarometer poll 383 (2012), 41 percent of the population are fairly concerned about natural disasters and 28 percent very concerned. Regarding man-made disasters, 46 percent are fairly concerned and 38 percent very concerned. In terms of terrorist attacks, 31 percent are fairly concerned and 25 percent very concerned. With this, Lithuania ranks above average among EU member states in relation to threat and hazard perception⁴⁵¹. The relatively high level of citizens' concern related to technological and man-made disasters can be explained by the recent debate about the safety of the Ignalina Nuclear Power Plant (see Section 2.2.3). Otherwise Lithuania ranks clearly lower than average of the EU members in terms of terrorist threat perception.

The trend in public opinion towards civil security has been generally upwards and positive, as can be seen in an example of recent polls regarding trust in firefighters. In 2010, 90 percent of Lithuanians replied that they share trust towards the FRD and the firefighters in particular. This is 30 percent higher than the same poll in the year 2000. This increase in public trust and positive expectations can be explained by the administrative and technical reform the Lithuanian civil security and emergency management system has undergone through the decade.⁴⁵²

⁴⁵⁰ Mikalauskiene, K. 2013. Civil Protection System in Lithuania – Emergency Management, 6.3.2013, PowerPoint presentation in Helsinki.

⁴⁵¹ European Commission. 2013. Special Eurobarometer: http://ec.europa.eu/public_opinion/archives/ebs/ebs_328_en.pdf

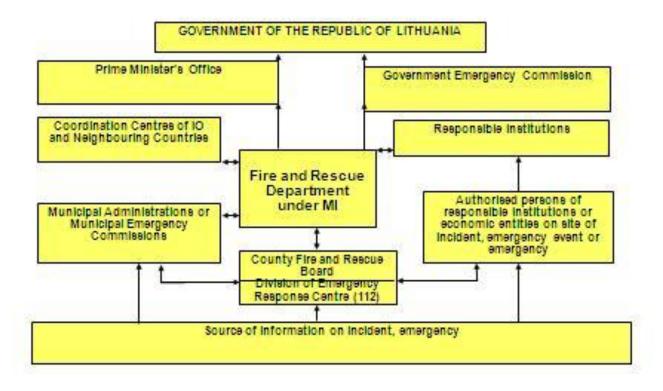
 ⁴⁵² Public opinion about state fire and rescue services: development of public trust in fire-fighters.
 State Fire and Rescue Service of Lithuania presentation 15. June 2012 (power points 17 March 2011)

The other factor which has created a relatively high level of trust towards the Lithuanian civil security system might be explained by the work done with the citizens, economic entities and other non governmental agencies. This work has been carried out with study materials on *risk mapping* to increase the situational awareness of the wider society and it has been reimbursed by the government. Accordingly, state support has been provided to residents, economic entities and other agencies which have suffered damage as a result of an emergency. Socio-economic guarantees of the persons participating in emergency response and mitigation efforts are also strictly defined and under the jurisdiction of laws and other legal acts.

2.3.2 Information

According to a Eurobarometer poll (2009), 12 percent of the respondents felt informed about disaster preparedness and 14 percent about disaster response. This is the lowest level among EU member countries. These results cannot solely be explained by a lack of available information or lack of interest but reflect the past reform processes which have affected the Lithuanian civil security system as a whole. One could argue that the specific two level civil security system of national (state) level and municipal (local) level has also somewhat failed in this respect. Despite the 60 municipal level ECs and a holistic state emergency management plan there are clearly some difficulties in absorbing civil security information by the wider society.

Figure 4. Exchange of Information on Emergencies (Mikalauskiene, K. 2013)⁴⁵³



Exchange of information in emergencies and crisis situations is based on a vertical power structure at the national level. FRD serves as an actual governmental situation centre or dispatch centre between other civil security organisations. It also filters the situational data from the municipal level to the government cabinet and vice versa. The Lithuanian model of information exchange pays particular importance to the economic entities and they are placed on the same level of importance as the public actors at the municipal and local levels in producing situational information (see 2.4.2.). Based on the two level system of ECs (state/local), it is relatively rare that the prime minister's office has been placed on a separate information channel with the government EC. This system requires efficient inter-agency information exchange between the MOI, Prime Minister's Office and other relevant civil security actors such as the Ministry of Foreign Affairs.

2.3.3 Education

Educational activities are mainly organised within the SFRS. The SFRS consists of the FRD under the MOI, 10 county fire and rescue boards, Three fire and rescue boards for protection of critical establishments, a specialized fire and rescue board, firefighters training school, fire research centre and emergency response centre.

⁴⁵³ Mikalauskiene, K. 2013. Civil Protection System in Lithuania – Emergency Management, 6.3.2013, Power Point presentation in Helsinki.

The firefighters training school is the main actor in Lithuanian civil security education. It comprises administrative and theoretical training divisions, divers training division (Klaipeda), civil protection training centre and practical training division.⁴⁵⁴ The fire research centre covers the other half of the public civil security training and represents the main entity in terms of CBRN education in Lithuania. Besides educational activities, the centre performs fire tests, technical fire exercises, fire investigations, attestations of fire equipment and construction products and it takes part in the standardization processes and elaborates various methodological documents.

Universities and other public institutions provide courses and vocational training in the field of civil security and have included some courses in their curriculum covering fields such as natural disaster reduction and roots causes of violent extremism. However, civil security training is mainly done by the public institutions in Lithuania. They also establish the procedures for organizing civil protection exercises. These are implemented by the respected agencies such as the Ministry of Interior and the Ministry of Defence.

Lithuania also conducts extensive scientific research in the area of civil security and emergency management. Besides the above-mentioned public entities and universities there are a number of private entities which take part in EU funded research programmes and projects. For instance the Lithuanian Fire and Rescue Department was one of the key initiators of the CIVPRO civil protection network which was established in 2006 by the EUROBALTIC II project for civil protection, which is part of the EUROBALTIC Programme for Civil Protection initiated by the Council of the Baltic Sea States. The CIVPRO network conducted studies addressing research questions in civil protection, risk management and emergency preparedness. CIVPRO consisted of a variety of partners and its activities covered all of the Baltic Sea Region (BSR). The project performed high quality research using state-of-the-art experimental approaches and risk mapping technologies. It also built a Web-based knowledge base for disseminating accurate and detailed definitions of various risks at the BSR. The project also promoted collaboration with experts within and beyond the network in cross-cutting areas of civil protection, risk management and emergency preparedness.

⁴⁵⁴ *State Fire and Rescue Service of Lithuania*, presentation 15. June 2012 (PowerPoint slides from 17 March 2011).

⁴⁵⁵ CIVPRO website: http://www.helsinki.fi/aleksanteri/civpro/partners.htm

2.4 The role of private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

The Lithuanian civil security system awards special importance to non-profit relief organisations across all levels and fields of civil security. Their role is more visible and documented in relation to response operations than in the field of prevention and preparedness.

The civil protection law (recast) which entered into force in 2010 also regulates the role of non-profit organisations in prevention, preparedness, response and mitigation of emergencies. The municipalities conclude forehand agreements with NGOs, such as the Lithuanian Red Cross, the Lithuanian Riflemen Union, etc. in emergency mitigation activities.

The Lithuanian Red Cross Society was founded in 1919. It was re-established after the collapse of the Soviet Union. The Seimas, the Lithuanian Parliament, passed a Red Cross law in 2000. It has functions and activities conducted by the First Aid Training Department, the Humanitarian Aid Department, the International Humanitarian Law Department, the Refugee Department, the Social Welfare Department, the Tracing Department, and the Youth Department.⁴⁵⁶

2.4.2 Role of profit oriented organisations

The private sector and other economic entities have a right in Lithuania to receive timely information on emergency events and disasters. They also have the right to receive assistance in the event of occurrence of emergencies. However, they also have an obligation to ensure that their activities do not pose a hazard to life, property or the environment and they are obligated to notify the civil protection system of an imminent or actual emergency. Also heads of economic entities and other agencies are responsible for civil protection preparedness at a facility headed by them. They are expected to provide material resources in the event of an emergency. When drawing up the municipal emergency management plan, the participation of those registered in the Register of Facilities of National Significance and Hazardous Establishments is required. Notably, the heads of economic entities are required to organize evacuation of their employees, rescue operations and to be in charge of them.⁴⁵⁷

⁴⁵⁶ Lithuanian Red Cross Society: http://www.ifrc.org/en/what-we-do/where-we-work/europe/lithuanian-redcross-society/

⁴⁵⁷ Hellenberg, T. & Hedin, S. 2006. Cross Border Risks in the Baltic Sea Region, Lessons to be learned, Eurobaltic Publications 4, Helsinki, 2006.

In the event of an emergency, economic entities are, together with residents and other agencies, expected to perform obligatory operations required to ensure emergency response and mitigation of its consequences. Particularly the electronic communications services are expected to give the entities of the civil protection system priority in using the electronic communication networks and receiving other electronic communications services required.

Lithuanian legislation foresees not only preparedness of state institutions and inhabitants for emergencies but also their active participation to reduce consequences and engage in recovery activities." Responsibility for recovery activities is first and foremost in the hands of municipal authorities. If there is not enough available resources, municipalities have the right to ask counties or the government for assistance. According to the legal acts, owners or managers of dangerous objects (including private ones) are obliged to establish emergency management units of stand-by preparedness for consequences elimination according to the contingency plans. The resources for recovery activities are primarily taken from the objects (i.e. the economical entities) and in case it is not enough from municipalities or the government. The government helps mostly in case of natural disasters.⁴⁵⁸

3. Quality Measures

3.1. Effectiveness

3.1.1. Assessments through professional and political inquiries

Political inquiries

The Lithuanian civil security system stands out as a centralized. This means in practise that the system is centralized both at the strategic-political and tactic-operational levels. The Lithuania Parliament (Seimas) cannot exercise direct political control over matters of crisis management. The system has been reformed recently and the county level has been passed so that crises can be managed at the local level or by the government cabinet.

One of the latest political investigations relating to civil security was conducted by the Seimas (Parliament) Committee on National Security and Defence concerning the alleged transportation and confinement of persons detained by the Central Intelligence Agency of the United States in the territory of Lithuania. On 9 September 2009 the Seimas Committee on National Security and Defence and the Seimas Committee on Foreign Affairs conducted a

⁴⁵⁸ Hellenberg, T. & Hedin, S. 2006. Cross Border Risks in the Baltic Sea Region, Lessons to be learned, Eurobaltic Publications 4, Helsinki, 2006.

hearing of representatives of state institutions in relation to the media news regarding the transportation and confinement of CIA detainees in the territory of Lithuania. The hearing process did not bring any data confirming these assumptions.⁴⁵⁹

Professional inquiries

There have been only a few professional inquiries on recent civil security incidents in Lithuania. These have been mainly conducted by the Ministry of Transport and Communications. Otherwise there is no adequate data available for this study.

3.1.2 Limits to national capacities

So far, Lithuania has not declared a state of emergency since the Second World War. The Lithuanian defence forces and voluntary defence system can provide assistance in any civil emergency situation when needed. Ongoing privatization of the civil security system and outsourcing of the capacities and services can have effect on the long run to the Lithuanian capacities at the national and local levels.

3.2 Efficiency

Lithuania survived the global financial crises rather well. Despite shrinking financial resources, the government has promoted new innovations and pioneering research by generating some seed funds for pilot projects and supporting project incubators. Since 2008, the Lithuanian government has committed itself to invest 1.27 billion litas into five integrated centers of science, business and studies (Sauketekis and Santara in Vilnius, Santaka ad Nemunas in Kaunas, and Jurinis in Klaipeda). The aim is to promote cross sectoral cooperation between science and businesses.⁴⁶⁰ This will probably have a positive effect on the civil security sector as a whole and will further enhance the cross sectoral interaction between essential agencies.

In order to enhance efficiency, the government has also implemented a large-scale project to introduce evidence-based policy-making since 2009. The aim has been to make better use of performance indicators, improve budgeting and benefit from impact assessment systems. This work is carried out by the so-called Sunset Commission within the Prime Minister's Office.⁴⁶¹

3.3 Legitimacy

⁴⁵⁹ European Parliament. Annex to the Resolution of the Seimas of the Republic of Lithuania.

⁴⁶⁰ World Bank. BTI2012. Lithuania country report.

⁴⁶¹ World Bank. BTI2012. Lithuania country report.

3.3.1 Political support

The legitimacy of the Lithuanian civil security system can be argued to be sustainable. There have been few exceptional civil security situations such as the H1N1 epidemic in 2009 which have tested the mechanisms. There has also been wide interaction with the public demand on immediate counter-measures. Based on these challenges, the Lithuanian civil security system has been further developed to counter complex disasters and emergency incidents.

3.3.2 Legal support

The Civil Protection Law entered into force in January 2010. The civil protection system in Lithuania has been modernized in line with the common trends in the European Union and the neighbouring Nordic and Baltic countries. *The Parliament* (Seimas) approves the national civil protection programme and the national emergency management plan which are based on Civil Protection Law.

3.3.3 Popular trust and support

The Lithuanian government has been developing a comprehensive strategy entitled "Lithuania 2030". The aim is to identify the structural challenges and lack of trust in public institutions. The World Bank country report on Lithuania (2012) states that the government is able to implement many of its reforms effectively, although its record has not been the same as it used to be during the years prior to EU accession and the first years of EU membership. Civil security is listed as one of the positive achievements and drastic measures against traffic accidents is a case in point. The number has been lowered from 202 per 1 million inhabitants in 2001 to 92 in 2010.⁴⁶²

4. Lithuanian Civil Security in the EU Context

Lithuania is a member of the European Union and a part of the Schengen Area but still outside the eurozone. The civil security and civil protection system (except the economic entities) are financed mainly from the state budget, municipal budgets and other legitimate funding sources such as EU project funding. Economic entities are expected to finance their preparatory measures from their own resources.

Lithuania has been an active partner in building up the European civil security cooperation both within its EU membership and NATO membership. The civil security environment as a whole has

⁴⁶² World Bank. BTI2012. Lithuania country report.

somewhat suffered from a lack of resources due to the vast reform which has taken place within the field of military security. Only during the past decade has the system been built to meet the needs and criteria of pan European cooperation and multinational operations. Lithuania was also hit by the global financial crisis from 2008, which left its mark on the country's civil security system.

In particular, Lithuania is an active participant in the EU mechanisms for disaster assistance and response. The main modules for this co-operation are within the Lithuanian Emergency Response Team (LERT) which comprises a medium urban search and rescue, ground firefighting specialists, search and rescue in CBRN conditions and other technical assistance.

According to the civil protection law, which entered into force on 1. January 2010, the system of civil protection in Lithuania has been streamlined and modernized bearing a resemblance to common trends in the European Union.

There have been 20.7 billion litas of EU structural funds which have financed 4,174 projects during 2007-2013 in Lithuania. One of the major civil security projects is to receive significant financial support to develop and decommission its Chernobyl-type Ignalina nuclear power plant which was closed by the end of 2009.⁴⁶³

5. Conclusion

The civil security system of Lithuania has mainly been created during the past two decades to reach sufficient preparedness which could prove that the country is ready and able to protect its population, property and environment using its resources. This work has been successful and has paved the way for future interaction with regional and international civil security organizations.

The *Civil Protection and Rescue System* is comprised of the Governmental Emergency Committee, Fire and Rescue Department, ministries and other state agencies as well as local authorities including municipal emergency committees, economical entities and the environmental monitoring network. The FRD is in a central role and responsible for the administration and co-ordination of civil protection at all levels of government.

⁴⁶³ World Bank. BTI2012. Lithuania country report.

Lithuania is an active member of the intergovernmental civil security context (UN, EU, NATO and Baltic Sea cooperation). It has also long record of taking part in international rescue and relief missions. Several universities and consulting companies are active in research and education in the field of European civil security studies.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 LITHUANIA

1	Introduction	Scoring instruction	Score	Source	Comments
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	0		
1. b	Is the crisis management approach primarily based on military or civilian operations?	-	2		
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?		1		
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	2	Pursiainen, Hellenberg, Hedin; Civil Protection Systems in the Baltic Sea Region, Towards Integration in Civil Protection Training, Eurobaltic Publications, 2005.	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1		

2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1		
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2		
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	1		
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down=1Bottom-up=2Both = 3	1		
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		NA	http://geert- hofstede.com /countries.ht ml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0.98	http://www. worldvaluess urvey.org/	Year 2000
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		-1	http://www. worldvaluess urvey.org/	Year 2000
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				

2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	 3	Law on Civil Protection, Law on Maritime Safety, Law on Protection of the Marine Environment	We find it very difficult and questionable to make this kind of assessments without possibility for proper interviews with authorities of this country
2.2.1.b	When was the last major reform in the civil security field undertaken?	2010		The new Civil Protection Law entered into force on 1 Jan 2010 and covers Civil Protection System of two levels; national (state) and municipal (local). It regulates prevention, preparedness , response ad mitigation of incidents, emergency events and emergencies. It lays down provisions on request, acceptance and rendering the civil protection assistance.

2.2.4	2008-2012 External dimension				
2.2.3.e	How many major exercises with an international dimension have been organised in the period	Register the number	N/A		
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number	N/A		
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No=0Bylaw=1By executive mandate = 2	1		
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	Yes = 1	1		Municipal EC
2.2.3.a	Is there a specialised agency for crisis response at the national level?		1		Goverment Emergecy Commission
2.2.3	Operational dimension				
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?			1	
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?			1	
2.2.2	Political dimension				
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		1		
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1		
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	-	1		Government can establish, declare and lift the emergency prevention procedure.

				with Nordic and Baltic countries
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	9	Finland, Sweden, Denmark, Ukraine, Hungary, Czech, Georgia, Azerbaijan, Poland.
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	3	EU, UN and NATO
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	0	
2.3	State-citizens relations			
2.3.1	Expectations			
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	
2.3.2	Information			
2.3.2 2.3.2.a	Information Does the country maintain a siren system?	No = 0 Yes = 1	1	

		and national levels = 3		
2.3.2.c	Does the government have a central website with updated	No = 0 Yes, at the local/regional	N/A	
	information on crisis events?	level = 1 Yes, at the national level = 2		
		Yes, at both local/regional and national levels = 3		
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?		N/A	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3	
2.3.3	Education			
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		0	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To member ands wide- spread training programmes for general population = 3	N/A	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	N/A	

2.3.3.d 2.3.3.e	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management? If yes, please provide the overall volume of research funding for	Yes = 1	1 tbc		
2.4	civil security Role of private sector				
2.4	Noie of private sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?				
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2			
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1			
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2			
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.			
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA			

	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	2000-2012. If there are no		
3.3	Legitimacy			
3.3.1	Political support			
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.		
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.		
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?			
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?			
3.3.2	Legal support			
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	U U U U U U U U U U U U U U U U U U U		
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	_		
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	Partial (legally defined		
3.3.3	Popular trust and support			

3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	39	Eurobaromet er 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	35	Special Eurobaromet er 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1			
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011			
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector?	Register the number per 1000 capita for 2011.			
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	-	To be complete d by UI/IFHS	http://ec.eur opa.eu/echo/ files/policies/ disaster_resp onse/EUCPM activations since_010120 07.pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be complete d by UI/IFHS	opa.eu/echo/	
4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence	

				College.
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009- 2010 training cycle?	Register the number for the 2009-2010 training cycle	15	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	6	http://ec.eur opa.eu/echo/ policies/prev ention_prepa redness/prep aredness_en. htm
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	1	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions _since_2002. doc
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	0.4	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions _since_2002. doc
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	50	Special Eurobaromet er 383 (2012)
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for	Register the percentage	86	Special Eurobaromet er 383 (2012)

1			1	
	attitude)			

Annex II: H1N1 in Lithuania

The Lithuanian response and resilience in the case of the H1N1 epidemic has been widely studied. By 26 June 2009, Lithuania had confirmed the first case of H1N1 flu. The case had appeared at the local HIV centre as was pointed out by Romualdas Sabaliauskas, Head of the Centre for Emergency Situations under the Ministry of Health. Speculations were based on the fact that the person had been sailing in India and probably caught the virus from there.⁴⁶⁴

By 21 August 2009, Lithuania had reported 47 confirmed H1N1 flu cases. There were different perceptions of the situation. Viktorija Jasulaitiene, Deputy Director of the Center for Prevention and Control of Communicable Diseases pointed out that such a big increase in the number of H1N1 patients was not expected (that fall) as most of the earlier cases had involved mainly people who were travelling. Her argument was that due to the bad economic situation "there are fewer visits abroad this year than in the past".⁴⁶⁵

The Ministry of Health informed the media representatives that they were updating their websites on a daily basis to provide *adequate* flu-information. Without specifications the Ministry also informed of having been in touch with hospitals, health agencies and local governments. It had also considered closing a number of schools if needed. The Ministry of Health had requested 5 million LTL to increase the stockpiles of antivirus drugs and 50 million LTL to mobilize vaccinations of 30 percent of the population.

Lithuanian Tribute has estimated that Lithuanian authorities started to pay attention to H1N1 only after there were some 22 people killed by the H1N1 in neighbouring Ukraine. Some media sources suggested that, Lithuania was not prepared and clearly behind in proper preparations and countermeasures. Vice Minister of Health Arturas Skikas pointed out that even if the anti virus vaccine had been purchased in early November 2009 it would have reached Lithuania only at the beginning of 2010.

On 12 November the Lithuanian Health Protection Ministry (Lietuvos Sivekatos Apsaugos Ministerija) had confirmed 76 cases of the H1N1. One single and major outbreak was issued at the General Jono Zemaicio Military Academy in Vilnius with several dozen potential cases. All together, Lithuania had reported over 6500 cases during 2009 (by November) although there was lack of information if these

⁴⁶⁴ Reuters. 2009. Lithuania confirms first case of H1N1 flu. 26.6.2009

⁴⁶⁵ Scoop.co.nz. 2009. H1N1: Lithuania's Preparation for Pandemic Lacks. 26.8.2009.

were from H1N1 strain. Soon the situation could have reached emergency conditions as there was not enough counter medicine available at the time.

Counter-medicine was predicted to arrive by mid 2010 by the Lithuanian Health Protection Ministry.⁴⁶⁶ Interestingly the Lithuanian media compared the situation to other two Baltic countries. It was pointed out that even in Estonia the situation was similar "who is more Baltic than Nordic this time.." Later on Antanas Matulas, chairperson of the parliamentary Health Committee pointed out that the country was not ready and that it might be necessary to request assistance from other countries.⁴⁶⁷

Referring to a study "Hospitalized adult patients with 2009 pandemic in influenza A (H1N1) in Kaunas" conducted by the Department of Infectious Diseases of the Lithuanian University of Medical Sciences, it seems that the 2009 pandemic influenza (H1N1) caused "considerable morbidity in a significant proportion of hospitalized adults".⁴⁶⁸ The main conclusion from this study was that the major factor associated with the increasing and complicated course of illness was delayed antiviral treatment.

By the end of 2010 about 88,000 people were vaccinated against H1N1 influenza.⁴⁶⁹ After the challenging times of public awareness in 2009, this can be regarded as an achievement by the Lithuanian government. On 10 August 2010 WHO announced that the H1N1 influenza virus had moved into the post-pandemic period. On the other hand, WHO Director-General Dr Margaret Chan warned that localized outbreaks might continue.⁴⁷⁰

The Special Eurobarometer report on H1N1 was published in March 2010. It analyzed common awareness of the H1N1 outbreak. Those citizens most informed about H1N1 were from Iceland (97 percent) by responding that they had heard of the pandemic influenza and that they knew what it meant. They were followed by the Swiss (96 percent) and the Finns (95 percent). In contrast, Lithuanians who felt knowledgeable about H1N1 were listed as only 79 percent. Moreover, when asked about the likelihood of personally catching the H1N1 flu, as many as 38 percent of Lithuanians felt it to be likely, whereas the average EU figure was 28 percent. Finally, when asked whether citizens felt informed about the pandemic influenza H1N1, Lithuanians ranked at the lowest level as 54 percent of the respondents were either not informed at all (7 percent) or felt not being very well informed (47 percent).⁴⁷¹

⁴⁶⁶ Scholars Health Insurance Programme. 2009. Government Warning Issued for Lithuania. 12.11.2009

⁴⁶⁷ The Lithuania Tribune. 2009. Lithuania is ready to face the wine flu.. Oh really? 2.11.2009

⁴⁶⁸ Department of Infectious Diseases, Medical Academy, Lithuanian University of Health Sciences. 2011. Hospitalized adult patients with 2009 pandemic influenza H1N1 in Kaunas, Lithuania.

⁴⁶⁹ Flutrackers.com. 2011. The first two deaths from H1N1 influenza virus in Lithuania.

⁴⁷⁰ WHO. 2014. Pandemic (H1N1) 2009 in the European Region.

⁴⁷¹ European Commission. 2010. Special Eurobarometer. Available from: http://ec.europa.eu/public opinion/flash/fl 287 en.pdf

Annex III: Resources

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Malta

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Executive Summary

Despite the country's small size, civil security challenges are common in Malta. For the last decade, the country has experienced flash floods almost every autumn and a number of industrial and transport accidents. The signature crisis for the time period 2000-2012 was the Libya crisis that caused a wave of fleeing civilians and refugees to seek refuge on the island.

Crisis management in Malta is centralised. Decisions flow from the government which is consulted by the Civil Protection Council; executive responsibility lies with the Civil Protection Department. There is no clear distinction between local, regional and national delivery of civil protection in Malta; every type of emergency will unavoidably mobilise the national level of crisis management. The institutional aspects of civil protection are depicted in the 'Civil Protection Act 1999', the sole official document on the matter.

The Libya crisis and the autumn flash floods unravel the limitations of the country's civil security system. The national capacities exclusively reserved for civil protection are very limited, forcing the public authorities to count firstly upon the voluntary sector in emergency response (not only in recovery and relief) and secondly upon the direct involvement of citizens, who are bound together in times of crisis due to communitarian solidarity. The administration has not developed a mentality of robust pre-planning and prevention of civil threats based upon exercises of national risk assessment; crises are confronted as they occur. In this framework, citizens seem puzzled about the effectiveness of the Maltese civil security apparatus and their occasional discontent materialize in criticism of the national press towards the government's activities. Despite the public criticism, the pathologies of the civil security system still survive since the parliamentary scrutiny of governmental actions in civil security is rather scarce.

Key Findings

1. The country in general deviates significantly from the standards set by the EU and the other MS in civil security and protection. No matter what the scale of civil security challenge is, it will activate the central and national level of crisis management. To a certain extent, this is justifiable due to the country's small size. A civil authority of limited size is formally responsible for crisis management, but the security services may be invoked during times of emergency.

2. There is a limited focus upon crisis prevention and preparedness in Malta. Even though there are national exercises referring to civil protection, the country does not regularly conduct national risk assessments that would help the authorities to design more efficient emergency plans.

3. The distinction between the terms civil security and internal or national security has not been clearly established in the Maltese context. Thus, there are different perceptions of what exactly constitutes a civil security threat in Malta. The education and information of the citizens has become one of the key responsibilities of the voluntary organisations and civil society groups.

4. Taking into account the limited national capacities, the country has thus to depend upon the heavy engagement of the voluntary sector not only for emergency recovery but also for emergency response and preparedness (training of citizens).

5. In the phase of emergency response, the recruitment of the private sector by the Maltese authorities is based upon an informal cooperation between private enterprises and the authorities. In general, the small size of the Maltese society favours informal arrangements in crisis management.

6. There is no parliamentary committee responsible for interpellating civil protection in Malta. The lack of fervent parliamentary scrutiny could limit the legitimacy of the government's actions in civil security.

7. Malta engages in inter-state cooperation in civil security matters. It has manifoldly provided assistance to other countries through the Civil Protection Mechanism and has participated in the Mechanism's training and exercise schemes. Moreover, the country has traditionally cooperated with Italy in issues of civil protection (e.g., joint exercises and exchange of experts).

8. Despite its shortcomings, the Maltese society has to date managed to cope with civil security challenges due to an all-society approach when calamities occur (e.g. Libya crisis). The whole society unites in a spirit of community and solidarity in the face of a disaster; such reaction chimes with the country's religious and traditional national profile. From all the three countries we have examined, Malta is the best fit for Hofstede et al.'s cultural Indices.

List of Abbreviations

CBRN	Chemical, Biological, Radiological and Nuclear
CSOs	Civil Society Organisations
DK	Don't Know
IDV	Individualist Index
LTO	Long Term Orientation index
МІС	Monitoring and Information Centre
UAI	Uncertainty Avoidance Index
UNESCO	United Nations Educational, Scientific and Cultural Organization

1. Introduction

Which is the official definition of crisis in Malta? According to the Maltese *Civil Protection Act 1999*, "disaster" means an unforeseeable event which causes or threatens to cause damage to the lives and health of a significant number of people, or to property or to vital supply resources of the population or to the environment, and the urgency of the situation requires the co-operation of authorities, institutions, and organisations for prompt remedial action' (Parliament of Malta, 1999).

For Maltese society, the most frequent type of crisis complying with the above definition would be the flash floods in early autumn that cause extensive damage of infrastructure and even casualties. Almost as frequent as floods are transport accidents occurring mainly during the summer months (see Table 1 below). A less frequent emergency arises because of a specific type of industrial accident, incidents in firework factories (e.g. explosions) (Xuereb, 2012).

Concerning precarious contingencies, known as low likelihood/high impact crises and disasters, they appear in three main forms in Malta. The first derives from the probability of a high-intensity earthquake as the country is geologically situated in an earthquake-prone area. The second is the contingency of a terrorist attack. The third is the possible isolation of the island in the case of the eruption of Mount Etna' because of the resultant transport problems.

However, a significant alert for the Maltese authorities during the period 2000-2012 was the Libya crisis, as the island had to host a number of European civilians fleeing from Libya and who had to be transferred safely back to their countries, as well as refugees and asylum seekers. According to Malta's Prime Minister Lawrence Gonzi, the Libyan crisis was 'the largest challenge to Malta's foreign and security policy since independence' (Cordina, 2012).

Let us note here that the picture of emergencies in Malta for the period 2000-2012 proffered by the International Disaster Database deviates from our account based upon reports and articles from the Maltese media (*Times of Malta, Malta Independent, National*). The database only reports transport accidents for the period under examination (Centre for Research on the Epidemiology of Disasters, undated). Triangulating this information with the country's 'Road Safety Country Profile', we estimate that most of these transport accidents are road accidents (EU Commission, DG MOVE, 2005).

The discussion above can be summarised in Table 1:

	Crisis Description		Damage				
Year/Month		Crisis Category	Persons killed	Persons injured	Persons affected		
Every autumn	Flash Floods	Natural disaster			Whole society		
February 2004		Transport Accident	16		4		
August 2005		Transport Accident	26		2		
June 2006		Transport Accident	11				
July 2006		Transport Accident	17				
June 2007		Transport Accident	22		4		
August 2007		Transport Accident	10		13		
August 2008		Transport Accident	10		8		
2009	Swine Flu	Pandemics/ infectious diseases	4		Whole society		
September 2010	Farrugia Brothers Fireworks Factory Explosion	Industrial accident	6				
February 2012	Libya Crisis	External crisis			Whole society		
November 2012	Gharb Fireworks Factory Explosion	Industrial accident	4				
Source: The International Disaster Database, http://www.omdat.bo/ and Maltose pross							

Table 1: Major civil security crises in Malta for the period 2000-2012

Source: The International Disaster Database, http://www.emdat.be/ and Maltese press

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

The Republic of Malta is an insular country (three islands: Malta, Gozo and Comino) which is distinct for its small size and its geographical location in the middle of the Mediterranean Sea, with a population that does not exceed half a million inhabitants (417,617 in 2012) (National Statistics Office of Malta, 2013). The country gained its national independence in 1964. It was declared a democratic republic in 1974 (Parliament of Malta, undated). Malta became a full member state of the EU during the Eastern enlargement in 2004 (European Commission, DG Enlargement, 2012). The most well-known feature of the country's foreign policy is the stance of neutrality confirmed by the Constitution of Malta itself.

The Maltese perception of civil security dates back to World War II, when the island(s) was/were besieged and severely bombed by the Italian forces (Malta History & Archaeology, 2006). For the first time, the need to provide shelter for civilians against any external hostility became apparent. The World War II bombings also bequeathed to the people of Malta a spirit of societal resilience. The latter would thrive along the lines of solidarity in the relatively small communities of Malta.

The establishment of a democratic republic and the emergence of an independent polity soon raised concerns of how to ensure civil security. In the past this had been the main duty of the police force and security services. Malta's armed forces, and more specifically the reserved forces of the army, are still seen as employable for crisis management and emergency response. According to Article 10 of the *Malta Armed Forces Act of 1982*, 'If it appears to the president of Malta that national danger is imminent or that a great emergency has arisen, he may by order signified under the hand of the minister, provide that men who would otherwise fall to be transferred to the reserve shall continue in service' (Parliament of Malta, 1982). This is more clearly expressed in Title IV of the Act which elaborates on the use of the reserved forces of the country. Thus, Article 32 of the Act foresees the callout of reserved forces (whether they belong to Malta's regular or territorial force): 'If it appears to the president of Malta that national danger is imminent or that a great emergency forces, the military force's structure includes a unit called 'Emergency Volunteer Reserve Force' (EVRF), which consists of volunteers that get proper military training and are made available for 'civil emergency duties' (Armed Forces of Malta, undated). In any

case, though, Maltese civil security is nowadays the concern and responsibility of the civilian authorities; this will become more explicit in the analysis of the following sub-sections.

We are inserting here two figures capturing the basic organisation of the Maltese civil security system. The first one describes the hierarchy and information flows whereas the second one depicts the coordination procedures when disasters strike (EU Commission, DG ECHO, undated 2). This information will help the reader to better grasp the sections that follow.

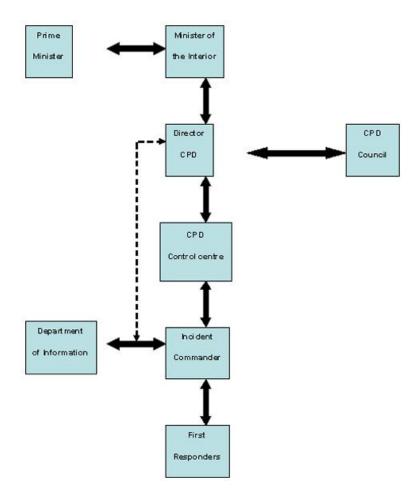
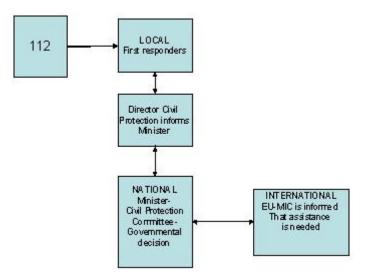


Figure 1: Lines of command and information flows

Source: EU Commission, DG ECHO

Figure 2: Lines of Coordination in emergency response



Source: EU Commission, DG ECHO

2.1.2 Government/social culture

Can the aspect of culture help us better understand how Maltese civil security evolved throughout the last decades? We employ the empirical research of Geert Hofstede and collaborators, and the analysis of World Values Survey results to describe the cultural landscape of Malta (Hofstede et al. 2010, undated; World Values Survey Organization, 2012). In Hofstede et al.'s cultural indices Malta appears as follows: in the Individualism Index (IDV) the country scores 59, which shows a moderately individualist society (the UK's score is 89), chiming with the country's religious profile and respect of tradition as well as with the picture of a society where the idea of community and collegial solidarity is still strong. In the Uncertainty Avoidance Index (UAI) the Maltese score is as high as 96, indicating a society that avoids uncertainty and behavioural deviations, clinging to the orthodoxy of societal credentials, a point which chimes again with how important the Catholic Church is for the country. As we will show below this aversion towards uncertainties is not reflected in the levels of the public administration's preparedness towards contingencies; the Maltese civil security has not adequately invested in disaster preparedness and emergency planning. Data from the World Values Survey supplement the societal picture of Malta as illustrated by Hofstede et al.'s research. The country is a traditional society where the role of religion is well established (scoring -1.53 in the Traditional versus Secular dimension in the late 1990s) and is still slightly concerned with issues of welfare and survival, not being a post-materialist society (scoring -0.03 in the Survival versus Self Expression values dimension in the late 1990s) (Inglehart & Welzel, 2012; World Values Surveys Organization, 2012). In sum, Malta is a traditional country, with a strong focus on religion and history, whose citizens would like to avoid uncertainties and be protected towards unpleasant contingencies.

Nevertheless, there is a perception gap between this picture and what is actually practised in the field of crisis management on behalf of the authorities. This will be further discussed later on in this report.

2.2 Legal and constitutional aspects of the civil security system

2.2.1 Statutory basis

From the 1990s onwards we observe an effort to distinguish civil protection/civil security from external security entrusted to the country's armed forces. Presumably, one of the reasons pushing Malta towards establishing a clear distinction between civil security pursued through civil forces and national security guaranteed by the army was the country's accession negotiations with the EU. The political willingness for reforms resulted in the *Civil Protection Act of 1999* which to date is the sole document that determines all legal aspects of civil protection in Malta.

2.2.2 Political and operational dimensions

Article 3 of the *Civil Protection Act 1999* establishes the Civil Protection Department, whereas Article 5 depicts jurisdiction and responsibilities of the Civil Protection Council. These are the key public divisions/offices regulating and delivering civil protection in Malta.

Starting with the Civil Protection Department, it operates administratively within the Ministry of Home and Parliamentary Affairs (HPA). The Act allocates overall responsibility of Malta's civil security mechanism to the 'minister for civil protection' (Article 7), who is the minister of the interior/minister of HPA (see scheme 1). Interestingly the Act does not explicitly define the minister of HPA as the sole person who can deal with civil protection. The wording of the act itself is not more explicit when reading: "the minister" means the minister responsible for civil protection and includes, to the extent and authority given, any person or body of persons authorised by the said minister for any purpose or class of purposes of this Act' (Article 2). This means that the minister of HPA can delegate authorities of civil protection to lower-ranking officers and presumably can ask the assistance of other government departments while dealing with a civil crisis.

The functions of the Civil Protection Department include: the preparation of contingency plans and risk assessments; the training of civil forces (Malta Police Force, Malta Police Fire Brigade) in issues of crisis management and emergency response; the infrastructural arrangements to ensure that government departments can coordinate the tackling of a civil security challenge; information of the

public and increase of awareness regarding civil crises; the maintenance of an assistance and rescue force; and finally the proposal of regulations which are relevant to civil security/protection (Article 4).

The Civil Protection Department mainly consists of officers who previously served the police force as the 'Malta Police Fire Brigade'. In 2012, the staff of the department numbered approximately 110 people, a relatively small number for the aforementioned variety of responsibilities (Civil Protection Department, 2008). Especially since Malta's Civil Protection Department is involved in emergency preparedness and response – it conducts operations itself – a duty following from the obligation above for the department to maintain an assistance and rescue force.

Turning to the Civil Protection Council, it is determined by the prime minister, its members being appointed with an annual, renewable mandate. The council resembles a crisis management task force or working group and consists of a limited number of senior civil servants with experience in civil security matters, a representative from the emergency voluntary sector, a representative chosen by the local councils, the police commissioner, and the Armed Forces commander. The minister responsible for civil protection chairs the council, deputised by the permanent secretary in her ministry; the director of the Civil Protection Department is always the secretary of the council (Article 5).

The Civil Protection Council has various responsibilities. First, it functions as a consultative body towards the government with regard to civil protection; not only can it initiate acts in the field of civil security, it also approves the country's contingency plans. Second, during a crisis it provides the strategic and operational design of the emergency response, just like a crisis room, offering additional advice to the minister responsible for civil protection. Third, the council has supervisory duties over the work of the Civil Protection Department. Fourth, it supports the voluntary organisations that are involved in Malta's civil protection (Article 6).

Apart from the Civil Protection Department and the Civil Protection Council which are involved with the strategic design of crisis management and delivery of operations, the political decisions and the necessary legal framing of the civil security mechanism rest with the government, where the office of the prime minister plays a fundamental role. More precisely, the Defence Matters Directorate within the office of the prime minister both deals with external security and provides policy advice concerning defence matters in general; this should include civil security issues (Government of Malta, Office of the Prime Minister, 2012).

The government has the opportunity to test the reflexes of the civil security mechanism once every year in the context of the national exercise NOVEX, an earthquake training exercise that engages all

the government departments as well as the emergency services of the country. The exercise which is a series of simulations after an earthquake disaster is planned and operated by the Civil Protection Department. As the director of the department declared after the completion of the exercise in November 2012, 'civil protection is not the sole remit of official entities and agencies like the CPF, the police, or the Armed Forces, but should be seen as a community-based effort' (Laiviera, 2012). The public administration also organises a number of paper exercises. Recently, Malta participated in the UNESCO tsunami exercise NEAMWave12. Even though this was largely a communication exercise, the Maltese authorities grasped the opportunity to combine it with a cross-sectoral simulation exercise of tackling maritime disasters (North-Eastern Atlantic and Mediterranean Tsunami Information Centre, 2013).

Due to insufficient data, we are not providing a complete case study of a crisis here. Nevertheless, in the following pages there is discussion of both industrial accidents (explosions in fireworks factories) and of the Libya crisis.

2.2.3 External dimension

Malta is a member of the Regional Environmental Center for Central and Eastern Europe (REC), of the Programme for the Prevention Preparedness and Response to Natural and Man-Made Disasters (PPRD-South), of the Euro-Mediterranean Partnership (EUROMED): Southern Europe, Northern Africa and the Middle East, and of the EUR-OPA Major Hazards Agreement. In some of these regimes of regional cooperation, Malta has initially participated because the EU joined with all its member states. In general, the country's more active membership is in the EU's Civil Protection Mechanism. The Union has been envisaged as a force pushing for and enabling institutional changes in the country's civil security system.

The country has signed bilateral agreements with Italy and Greece in the field of civil protection (EU Commission, DG ECHO, undated 2). The agreements with Italy concentrate upon visits of experts during exercises as well as participation of staff from Malta's Civil Protection Department in Italian training programmes on emergency response (di-ve.com news, 2012). In 2001, the Maltese government signed a cooperation agreement with Greece covering a broad gamut of perspectives of civil security: exchange of technical information regarding crisis management, cooperation in pre-empting natural disasters and in tackling transboundary crisis (Jurvélius, 2004: 132)

2.3.1 Expectations

The public perception of crisis to a certain extent determines citizens' expectations in civil protection. According to the *Special Eurobarometer Survey 328 on Civil Protection*, the citizens feel that Malta is mostly endangered by marine pollution (55 percent) or by earthquakes (48 percent) (EU, 2009). In the *Special Eurobarometer Survey 383 on Civil Protection*, terrorism seems to concern roughly one out of two respondents (51 percent are 'concerned' versus 49 percent that are 'not concerned'). The Maltese seem to be much more anxious about man-made disasters such as accidents and oil-spills than terrorism, with a percentage of 73 declaring their concern about these particular emergencies (EU, 2012). There is an overlap between citizens' attitudes towards contingencies and the crises of the last decade, mainly transport and industrial accidents as well as natural disasters. Therefore, it can be deduced that Maltese public opinion expects the state to deliver civil protection against these specific types of emergency. At the same time, the Maltese government counts upon the cooperation of the people when civil crises emerge. This issue became evident with the mobilisation of the whole country during the Libya crisis. It is also evident in the strong relationships between the civil protection authorities and the voluntary services of the island.

2.3.2 Information and education

A large percentage of citizens (71 percent) admit to not being well informed about disaster prevention. This percentage is even bigger for disaster prevention at the EU level (76 percent). A similar picture is presented for disaster preparedness and disaster response at national or EU level, with percentages of unawareness to surpass 70 percent in both cases (EU, 2009). Interestingly, citizens have more trust in the scientific community (48 percent) than in the Maltese government (39 percent) for objective information about civil security. The percentage of trust in NGOs being a reliable source of information is also high (37 percent) (*ibid*.), confirming the vital role that the voluntary sector plays in delivering civil protection in Malta. We will be briefly referring to issues of education in the following sub-section as well.

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

Civil security in Malta is not merely the business of the public sector. The voluntary sector is heavily involved with crisis management. Red Cross Malta, consisting of around sixty volunteers, informally

leads a group of civil society organisations (CSOs) engaged in Malta's civil security (Red Cross Malta, 2012). This group also includes St. John Ambulance-Malta, St John Rescue Corps-Malta and the Emergency Fire & Rescue Unit (EFRU) (St. John Ambulance Malta, undated; St John Rescue Corps-Malta, 2012; Emergency Fire & Rescue Unit, undated). These four organisations maintain official websites to inform the Maltese people about occurring crises, educate them regarding civil security and recruit them as volunteers. All four organisations proffer programmes of rescue training and courses in crisis management to their volunteers. Their administration is financially supported by membership fees, donations and sponsorships.

Malta's voluntary sector does not deal solely with recovery and relief issues. Its services can be recruited by the Civil Protection Department and thus the voluntary organisations can actively participate in emergency response and delivery of civil protection (Red Cross Malta, 2012; St John Rescue Corps-Malta, 2012). Referring more specifically to the Red Cross, 'Malta RC has trained volunteers in this area to assist in disaster situations *and also as auxiliaries to the Civil Protection Department*' (Red Cross, EU Office, undated, our emphasis). The actions of CSOs are always coordinated by the director of the Civil Protection Department. The gamut of voluntary services provided by Red Cross Malta is substantial: except for first aid and ambulance services, the organisation is active in land search and rescue activity. It also trains lifeguards whose assistance becomes essential during the summer when the tourist flux is at its peak (*ibid*.)

2.4.2 Role of profit-oriented organisations

Privately owned resources can be made available for the delivery of civil protection through informal decisions and agreements between the Civil Protection Department and the local communities. These informal arrangements are favoured by the society's limited size. Legally, the *Civil Protection Act* allows the Director of Civil Protection to recruit the private sector during a major emergency (Parliament of Malta, 1999). However, a series of informal understandings has developed between the authorities and the citizens to ensure public-private cooperation during emergency response and recovery. The institutionalisation of how public authorities can impose a mandate upon the private sector when managing crises is not yet in place.

3. Quality Measures 3.1 Effectiveness⁴⁷²

There are a number of objective reasons which facilitate timely confrontation of civil crises in Malta. First of all, the size of the island facilitates the mobilisation of the Maltese authorities. Even though the Republic of Malta consists of three islands, forces available to the Civil Protection Department are stationed in Gozo and there is a police station in Comino (The Ministry of Home and Parliamentary Affairs, 2012). Secondly, the country's civil security system has not been severely challenged by low likelihood/high impact crises such as volcano eruptions, chemical, biological, radiological and nuclear (CBRN) incidents, or terrorist attacks.

On the other hand, factors rendering civil protection effective may flow from the socio-political reality of the country. The relatively small size of the population has resulted in sentiments of solidarity, community and self-assistance on the part of the people, as confirmed by the research on Maltese culture we previously examined. Simply put, citizens know each other well and thus they are willing to help each other in a calamity. This is confirmed by the heavy involvement of the civil society organisations in emergency response, recovery and relief. Moreover, the government and emergency services have developed a working relationship with the citizens to request their assistance in times of emergency; therefore, the civil security mechanism can react very quickly when civil threats emerge. Apart from the small size of the population, the public sector itself is small and the coordination of governmental agencies can be fairly rapid; hence, business continuity in crisis management is secured.

Whilst these aspects help to facilitate the delivery of civil protection in Malta, there are also a number of parameters hampering the effectiveness of the country's civil security mechanism, such as:

- 10. The country's legal framework with regard to civil protection is a unique document that dates from 1999 (*Civil Protection Act*) and has not been updated since then. This translates into the lack of a legislative framework regarding new types of civil security challenges such as CBRN attacks or cyber-crime.
- 11. Even more important, the civil security system of Malta is extremely centralised: there is no distinction between legal, regional, and national management of civil crises; every crisis is considered a national concern and thus activates the central government's mechanism. This may result not only in delays tackling the crisis due to bureaucratic hurdles but may also

⁴⁷² This section has been developed upon informal exchanges of opinions with Maltese civil security stakeholders.

trigger a whole-scale operation when only a localised emergency response is necessary.

- 12. A major issue has been the absence of systematic and thorough national risk assessment in Malta. This implies that the phase of prevention in the emergency cycle is seriously compromised because there is no assessment of potential risks and contingencies endangering civil security. The pre-planning of how to deal with a crisis in Malta has not been given due attention. This is partly because both the political elites and society reckon that crises are scarce phenomena and the probability of their occurrence in Malta is much lower than in the rest of Europe.
- 13. The general lack of an understanding concerning crisis prevention spills over to issues of preparedness. The civil security system in Malta is highly reactive and not proactive, and depends upon the activation of the national decision-making process no matter what the type and level of crisis is.
- 14. An issue that is strongly associated with preparedness is the development of risk awareness in society. In Malta, there has been no systematic endeavour to inform the public, to educate citizens about dangers and imminent emergencies and thus to increase their own perception of potential hazards. Even though dissemination of information towards the public and educational matters is a duty of the Civil Protection Department (for instance it has published a brief emergency guide for children's education) (Civil Protection Department of Malta, 2012), emergency awareness depends considerably upon initiatives of the voluntary sector of the country.

3.1.1 Limits to national capacities

Taking into account the inbuilt limitations of the civil security mechanism such as limited personnel, lack of specialised administration dealing with specific types of emergencies, and lack of an updated legal institutional frame regarding crisis management, one can assume that the civil security system will reach its limits in a crisis of significant magnitude. Two examples confirm our estimation. The first one is the country's response to the Libya crisis. Even though the country did not officially ask for international or European assistance and coped with the crisis by launching a whole-of-society emergency response, the incident has provoked a social and political tumult, *inter alia* fears of massive immigration towards Malta from Northern Africa (Bundhun, 2011); the impact of the Libya crisis was still vivid in Maltese society by the end of 2012. The second example is the country's reaction to the flash floods repeated almost every autumn. The country's civil security apparatus faces difficulties in coping with their impact. This point is supported by the fact that the country received a grant of almost one million Euros from the EU Solidarity Fund to confront the disastrous impact of the storms and floods of September 2003 (EU Commission, DG REGIO, undated).

3.2 Efficiency

Concerning the efficiency of the country's civil security system, the abundance/paucity and availability of resources should be considered here. The national statistics, as presented to Eurostat, give a first picture of how limited the budget allocated to civil protection is in Malta. In Table 2 below are some indicators that address government expenditures (general government) expressed in national GDP percentages, in different areas that can associate with civil security, and for the period 2007-2011.

Table 2: Indicators of general government expenditures

Category of Expenditure	2007	2008	2009	2010	2011
Civil Defence	0	0	0	0	0
Public Order and Safety	1.4	1.4	1.5	1.5	1.4
Police Services	0.9	0.9	0.9	0.9	0.9
Fire-Protection Services	0.1	0.1	0.1	0.1	0.1
Environment Protection	1.7	1.6	1.7	2	1.3

Source: Eurostat, COFOG (undated)

Setting aside the expenditures on environment protection that may well refer to other than civil security issues, the resources that are formally allocated to civil protection in Malta are rather limited. The percentage of GDP spent on civil protection is in most cases inferior to the corresponding percentages of what other EU member states spend on civil crisis management (EUROSTAT, COFOG, undated). Moreover, the Civil Protection Department is considered relatively understaffed (110 employees). The department's responsibilities are overstretched as it both coordinates and delivers crisis management. Lack of resources forces the public administration *de facto* to allocate services to the private sector (e.g. ambulance services, private clinics and hospitals) when crises occur. It also means that the authority formally responsible for civil protection (Civil Protection Department) has to be subsidised by the security services of the island, either the police force or the armed forces if a crisis is considerably aggravated.

3.3 Legitimacy

3.3.1 Political and legal support

The necessary institutional tools to hold the Maltese government to account for maladministration regarding civil protection are in place. For example, the Civil Protection Department is audited by the

National Audit Office (National Audit Office, undated). Furthermore, due to the *Freedom of Information Act*, the Department receives inquiries regarding civil security and is obliged to respond to them.

However, there is no parliamentary committee on civil protection as such in Malta. Parliamentary questions are frequent but civil security issues are not their priority. There have been no major parliamentary inquiries conducted for maladministration on behalf of the government. This should come as no surprise since there is no corresponding parliamentary committee that would investigate malpractice in civil protection and thus prepare and submit a report requesting a parliamentary inquiry.

3.3.2 Popular trust and support

The discourse around problematic aspects of civil protection is most conspicuously evident in the Maltese press. We present here the recent incident of an explosion in a fireworks factory in November 2012 which resulted in four deaths. This unfortunate event provoked the *Times of Malta* to launch a debate about the ban on hazardous substances employed in the manufacturing of fireworks, a tradition well established in Malta for religious festivities (Boissevain, 1965). A commission of experts was mandated to investigate the production of fireworks since 2011, but their recommendation for a ban on hazardous materials reached a stalemate before the country's government. The passage from the *Times of Malta* astutely depicts pathologies of the country's civil security system, such as lack of pre-planning to deal with a crisis, lack of understanding of imminent civil security threats, lack of continuous collaboration between the civil security stakeholders, and lack of political decisiveness to proceed to a radical improvement of civil protection (Michallef 2012). Such a critical reception sustains the critical points raised above in the section concerning effectiveness.

Interestingly, the press has pinpointed weaknesses of the civil security mechanism even after the successful management of the Libya crisis. The *Malta Independent* quoted the prime minister's statement that the country's contingency plans were put under a stress-test by the Libya crisis, forcing the government to reconsider civil security (Cordina, 2012). The *Times of Malta* has presented lessons learnt after the Libya crisis in a more critical manner, underscoring that the country needs a more focused crisis management system, a registry of national risks as well as of existing national capacities to tackle them, and better communication and coordination between the different civil security stakeholders with expertise in the domain of civil protection (Calleja, 2012). The critical assessment of the Libya crisis on behalf of the press again sustains our comments on the limitations of national capacities in crisis management (see relevant sub-section above).

More importantly, citizens themselves appear puzzled on whether crisis management is successfully conducted by the public authorities. The data from the *Special Eurobarometer Survey 371 on Internal Security* are revealing. Even though 38 percent of the island's population believe that the administration does enough to tackle natural and man-made disasters (versus 32 percent who do not agree), these percentages come with a 30 percent share of 'Don't Know' (DK) replies, confirming citizens' limitations in formulating an opinion on the matter. Respondents also had to answer in the same survey whether Malta does enough to secure EU borders, a question which can be related to the antecedent Libya crisis. 34 percent feel that their country is doing enough to secure EU borders, 33 percent disagree and the percentage of DK responses reaches 33 percent. Even in the more concrete case of fight against terrorism, 32 percent cannot answer whether the Maltese administration takes sufficient counter-terrorism measures (EU, 2011).

4. Maltese Civil Security in the EU Context

The Maltese government maintains close contacts with the EU on civil security issues and is willing to collaborate with its European partners in case of a trans-boundary crisis. Malta participates in the EU Civil Protection Mechanism, and the director of the Civil Protection Department is the contact person, responsible for communication with the Mechanism as well as with the Monitoring and Information Centre (MIC). During the Libya crisis, there was a steady exchange of information between the Maltese government and the MIC. From the very beginning of the Libya crisis, the EU offered its assistance to Malta, showing willingness to activate the EU Civil Protection Mechanism. However, the government decided that Malta could tackle the crisis with its own resources and thus did not further activate the mechanism. As seen before, the country accepted financial assistance from the EU Solidarity Fund in 2003.

The country has been willing to provide aid in the framework of the mechanism when other partners are struck by disasters: it contributed to the assistance to China suffering from an earthquake in 2008; it contributed to relief and humanitarian aid after the 2010 earthquake in Haiti; it offered assistance to Pakistan during the 2010 floods; it even provided assistance to Tunisia during the 2011 Libya conflict for the repatriation of third country nationals and to Cyprus when dealing with the explosion of a principal power plant in 2011 (European Commission, DG ECHO, 2012). All these activities make it clear that the Maltese government wants to provide assistance and cooperate with other countries when the latter face crises. This also brings forward the idea of solidarity that is strongly integrated with the country's cultural profile.

The country's activity is much more moderate with regard to participation of Maltese emergency planners in training and exercises organised by the Mechanism. Only eight practitioners participated

in the Mechanism's training cycle for 2009-2010 whereas Malta has participated only twice in the Mechanism's simulation exercises for the period 2002-2012 (Hollis, 2010; EU Commission, DG ECHO, undated). This confirms our prior estimation that the country has not given emphasis to preparedness and pre-planning for facing disasters/emergencies.

In general, though, a more active role of the Maltese civil security system in the EU context is positively viewed by the citizens of the country. First of all, the Maltese are largely aware that the EU is active in the domain of civil protection (56 percent, versus 33 percent who do not know about this), which is an interesting fact if one takes into account the high levels of ignorance of what the Maltese civil protection consists of (see above). More importantly, the vast majority of Maltese seem to consider a coordinated EU action in the area of crisis management more effective than individual national activities (EU, 2012).

5. Conclusion

From our investigations, it appears that the Maltese civil security mechanism presents shortcomings in comparison to the standard structure of other European civil security systems. We summarise them as follows:

- Malta's civil security mechanism lacks a concrete understanding of prevention, which results mainly from the absence of annual national risk assessment surveys.
- Following on from the latter, preparation and pre-planning for tackling emergencies and disasters are limited.
- The civil security system is very centralised, and every crisis, no matter what its magnitude, will activate the national means for crisis management.
- Associated with the previous point, the distinction between local, regional and national as well as between tactical, operational and strategic levels of crisis management are not clearly depicted in Malta. To a certain extent this emanates from the existing legal framework that should be updated.
- Delivery of civil protection often depends upon the community's sentiments of solidarity and proximity to each other as well as upon informal arrangements of cooperation between the authorities and the citizens that flourish due to the country's and constituency's small size.
- Regarding the legitimacy of crisis management in particular, the necessary mechanisms to hold the executive to account for failing to deliver civil protection are not in place in Malta. There is a lack of parliamentary scrutiny flowing from the relative political marginalisation of debates on civil security.
- The country's civil security system could interact even more within the EU context so as to

gain experience from how the other European countries' civil security systems are structured and thus try to adopt some of their best practices, especially in the fields of crisis prevention and emergency preparedness.

Despite weaknesses, the country has managed to avoid an escalation of crisis that would necessitate the intervention of its European partners, for example through the activation of the Lisbon Treaty's Solidarity Clause. To date, the lack of national capacities has been compensated by strong sentiments of solidarity and communitarianism prevalent in the Maltese society. Such sentiments are reflected in the considerable engagement of the country's voluntary sector in the delivery of civil protection.

Annex I: Coded Data

		Anne	ex I (Qu	antitative Data)	
1	Scoring Sco instructions re		Sco re	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Civil Protection Act 1999, www.justiceservices.gov.mt/DownloadDocument.aspx?ap p=lom&itemid=8877&l=1	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	<u>Civil Protection Act 1999,</u> <u>www.justiceservices.gov.mt/</u> <u>DownloadDocument.aspx?ap</u> <u>p=lom&itemid=8877&l=1</u>	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1	Malta Armed Forces Act of 1982	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	<u>Civil Protection Act 1999,</u> www.justiceservices.gov.mt/ <u>DownloadDocument.aspx?ap</u> p=lom&itemid=8877&I=1	
2		Scoring instruction	Sco re	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	Constitution of Malta	
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentar y system = 1 Presidential system = 2	1	Constitution of Malta	
2.1.1.c	Is the country a monarchy or a	Monarchy = 1	2	Constitution of Malta	

	republic?	Republic = 2			
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociation al democracy = 1 Majoritarian democracy = 2	1	Constitution of Malta	
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	1	Civil Protection Act 1999, www.justiceservices.gov.mt/ DownloadDocument.aspx?ap p=lom&itemid=8877&l=1	
2.1.2	Culture				
2.1.2.a .i	Geert Hofstede country national cultural score - DPI		56	http://geert- hofstede.com/countries.html	
2.1.2.a .ii	Geert Hofstede country national cultural score - IDV		59	http://geert- hofstede.com/countries.html	
2.1.2.a .iii	Geert Hofstede country national cultural score - MAS		47	http://geert- hofstede.com/countries.html	
2.1.2.a .iv	Geert Hofstede country national cultural score - UAI		96	http://geert- hofstede.com/countries.html	
2.1.2.a .v	Geert Hofstede country national cultural score - LTO		NA	http://geert- hofstede.com/countries.html	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		- 1.5 3	http://www.worldvaluessurv ey.org/	Year 1999
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self- expression		- 0.0 3	http://www.worldvaluessurv ey.org/	Year 1999
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized	Highly centralized (1-2 key laws regulates	1		There is only one official document describing the delivery of civil protection, the

	· · · · · · · · · · · · · · · · · · ·		1		
2.2.1.b	versus fragmented?	civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	199	Civil Protection Act 1999	Civil Protection Act 1999.
	major reform in the civil security field undertaken?	year of the reform	9		
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	pro bab ly 1		There is only one official document describing the delivery of civil protection, the Civil Protection Act 1999. In addition, plenty of executive decisions regarding civil security have an informal character in Malta.
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1	1	<u>Civil Protection Act 1999,</u> <u>www.justiceservices.gov.mt/</u> <u>DownloadDocument.aspx?ap</u> <u>p=lom&itemid=8877&l=1</u>	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	No = 0 Yes = 1	0		The term is not used in the documents regarding civil protection.
2.2.2	Political dimension				

2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2	1	Informal exchange of opinions with civil security stakeholders.	
		At the local level = 3			
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	Atthenationallevel=Attheregionallevel=Atthelocallevel =3	1	<u>Civil Protection Act 1999,</u> <u>www.justiceservices.gov.mt/</u> <u>DownloadDocument.aspx?ap</u> <u>p=lom&itemid=8877&l=1</u>	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1	1		The Civil Protection Department.
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1	0		Please, refer to the corresponding passages of the country report.
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	1	<u>Civil Protection Act 1999,</u> www.justiceservices.gov.mt/ <u>DownloadDocument.aspx?ap</u> <u>p=lom&itemid=8877&l=1</u>	
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	1 exe rcis e is con duc ted eve ry yea r.	Informal exchange of opinions with civil security stakeholders.	This is the NOVEX.
2.2.3.e	How many major exercises with an international dimension have been organised in	Register the number	1	<u>http://neamtic.ioc-</u> <u>unesco.org/index.php/neam</u> <u>wave12</u>	

	the period 2008- 2012				
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	1	Informal exchange of opinions with civil security stakeholders.	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	0		To the best of our knowledge.
2.2.4.c	How many regional/multilater al agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	2	Regional Organisations provided by WP3	
2.2.4.d	Has the country received assistance from partner/neighbouri ng country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	0	Informal exchange of opinions with civil security stakeholders.	
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibiliti	0	<u>Civil Protection Act 1999,</u> www.justiceservices.gov.mt/ <u>DownloadDocument.aspx?ap</u> p=lom&itemid=8877&l=1	

		. f.			[]
		es for disaster			
		managemen			
		t (e.g.			
		mandatory			
		civil service			
		and/or			
		insurance) =			
		2			
		2			
2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	N/A		Missing data.
2.3.2.b	Does the	No = 0	0	Informal exchange of	
	government have a	Yes, at the		opinions with civil security	
	system for radio/TV	local/region		stakeholders.	
	warnings	al level = 1			
		Yes, at the			
		national			
		level = 2			
		Yes, at both			
		local/region			
		al and			
		national			
		levels = 3			
2.3.2.c	Does the	No = 0	0	Informal exchange of	
2.3.2.0	government have a	Yes, at the	U	opinions with civil security	
	central website	local/region		stakeholders.	
	with updated	al level = 1		stakenolaers.	
	information on	Yes, at the			
	crisis events?	national			
		level = 2			
		Yes, at both			
		local/region			
		al and			
		national			
		levels = 3			
2.3.2.d	Does the	No = 0	0	Informal exchange of	
	government make	Yes, at the		opinions with civil security	
	use of social media (Facebook, Twitter	local/region		stakeholders.	
	etc.) to update	al level = 1			
	citizens on relevant	Yes, at the			
	crisis issues?	national			
		level = 2			
		Yes, at both			
		local/region			

	ſ			ſ	
		al and			
		national			
		levels = 3			
2.3.2.e	Does the	No = 0	0	They need to call 112,	
	government have a	Yes, at the		www.mjha.gov.mt/page.aspx	
	mobile application	local/region		?pageid=18	
	for reaching	al level = 1			
	citizens with vital	Yes, at the			
	crisis/security	national			
	information?	level = 2			
		Yes, at both			
		local/region			
		al and			
		national			
		levels = 3			
2.3.3	Education				
2.3.3.a	Is civil emergency	No = 0	N/A		Missing data.
	training	Yes = 1			
	(not/except basic				
	FIRST AID) part of the school				
	curriculum?				
2.3.3.b	Do	No = 0	2	Websites of CSOs	
	societal/voluntary	To	-		
1.	actors offer civil	members/pr			
	emergency				
	training?	ofessional =			
	_	1			
		To members			
		and limited			
		public			
		outreach = 2			
		To member			
		and wide-			
		spread			
		training			
		programmes			
		for general			
		population =			
		3			
2.3.3.c	Does the	No = 0	N/A		Missing data.
2.3.3.0	government run TV		IN/A		iviissilig udld.
	campaigns to raise	Yes,			
	awareness of crisis	moderately			
	issues among the	(once per			
	public?	year) = 1			
	1	Yes,			
		extensively			
		(more than			
L	1			l	

		Γ			· · · · · · · · · · · · · · · · · · ·
		once per			
		year) = 2			
2.3.3.d	Does the	No = 0	1	Eurostat, COFOG	
	government	Yes = 1			
	provide for a				
	budget for				
	sponsoring				
	research/technolog				
	ical developments				
	on civil				
	security/crisis				
	management?				
2.3.3.e	If yes, please	Register the	0.2	Eurostat COEOC	
2.5.5.e	provide the overall			Eurostat, COFOG	
	•	number	milli		
	volume of research		on		
	funding for civil		eur		
	security		os		
			for		
			yea		
			r		
			201		
			1		
2.4	Role of private				
	sector				
2.4.1	Role of societal/				
	non-profit				
	organisations				
2.4.1.a	Do societal/non-	No = 0	1	Civil Protection Act 1999,	
	profit actors play	Yes = 1		www.justiceservices.gov.mt/	
	an official/legally	105 1			
	mandated role in			DownloadDocument.aspx?ap	
	EXCEPTIONAL			<u>p=lom&itemid=8877&l=1</u>	
	crises?				
2.4.1.b	Do societal/non-	No = 0, In	2	Web-sites of CSOs	
2.7.1.0	profit actors play	parts of civil	<u> </u>		
	an official/legally	•			
	mandated role in	security (e.g.			
		emergency			
	the REGULAR	medicine) =1			
	provision of civil	In (almost)			
	security?	. ,			
		all aspects of			
		civil security			
		= 2			
2.4.2	Role of profit-				
	oriented				
	organisations				
2.4.2.a	Do for-	No = 0	1	<u>Civil Protection Act 1999,</u>	As long as they are
	profit/private	Yes = 1		www.justiceservices.gov.mt/	recruited by the Civil
	actors play an			DownloadDocument.aspx?ap	Protection
	official/legally			p=lom&itemid=8877&l=1	
	mandated role in			p-10111&11211110-0077&1=1	Department.
	EXCEPTIONAL				
	•	•		•	

	crises?				
2.4.2.b	Do for- profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	0		To the best of our knowledge.
3		Scoring instructions	Sco re	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	0		To the best of our knowledge.
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/ disaster, note NA	0		We have not retrieved data confirming that the state was declared in a state of emergency during the Libya crisis.
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/ disaster or data is not accessible at this level, note NA	0		The term is not used in the documents regarding civil protection.

3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	1	Creation of the Civil Protection Department in 2004	
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000- 12)?	Register the number for 2000-2012.	0	Informal exchange of opinions with civil security stakeholders.	
3.3.1.c	How many formal and politically instituted inquiries/committe es on civil security have been undertaken at the national level?	Register the number for 2000-2012.	0	Informal exchange of opinions with civil security stakeholders.	
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0		To the best of our knowledge.
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	N/A		Missing data.
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	N/A		Missing data.
3.3.2.c	Are there restrictions on judicial oversight powers over the	None = 0 Partial (legally	N/A		Missing data.

	REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	defined leeway for operational crisis managemen t) = 1 Extensive (e.g. no civilian jurisdiction over military actors in crisis managemen t) = 2					
3.3.3	Popular trust and support						
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	38	Special (2011)	Eurobarometer	371	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	43	Special (2011)	Eurobarometer	371	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	1				If we refer here to the special military unit 'Emergency Volunteer Reserve Force'.
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	N/A				Missing data.
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	diffi cult to say				The CSOs keep registers of their volunteers but we could not retrieve data for all of them. The Red Cross Malta consists of

					roughly 60 volunteers.
4		Scoring instruction	Sco re	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be com plet ed by UI/I FHS	http://ec.europa.eu/echo/file s/policies/disaster response/ EUCPM activations since 01 012007.pdf	
4.b	How many times has your country contributed to a MIC request - 2007- 2011?	Register the number for 2007-2011	To be com plet ed by UI/I FHS	http://ec.europa.eu/echo/file s/policies/disaster_response/ EUCPM activations since 01 012007.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009- 2010 training cycle	8	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002- 12?	Register the number for 2002-2012	2	http://ec.europa.eu/echo/pol icies/prevention_preparedne ss/preparedness_en.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to	Register the number for 2002-Sept 2012	1	http://ec.europa.eu/regional _policy/thefunds/doc/interve ntions_since_2002.doc	

	natural disasters (2002-Sept. 2012)?				
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002- Sept 2012	0.9 6	http://ec.europa.eu/regional _policy/thefunds/doc/interve ntions since 2002.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	56	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in Malta

There is limited information available on how the Maltese civil security system tackled the swine flu (H1N1) crisis in 2009. The *Times of Malta* give some basic information about how the pandemic progressed in the country in the second half of 2009 and early 2010. As early as July 2009, cases of swine flu were confirmed, mainly among citizens returning to Malta from their vacation destinations (Times of Malta, 2009a). During the worldwide peak of the pandemic, the number of confirmed cases reached 282 with the vast majority of them having successfully recovered; in September 2009 two deaths had been registered due to infection from the H1N1 virus (Times of Malta, 2009b). By late January 2010 and according to data from the European Centre for Disease Prevention and Control (ECDC), deaths caused by swine flu amounted to four (BBC, 2010).

Malta succeeded in managing the outbreak of swine flu effectively and this is mainly due to the initiatives and actions of the Ministry of Health, the Elderly and Community Care. The Ministry was very efficient in dealing with the crisis from the very early stages of the spread of the disease because the government had reacted to the alert in 2005 of a potential avian influenza pandemic and thus had already purchased 100,000 doses of Tamiflu which could still be employed in 2009 to contain the swine flu. Furthermore, the Ministry organised a general information campaign delivering brochures about swine flu to all Maltese households; 3.5 million euros were allocated to tackle the spread of the disease (Times of Malta, 2009a).

At the same time, the government invested highly in the immunisation of the public through vaccination free of charge. The government's objective was the mass immunisation of about 100,000 Maltese, yet the actual number of citizens vaccinated fell much short of the government's objectives mainly because of fears of the side effects of the vaccine and because of doubts about whether mass immunisation against swine flu was actually necessary (Peregrin, 2010). Public opinion itself would be ambivalently positioned towards mass immunisation; in a survey conducted on the island in August 2009, 52 percent of respondents were in favour of a generalised immunisation, whereas 43 percent were against (Malta Surveys, 2009).

As well as the public administration, the voluntary sector also endeavoured to inform the public about the disease. For example, Red Cross Malta included a webpage in their site with 'Frequently Asked Questions' on the nature of the swine flu, on how the virus is transmitted and what to do if someone travels (Red Cross Malta, 2009).

Despite the fact that the Maltese civil security system does not focus upon prevention and preparedness, it can be observed that, at least in the case of the swine flu crisis, the civil security mechanism did cope successfully. However, this should not be considered as the result of general preparedness for emergencies in Malta but attributed to initiatives and political decisions made by a specific public health stakeholder, the Ministry of Health. Moreover, the effective management of swine flu had been also due to the fact that the country had already been alerted to the contingency of a pandemic in 2005. To the defence of the system, though, the fact that the public authorities still took the probability of a pandemic four years later into serious consideration indicates vigilance of the crisis management apparatus. How the country reacted in the face of the swine flu crisis should be deemed an example for future enhancements in the function of the Maltese civil security system.

Annex III: Resources

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Netherlands

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Executive Summary

Historically and culturally bestowed with risk awareness and prevention motives to fend off water, the Dutch became good at exactly that: investing in prevention and matching response capacity to known risks. The Netherlands has had its share of man-made accidents in the past decades, but natural disasters or high numbers of casualties or victims are extremely rare.

The constitutional and legal framework has fragmented responsibilities and authority for crisis and disaster management. This necessitates coordination and cooperation between many agencies involved at all times. According to existing studies and our interviews, this renders the system and its response a bit slow. The upside is that involvement of all parties increases legitimacy and support (and is thus checked and balanced at all times). Moreover, administrative authorities and operational agencies across the many disciplines and territories are relatively familiar with each other and their way of working, which should enhance administrative cooperation in crises. Budgets are also scattered, which makes establishing causal relations between costs and benefits nearly impossible. Efforts to promote efficiency are uncoordinated and the results often unclear.

Citizens' trust in government crisis management capacity is relatively high, and surveys indicate that citizens see the probability of ever getting involved in a major disaster as low to very low. Nevertheless, each crisis and large-scale incident is evaluated and investigated intensely and the civil protection system is subject to constant reform and adaptation. The evaluations of actual responses suggest that operational efforts are often timely and effective. Emergency officers appear to be well trained, highly experienced and well-connected, and tend to work around impending reorganizations, recently introduced tools and new protocols.

Key Findings

1. Historically and culturally bestowed with risk awareness and prevention motives to fend off water, the Dutch became good at exactly that: investing in prevention and matching response capacity to known risks. The Netherlands has had its share of man-made accidents in the past decades, but natural disasters or high numbers of casualties or victims are extremely rare. Citizens' trust in government crisis management capacity is relatively high, and citizens' risk perception is low.

2. The constitutional and legal framework in the Netherlands has fragmented responsibilities and authority to such an extent that coordination and cooperation between many agencies involved is a necessity at all times. According to existing studies and interviews for this case description, this renders the system and its response a bit slow. The upside is that involvement of all parties increases legitimacy and support (checked and balanced at all times). Also, administrative authorities and operational agencies across the disciplines and the territories are relatively familiar with each other and each other's way of working, which enhances the results of their cooperation in crises.

3. Each crisis and large-scale incident is evaluated and investigated (too) intensely, and the civil protection system is subject to constant reform and adaptation. While the constant ambition to 'do better next time' deserves praise, the system seems rather restless and this begs the question whether too many adaptations and changes are not part of the problem instead of the solution.

4. Operational response often occurs timely and smoothly because emergency officers are highly trained, experienced and well-connected and tend to work around impending reorganizations, recently introduced tools and new protocols.

5. In spite of its geographic location and relatively small size (and possible dependence on or vulnerability to what other member states do in terms of crisis management), the Dutch elude a deep awareness of EU aims and activities in the crisis and disaster domain. The Dutch interview respondents do not express a widely shared need for an enhanced role for the EU. As perhaps in other Member States, EU action lacks visibility. This is an issue that should be addressed and that can be part of EU value-added.

List of Abbreviations

CdK	Commissaris van de Koningin			
СМ	crisis management			
DCC	Departementaal Coördinatiecentrum Crisisbeheersing			
GRIP	Gecoördineerde Regionale Incidentbestrijdings Procedure			
100V	Inspectie Openbare Orde en Veiligheid			
KNRM	Koninklijke Nederlandse Redding Maatschappij			
LCMS	Landelijk Crisismanagement Systeem			
LOCC	Landelijke Operationeel Coördinatie Centrum			
MIC	Monitoring and Information Centre			
NCC	Nationaal CrisisCentrum			
NIFV	Nederlands Instituut Fysieke Veiligheid			
PPS	public-private partnerships			
SIGMA	Snel Inzetbare Groep ter Medische Assistentie			
SNV	Stuurgroep Nationale Veiligheid			
UNDAC United Nations Disaster Assessment and Coordination				

1. Introduction

Experience

The Netherlands has most experience with large scale accidents (fires, crashes and industrial accidents) or terrorist attacks (assassination, crowd shooting). Infectious diseases or public health safety issues also occur regularly.

All crisis types seem to take place once every few years, without one being dominant. The Netherlands is a very densely populated country with a high tech industry, an open economy, and relatively large traffic hubs (Amsterdam Schiphol Airport, the Rotterdam harbour, the inland rivers). The politically and culturally expressed standpoints of (some of) the Dutch are not always met with enthusiasm domestically and abroad. Raids at embassies because of an anti-Muslim film (Fitna), assassinations of a politician (Fortuyn) and a film maker (Van Gogh), are indications thereof.

Dutch crises between 2000-2012 fall in the following crisis categories: i) natural disasters and infectious diseases, ii) industrial/transportation accidents, iii) infrastructure failures, and iv) terrorism (based on the Emdat list, completed with crises from Vademecum list and assassinations in 2001 and 2004).

		Crisis category	Damage		
Year/			# of	# of	# of
month	Crisis description		persons	persons	persons
			killed	injured	affected
2012 Apr	Train crash	11	1		117
2011 Apr	Shooting at a mall	IV	6	17	
2011 Jan	Fire at chemical plant	П			?
2009 Apr	Start Influenza H1N1 pandemic	1	62		?
2009 Apr	Attack on Royal family	IV	8	10	
2009 Feb	Airplane crash near Schiphol	П	9	86	
2007 Oct	Electricity breakdown (2 days) due to	Ш			100,000
	helicopter crash				
2005 Nov	Electricity breakdown (2 days)	Ш			25,000
2005 Apr	Fire at Schiphol Airport	1	11		15
2004 Oct	Assassination Van Gogh	IV	1		
2001 May	Assassination Fortuyn	IV	1		
2001 Jan	Café fire on New Year's Eve	1	14		180
2000 May	Fireworks factory explosion in Enschede	II	22	1,000	3,000
Note: Extreme weather conditions such as extratropical cyclones (winter storms) and cold or heat waves listed for the Netherlands in Emdat (Oct. 2002, July 2003, Jan. 2005, Dec. 2005, July 2006, Jan.					

Table 1. Crises in the Netherlands (2000-2012)

2007, Feb. 2008 and Feb. 2012) are excluded from this list because generally, they do not require a specific response effort from the civil security system. Also, attacks by the Animal Liberation Front on private property (2011, 2009, 2008) and unclaimed attacks that have been prevented (explosives defused in time, or that did not go off: 2011, 2010, 2003) are not reported in this table (see Global Terrorism Database and TE-SAT/Europol 2012).

Dominant CM approach

Dutch all hazards crisis management (CM) approach includes the entire set of measures taken and provisions made by public authorities, in cooperation with other organizations, aimed at maintaining national safety and security. National safety and security are considered at risk if the vital interests of the state or society are at stake because of (a threat of) an actual, or potential, disruption. The government CM handbook discerns five types of vital interests: territorial security, economic security, ecological security, physical safety and social and political stability.⁴⁷³

The law makes a formal distinction between 'crisis' and 'disaster' situations (Security Regions Law, 2010 § 1, art. 1).

- Disaster: a major incident or accident which seriously threatens or damages the lives and wellbeing of citizens, environment or property, and that requires a coordinated deployment of multi-disciplinary services and organizations to counter the threat or mitigate the consequences.
- Crisis: a situation that violates, or threatens to violate, vital interests of society.

This distinction is highly relevant to the structure of the civil security system in the Netherlands. Disasters are the type of incidents that start locally and affect local communities, the wider region or even a cross-regional area. Primarily, CM authority rests with local executives. If larger than municipal areas are affected, CM command can 'upscale' to the regional authority. By contrast, in a 'crisis', central command is executed by the ministry, thus managed from the top. For instance, certain types of infectious diseases, nuclear accidents, or terrorist attacks are all crises that require central command by the ministry/ministries involved. At the local level, functional lower authorities execute ministerial instructions. Municipal authorities remain primarily responsible for maintaining public order and safety.

The dominant CM approach is civilian. The Dutch have no strong military tradition and tend to eschew military dominance in executing government tasks. There are civil-military cooperation programs to support authorities in their tasks to increase, maintain or restore public safety. Occasionally, the military has provided such support in evacuating communities, piling up sandbags, or rolling out temporary infrastructures or equipment. A local or regional authority can request such military support through the minister of security and justice, who formally asks the minister of defence for assistance. The national operational coordination centre (LOCC) coordinates those efforts. If urgent, requests can be made directly to the national operational coordination centre, and formally covered by politically responsible authorities at the central government level later.

⁴⁷³ CEP Handbook, pp. 159-161

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Central-level governance

The Netherlands is a monarchy with King Willem-Alexander as head of state. The Parliament comprised of an indirectly elected First Chamber (Senate) and a directly elected Second Chamber (House of Representatives), the former only empowered to approve or reject bills, but not to propose or amend legislation. It is a unitary state, centrally governed from the residential city of The Hague. The Netherlands has been characterized as a consociational democracy by Lijphart (1999): coalition cabinets, proportional representation, mutual vetoes, rigid constitution, and equality between cabinet ministers and the prime minister.

Regional-level governance

The Netherlands is divided into 12 provinces. They are governed by directly elected representatives, and their decisions are politically executed by deputies (appointed by the representatives) and the crown-appointed commissioner of the king (CdK - a governor). Their main tasks include environmental protection and country planning and oversight of the municipalities and water boards in their territory. The provincial representatives elect the members of the Senate.

The Netherlands is divided into 25 so-called 'Security Regions' (*veiligheidsregio's*), a decentralized level of government, which are in charge of the fire brigade and the emergency medical care on their territory. The security regions represent the governmental and operational link between the local civil protection organizations and the national governmental institutions. They are managed on a daily basis by a director, but politically headed by the mayors and the councils of the municipalities in the region. The mayor of the largest city is the chairperson of that region. If a crisis affects several municipalities in a security region, the chair is only fully accountable to his/her own municipality for managing the crisis, not to the councils of the other municipalities in the region. However the law requires that the chair does fully inform the councils of the other municipalities affected within the region, also in the crisis aftermath.

The security regions closely cooperate with the regional police units (10 in total). The regional police structure is recently reorganized into a national, centrally directed, police force.

Local-level governance

The Netherlands is currently divided into 408 municipalities. They are governed by directly elected representatives and their decisions are politically executed by aldermen (appointed by the representatives) and the crown-appointed mayor. The size of the council and the number of Aldermen vary with the size of the municipality (between 1,000-800,000 inhabitants).

CM structure and the administrative levels

Authority and responsibility for crisis (i.e. public unrest and disasters) preparation and response rest at the local level, but ascend when a crisis cuts across local communities and/or overwhelms local capacity. The mayor is the commander if incidents occur on municipal territory. There is a protocol (*GRIP*) for up-scaling authority if the crisis affects more than one municipality. In such cases, the security region takes the lead. The mayor of the largest city in the security region is then in charge of the crisis response. If several regions are affected, they either follow an established protocol (some regions within a single province, or within an area with a common threat or interest have already convened on protocols for up-scaling and coordination in case of cross-regional emergencies), or they respond to the crisis in bilateral or multilateral ad hoc agreement. Regions can also decide to ask the national government (the minister of security and justice) to assist (with resources and supplies) or intervene (and overrule).

Each minister and department is responsible for CM in its own sector. Sector-specific CM is often centralized, with the department giving directions to decentralized functional authorities. Central ministries execute authority and responsibility for crisis preparation and response in their specific domain (e.g. fighting infectious diseases or preventing floods) and delegate tasks/mandates to local/regional authorities when customized implementation is required. Local authorities remain responsible for securing generic law and order, and policing locally.

When CM requires interdepartmental coordination and cooperation, the advisory team of representatives of the ministries involved, convenes to exchange information and arrive at a common operational picture and coordinated CM approach. The Interdepartmental Crisis Management Team (consisting of departmental directors and director-generals of the sectors involved) decides upon issues prepared by the advisory team. Political strategic decisions are taken unilaterally or bilaterally by the respective ministers or by the Ministerial Crisis Management Team (consisting of the prime minister [chair] and the ministers of the sectors involved). The Netherlands does not have a disaster declaration (settling for instance reimbursement of damage). In extraordinary circumstances, governments can exercise powers beyond their normal authority. For example, specific sector legislation stipulates the emergency powers of authorities in case of a mass evacuation, a pandemic outbreak, etc. In most cases, authorities do not need prior advice and consent from the House of Representatives or the council.

The National Crisis Centre (NCC) is the coordinating agency where the crisis teams convene. It serves as an information hub, with a 24/7 front office that alerts all the government officials involved when incidents occur. In the preparation phase, the NCC is tasked with early warning, awareness raising, and providing crisis communication and CM training and advice.

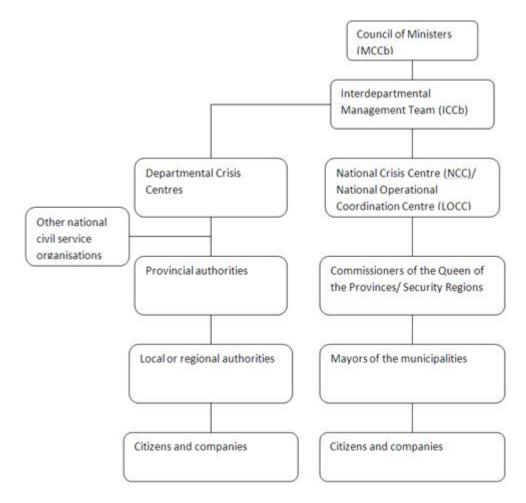
Each ministry has its own Departmental Crisis (Coordination) Centre (DCC) that is in charge of early warning, training and preparation in the 'cold phase', and information processing and sectoral coordination in the 'hot phase' of CM.

For preparation and risk reduction, the National Steering Committee for National Safety and Security

was established, which consists of director-generals of all national ministries. The SNV promotes coherence in national security and CM policy. The SNV advises the cabinet on disaster risk reduction, and reports on National Risk Assessment and activities to strengthen capabilities and coherence.⁴⁷⁴

Organizational chart of the civil security system

Figure 1. Dutch civil security system – organizational chart



Source: Vademecum country profile The Netherlands 2012

2.1.2 Government/social culture

Impact of culture on CM system

The Dutch civil security system has been greatly affected by the omnipresence of water and flood potential. The 1953 flood was a strong impetus for the development of a civil security system. During the Cold War, legislation and policy consolidated a strong 'binary' focus on CM: either crisis occurred or not at all. In recent decades, policy makers came to realize that creeping crises, in-between situations and transboundary incidents require a more differentiated approach. The 1992 Bijlmer air

⁴⁷⁴ See for statutory basis: <u>http://wetten.overheid.nl/BWBR0027277/geldigheidsdatum 18-01-2013</u>

crash instigated civil security system reforms and increased the awareness of threats to mobile, densely populated, urban societies. The list of crises and incidents since 2000 indicates a great variety of contingencies that affected Dutch society.

The Dutch score relatively high on both self-expression values and rational-secular values (WVS, Inglehart and Welzel). The culture of the Netherlands indicated by value surveys is reflected in the civil security system in many ways.⁴⁷⁵ Individualism and egalitarianism instruct the Dutch to manage crises at the local level. Strong hierarchy relations and military involvement are alien to Dutch civil security practice. Citizens' expectations from government in terms of crisis communication demand transparency and openness, empathy, participation and constant flows of information. Uncertainty avoidance and short term orientation denote a lack of relativism, and a strong adherence to norms, punctuality and precision. An example would be the detailed standardization of response time by formal law (see Security Regions Law art 13 and 14, and Report IOOV, 2012, p.19). The progressive liberal and secular values make the Dutch engaged citizens, critical of their government, also during crises.

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

In the Netherlands, crisis responsibilities are legally institutionalized. The following acts provide the administrative and operational framework for the physical aspects of civil protection.

The Security Region's Act (2010) substitutes the Disaster and Heavy Accidents Act, the Act on Medical Assistance in Times of Disaster and the Fire Service Act of 1985. Since the 1980s, there is no 'formal disaster declaration' equivalent to that in other countries. Municipal and regional decision makers have to assess in each given situation whether extraordinary authority, according to the mandates in the Security Region Act and other laws, is necessary for drastic intervention or response (and whether this drastic intervention is necessary in the first place).

The Security Region's Act includes quality requirements for the fire and rescue services, the emergency medical services and the training and preparation efforts within the security regions. In the preparation phase, the CdK can give instructions to security regions when the Inspection for Public Order and Safety (IOOV) indicates a lack of preparedness.

Medical assistance in times of disaster is an integral part of disaster management and is designed to provide the best possible treatment to as many victims as possible. In the event of major incidents and disasters, the director of the regional public health service is in charge of the organisation, coordination and management of medical assistance.

⁴⁷⁵ This interpretation is by no means the result of thorough research on the impact of culture on the civil security system. It is the author's private interpretation, and should be seen as an insider's sketch of the Dutch civil security world.

In extraordinary circumstances, a variety of other emergency laws can also be applied such as the Coordination of Exceptional Situations Act, the Extraordinary Competences of Civil Authority Act, the Evacuation Act and the War Act. These acts will be applied by royal decree at the request of the prime minister. According to Art. 103 of the Constitution, deviation from constitutional regulations and certain human rights is possible during an emergency.

Due to the Security Region Act of 2010, security regions replace the role of the province during emergencies, but the governor of the province still can give specific directions in cases 'of a more than local significance' on cooperation and coordination between authorities within a region. The minister can also request the governor to give municipal and regional authorities specific directions, this request has to be followed up immediately (see royal decree of 1994 on governor's duties: http://wetten.overheid.nl/BWBR0006728/geldigheidsdatum_29-01-2013).

The overall responsibility for safety in the Netherlands rests with the Ministry of Security and Justice (former Justice Department, with additional tasks and authority). The Ministry is comprised of five directorates: Threats (risk management and reduction), Resilience (response and relief), Interests (protection of critical infrastructures), Cybersecurity and Strategy & Management.

In case of river floods and earthquakes, and disasters as defined in the Security Region Act, the Disaster Compensation Act issues damage compensation. The minister decides by royal decree whether a situation qualifies as eligible for this compensation.

2.2.2 Political dimension

Executive responsibility

The security region is responsible for preparation, training and operational capacity of the regional fire brigade and emergency health care. Executive responsibility for crisis response rests, initially and primarily, at the level of the municipality with the possibility of escalating to the security region or national authority.

The Ministry of Security and Justice usually formulates civil security policy at the national level, while the Parliament adopts, amends, and eventually decides it. At the regional level, security regions develop and implement local civil protection policy, in cooperation with the municipalities. A socalled 'accountability deficit' occurs when a disaster situation requires the region to take over central command. This chairperson of the region is also the mayor of another city. In some cases—such as Chemie-Pack—the incident occurs in a small town, and the mayor of the nearby city takes over because he/she chairs the security region, even though the disaster has not affected his or her own city. When dust has settled, the mayor is fully accountable to his own city council, and is only obliged to fully inform the council of the small town where the crisis occurred. But the council of the small town has no authority over this mayor, and cannot apply political sanctions. Also, the region has been responsible for preparation and training of the regional emergency services, but the small town suffers the consequences in case of ill performance.

2.2.3 Operational dimension

Implementation agency/ies

Security regions (including the fire service and the emergency medical services) and police units implement policy at the local and regional level. The security regions are responsible for planning, logistics, and monitoring of generic crisis management preparation and preparedness in their jurisdiction. They recruit qualified personnel, train, exercise and implement safety regulation and prevention policies, operate an emergency room for 112 calls, respond to incidents and provide relief. Municipalities are in charge of local crisis communication and of enabling emergency shelter, listing missing persons and providing aftercare.

In the 'cold phase' (no crisis or incident occurred, only prevention and preparation required), the security regions are responsible for policy implementation within their region. Account is to be rendered by the operational organization to the joint commission of mayors in the region. In the 'hot phase' (crisis), the mayor of the municipality where the crisis occurred is ultimately responsible for the local crisis response, while the chair of the security region (mayor of the largest city) is ultimately responsible when multiple municipalities are affected.

At the national level, the Ministry of Security and Justice implements national security policy. Other departments implement CM policies specific to their sector and legislation. The National Operational Centre receives requests for operational support when the capacity of a region or municipality is overwhelmed, or when specific resources are needed (such as special police forces, military aid, or advanced technological equipment or expertise). Also, several networks of specialized national services exist, such as for environmental incidents or for health risks. Such networks have a 24/7 operational front office to respond to requests for special measurements or laboratory research.

Signature crisis: Chemie-Pack

A huge blaze at a chemical plant dispatched a toxic cloud over the Netherlands on January 5, 2011.⁴⁷⁶ The enormous fire raged much of the day at Chemie-Pack, a company that processed and packaged 2,600 different substances, many of which are extremely toxic. The site stored ten 23,500-litre tanks of chemicals. The fire, which started around half past two in the afternoon, was so fierce that the intensity of the blaze injected the black cloud high into the sky allowing it to be dispersed more easily⁴⁷⁷. Uncertainty on the substance of the chemical cloud that polluted the air upset local communities, emergency workers and people in the wider affected region in the days and weeks after the fire. It took more than 30 hours to stop the fire.

The fire service set off the local alarm devices and drove vehicles round the town with loud speakers telling people to stay inside their homes with the doors and windows closed. Both the emergency telephone number and website were unreachable for long periods of time due to an overload of demand.

⁴⁷⁶ See for English media reports at the time, the Radio Netherlands Worldwide website at http://www.rnw.nl/english/article/press-review-thursday-6-january-2011 and http://www.rnw.nl/english/article/press-review-thursday-6-january-2011 and http://www.rnw.nl/english/article/press-review-thursday-6-january-2011 and http://www.rnw.nl/english/bulletin/dutch-chemical-company-flaunted-regulations , information retrieved November 19, 2012.

⁴⁷⁷ Fortunately, in the end the health effects were insignificant for local communities and for the wider region.

The incident location was a chemical storage and processing plant in a large industrial complex in Moerdijk, south of Rotterdam, situated on the border of two regions: the region where the fire took place, and the region affected by the chemical cloud (the wind drove the cloud North). Moerdijk is a relatively small municipality in terms of numbers of inhabitants and local government capacity. Authorities were soon overwhelmed by the complexity of the crisis, the public communication effort required and by the extent and intensity of the media attention.

Operational response shifted immediately into regional hands (due to regionalization of the fire service), but Moerdijk authorities long held on to their local political-executive mandate as commander in chief. It took a full day before the chair of the security region (the mayor of the town of Breda) took over central command. Coordination between authorities, as well as uniformity of communication to their citizens proved time-consuming and difficult. The expertise of the neighboring region Rotterdam remained under-used. Confusion and insecurity on the potential hazards and consequences reigned among local citizens. Citizens and the media created their own reality in the days after the incident, also using social media to report their private footage and interpretation of the incident, the response and the hazards.

The Chemie-Pack crisis revealed the Achilles heel of the Dutch civil security system, in that it pointed at the coordination difficulties between regions, at the ill-defined role of the central government when a crisis starts at the local level, and at the difficulties involved in modern crisis communication under conditions of uncertainty. A government commission has been set up (with representatives from both the Ministry of Security and Justice, and from the security regions) to overcome these coordination problems.⁴⁷⁸

2.2.4 External dimension

Bilateral cooperation, assistance requests and decision making

The formal contact point for all civil protection assistance requests is the NCC at the Department of Security and Justice. Official requests for assistance in a foreign country are formally decided upon by the Ministry of Foreign Affairs. Foreign Affairs also pays the bill post hoc. First, Foreign Affairs consults the Ministry of Security and Justice, and other Departments involved, on operational feasibility and available capacity for the requested assistance (NIFV, 2012: 45-46). Most common reasons for international cooperation and assistance are (1) cross-border threats, incidents and disasters, (2) humanitarian aid, (3) scarcity of professional specializations and equipments.

Foreign Emergency missions: UNDAC and USAR

The Dutch have been member of the international emergency response system for sudden-onset emergencies (UNDAC – United Nations Disaster Assessment and Coordination) since 1993. Experienced Dutch emergency managers are made available for UNDAC missions by their respective

⁴⁷⁸ See government report *Eenheid in Verscheidenheid: Uitwerking Bestuurlijke Werkgroep Bovenregionale Samenwerking*, March 2013.

government organizations. The Dutch have provided assistance within OCHA missions in 18 foreign emergency situations since 2000.⁴⁷⁹

Since 2003, the Netherlands has created an urban search and rescue team (USAR.NL), that has been classified as 'heavy team' by the International Search and Rescue Advisory Group (INSARAG) since 2007 (<u>http://insarag.org/en/iec/iec-leftmenu.html</u>). The USAR team can be deployed domestically and, upon request, abroad.

Multilateral and Bilateral operational assistance agreements

The Netherlands takes part in both EU, multilateral and bilateral agreements (with Benelux, Belgium and Germany) on operational assistance. All agreements (in Dutch) are listed in ANNEX III and explained in the LOCC Handbook Operational Assistance, 2010, part 2 'International Assistance', pp. 13-22. The statutory base for operational assistance in the EU context can be found in the EU Civil Protection Mechanism (June 2010: 2010/481/EU), and its financial instrument (March 2007: 2007/162/EC) (LOCC 2010: 13).

Regional and/or multilateral provisions

Many agreements ('convenanten') have been created in anticipation of the new Security Region Act of 2010 and during the 2008 policy trajectory 'Waterramp' (water disaster) which coincided with the nationwide exercise Waterproof in the same year. Regions bordering the same water realized that they had to make joint provisions for what to do with incidents at sea or in their coastal territory. Two examples of regional and/or multilateral agreements and partnerships, with a civil security dimension:

- 15. SAMIJ (six security regions around the 'IJsselmeer' (major inland lake), six water boards, the coast guard, the police, the Directorate-General of Public Works and Water Management and the rescue services);
- 16. WADDEX (two security regions and water boards bordering the Waddenzee, (sea at the North coast), the coast guard, the police, the Directorate-General of Public Works and Water Management and the rescue services).

Such 'convenanten' include procedures for activating regional and/or multilateral agreements for assistance or cooperation (requesting and offering assistance) during a crisis. Typical for incidents on water is the fact that localization of the incident within a specific jurisdiction is difficult/impossible, and, the scene of the crisis (a capsized boat, for instance) may literally drift from one region to another. In case the location is unclear, one region has been designated in the agreement as the coordinating region. In other cases, the region in whose jurisdiction the water incident first occurred takes the lead. The agreements specify that the first region to take on coordination remains the coordinating region. Only smaller incidents have triggered activation of these agreements, no major incidents on water have happened since.

Reasons for collaboration

The regional (within country) collaboration agreements primarily focus on who is in charge in case of

⁴⁷⁹ <u>http://ochanet.unocha.org/p/Documents/LATEST%20UNDAC%20Missions%20Table.pdf</u>)

cross-regional incidents or incidents on the water in between two or more regions. The agreements specify the roles and responsibilities of all partners involved, and the participants to the agreement exercise together with crisis scenarios that test the functionality of the agreement.

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

State-to-citizens expectations (citizens' obligations)

The legislature does not specify many formal obligations and responsibilities of citizens in protecting his/her life and property within the broader framework of civil security. The Security Regions Law of 2010 stipulates that citizens are obliged to provide government with all security-technical information that may be essential to adequate CM preparation (WVR art 48, 1). When a crisis or disaster occurs, citizens are obliged to inform the local government of the affected area as soon as possible (WVR art 50, 1).

The national government launched a major communication campaign in 2007 to raise awareness among citizens about risks and their own responsibilities in terms of risk reduction and coping with crisis situations.

Citizens-to-state expectations

Citizens are entitled to some compensation for incurred damage by natural disaster (floods, earthquake) or major emergencies, based on the Disaster Compensation Law of 1998 – if their insurance does not cover the costs or if no one can be held accountable.

Dutch citizens have high expectations of their government when it comes to civil protection preparation. Citizens seem more skeptical, though, on crisis communication. The following tables show the how much Dutch trust their government in times of disaster in terms of civil protection preparation and crisis communication.

•	Not at all		Reasonably	Well prepared	
preparation	prepared	preparation	prepared		
Jun 2012	3%	14%	55%	28%	

Table 4. Expectations of government (civil protection preparation)

Source: *Risico en Crisisbarometer 2012* (annual opinion poll on risk and crisis perception conducted by the Ministry of Security and Justice)

Crisis	No trust	Limited trust	Reasonable	Much trust	
communication			trust		
Jun 2012	7%	32%	55%	6%	

Table 5. Trust in government (crisis communication)

Source: *Risico en Crisisbarometer 2012*

Those who do not trust government to inform the public think: 'government does not want to tell' (28 percent); 'government is unable to inform clearly' (15 percent); 'government does not tell us enough' (14 percent), or 'government informs us too late' (13 percent) (figures from poll of June 2012). The polls also reveal that citizens have much more trust in media and Internet information than in the special emergency website provided by the national government (<u>www.crisis.nl</u>).

When asked who they would trust most to inform them on possible disasters, citizens responded they would mostly trust information by scientists (61 percent), government (38 percent), journalists (29 percent), European Institutions (21 percent), NGOs (18 percent) and family, friends or colleagues (8 percent)(Source: Special Eurobarometer 328/2009).

The following situations instill fear among Dutch citizens (Risico en Crisisbarometer 2012):

	Jun '12	Nov '11	Jun '11	Nov '10	Jun '10
Economic crisis	78%	79%	58%	62%	63%
International crisis	49%	49%	45%	41%	44%
Mass upheaval	45%	45%	45%	44%	51%
Terrorist attack	44%	43%	45%	50%	46%
Chemical incident	43%	47%	52%	41%	44%
Pandemic	41%	43%	59%	38%	41%
Transportation accident	40%	42%	38%	39%	41%
Large scale Fire	37%	33%	45%	34%	38%
Extreme weather	33%	38%	38%	34%	30%
Utilities outage	31%	31%	31%	31%	31%
Nuclear incident	27%	31%	36%	27%	25%
Flood	26%	29%	29%	30%	28%

Table 6. Situations causing Dutch fear

Source: *Risico en Crisisbarometer 2012*

According to special Eurobarometer 371, 2011, terrorism is regarded as a slightly more serious threat to citizens' security than economic crisis (26 percent /22 percent). The *Risico en Crisisbarometer 2012* survey indicates that 75 percent of the citizens see the probability they ever get involved in a major disaster as low to very low (another 21 percent are neutral). Compared to their fellow Europeans, the Dutch seemed to be more (than average) concerned about natural and man-made disasters and less (than average) concerned about terrorist attacks and armed conflicts in their country (source: Special Eurobarometer 383, 2012).

Dutch citizens are willing to actively assist in the case of emergency, according to a study among emergency response workers about their experiences with citizen assistance (Tonnaer, 200847-48). Citizens are directly engaged in CM preparation and response through volunteerism in some civil rescue and relief organizations. The fire service, the rescue brigades and the Dutch Red Cross are all examples of organizations with a dominant civil security mission combined with volunteer staff. See for more information sections 2.3.3 and 2.4.

2.3.2 Information

Information on preparedness

The NCC and the crisis communication cells of the ministries use their regular websites, brochures, and mailings to inform citizens on what they can expect from their government and what they need to do to prepare for a crisis or disaster situation.

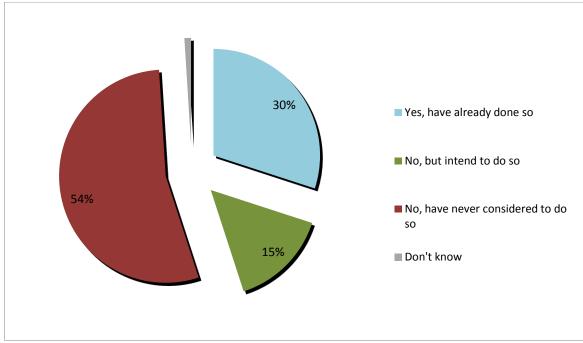
Government informs citizens on threat levels in several ways. The National Coordinator for Counterterrorism and Security informs citizens daily on the threat level (*'actueel dreigingsniveau'*: ranging from minimal – limited – substantial - critical) with codes on the organization's website (<u>http://www.nctv.nl/</u>). Sector specific threat level categorizations are in place as well to alert citizens on impending pandemics, or on veterinary diseases.

Since 2007, the Dutch government promotes a holistic approach to risk management through the Netherlands National Safety and Security Strategy. They use a National Risk Assessment (NRA) to define priority risks for civil security preparation and planning. The assessment permits to determine capabilities needed for each type of risk and contributes to the development of resilience capacities and preparedness (see for more information <u>http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2012/08/15/nationale-risicobeoordeling-2011.html</u>).

At the national level, the NCC (part of the organization of the National Coordinator for Counterterrorism and Security) has a special expertise team for crisis communication. They develop national model handbooks (for regions to customize), they advise other government agencies and regions in crisis situations on communication issues, and they provide tools such as the national crisis website (www.crisis.nl) and telephone service upon request.

According to Special Eurobarometer on Internal Security 371/2011, in the Netherlands, most citizens think government is doing enough to fight terrorism (71 percent), and to manage natural and manmade disasters (64 percent). Generally, Dutch citizens do not feel very well informed on crisis preparedness in the Netherlands (Special Eurobarometer on Civil Protection 328/2009). The majority (70 percent) of Dutch citizens did not prepare for a disaster (such as purchasing a first aid kit, buying a torch, etc.), but 15 percent intends to do so (see graph below). Compared to the average EU 27, the Dutch are relatively disaster-prepared European citizens (Eurobarometer on Civil Protection 328/2009).

Figure 2. Citizens' disaster preparedness



Source: Special Eurobarometer on Civil Protection 328/2009.

Information on response

The Dutch national government informs citizens in a variety of ways on immediate crises. The optimal means to inform citizens vary, depending on the type of crisis and the urgency of the matter. Local government uses similar means and sends police officers to the affected area to inform citizens on site. With the local crisis response teams (including fire service and medics), police are responsible for the operational, on site, crisis communication. The municipality, under command of the mayor, is responsible for strategic crisis communication.

<u>Tools</u>

A few tools that are specifically used for more immediate crisis communication purposes are worth mentioning here.

- Ad hoc telephone team for FAQs: The telephone number 0800-1351 is opened 24/7 when a crisis occurs and government decides that citizens need information. The authority that requests the telephone service feeds the telephone team with answers to FAQ.
- *Website <u>www.crisis.nl</u>*: A special website can be launched with extra server capacity to inform citizens on crisis situations. It can be requested for any type of crisis by the government authority responsible for the crisis response (local, regional or national). This authority feeds the website with information.
- *Cell broadcasting NL Alert*: Cell broadcasting notifies citizens of a threat in a specific area on their GSM. Cell Broadcast is a one-to-many geographically focused messaging service.
- *Disaster broadcasting (Rampenzender):* The local television and radio station have a role in broadcasting government provided information during emergencies. Citizens are informed that they have to tune in on the local radio channel when the alarms sound.
- Local alarm system (WAS sirens): Every municipality has an alarm system ('the sirens'). In

recent years, crisis communication experts advocated more specific ways of communicating.

Only 50 percent of Dutch citizens feel informed on crisis response, while 48 percent do not (<u>Special</u> <u>Eurobarometer on Civil Protection 328/2009</u>). Ultimately, political actors are responsible for crisis communication in their organization.

What information channels do citizens prefer?

Citizens (N=801) trust the following information sources when a crisis would occur:

Source	No trust at all	Not so much trust	Considerable trust	Much trust
Website crisis.nl	3%	5%	25%	12%
TV	2%	9%	57%	29%
Radio	2%	7%	56%	32%
News paper	5%	21%	49%	17%
Twitter	17%	23%	15%	5%
News sites on internet	2%	11%	54%	19%

Table 7. Trusted information sources (N=801)

Source: *Risico en Crisisbarometer* 2012 (categories 'no opinion' and 'don't know' are not included)

When citizens search for information during a crisis or disaster, the majority look for information through the Internet (68 percent), television (50 percent), radio (40 percent), telephone (12 percent), news paper (8 percent), friends (6 percent) and Twitter (1 percent) (source: *Risico en Crisisbarometer* 2012).

2.3.3 Education

Education and awareness

The nationwide information campaign 'Think Ahead' (*Denk Vooruit*) presented in section 2.3.2 reflects an awareness within government that citizens should not expect it to come to the rescue immediately, and that they need to prepare themselves first. Citizens are privately responsible for buying a survival kit, and for knowing what to do when disaster strikes. Government distributed the campaign brochures, TV and radio commercials and printed instructions to raise awareness. In 2009, the campaign had reached 79 percent of the target population, while between 60 and 80 percent of the population had actually understood the message (i.e. could reproduce what the campaign intended to convey) (*Jaar Evaluatie Postbus 51 campagnes*, 2009, p.85-86).

As a consequence of Directive 89/391/EEC, of 12 June 1989, the Dutch Parliament amended the occupational safety legislation to include the provision that every private and public organization should appoint 'emergency response officers': employees responsible for safety at the workplace in

case of an emergency. These emergency response officers should get a certified training according to ISO 17024:2003 norms.⁴⁸⁰

The Dutch Red Cross and many other non-governmental and private organizations offer first aid training to citizens on a voluntary basis. According to the Dutch Red Cross, only 3.2 percent of the population has demonstrable first aid skills (compared to over 80 percent in Germany and Austria), which is a reason for concern (Red Cross, Annual Report, 2011, p. 25).

Some vital emergency response services such as the Dutch Royal rescue service and the rescue brigades train their volunteers with their own facilities; the training complies with the norms of the International Life Saving Federation (ILS) and the Education and Professional Training Regulation (KNRM, annual report 2011, p. 19 and 51).

Fire brigades (31,000 people staff in total) in the Netherlands are to a considerable extent manned by volunteers (70 percent of the total – over 80 percent of the operational staff). They have to follow the same training and education program as professional fire guards with similar responsibilities and duties. The law stipulates that it should not matter to citizens whether they are rescued by a volunteer fireguard or a professional one in terms of the quality of the service delivered. The Security Regions legislation of 2010 details the quality criteria and certifications for all fire brigade staff. The National Institute for Physical Safety (NIFV) includes a national training centre for firefighters. The Dutch fire service has a relatively high percentage of volunteers when compared to neighboring countries such as Belgium and the UK, but similar to France and a bit less than Germany (Wijkhuis and Van Duin et al, 2012: 20). Van Duin et al conclude that the fire department volunteers in the Netherlands are relatively highly educated and professionally trained when compared to firefighters. The same goes for the level of training and exercising of ambulance personnel (Wijkhuis and Van Duin et al, 2012: 51).

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organizations/NGOs

The Dutch civil protection system seems to include a considerable level of voluntarism and institutionalized societal involvement. The large number of volunteers (70-80 percent) working in the fire service has been mentioned already. The police force includes relatively few volunteers (4 percent), that can be employed as extra security during festival events and in traffic circulation and so on (Wijkhuis and Van Duin et al, 2012: 21). In terms of prevention, dikereefs (volunteers assisting the regional water boards) help protect the dikes and dams. These volunteers receive compensation for their employment. Other examples would be the Dutch Rescue Service, or the Dutch Red Cross, which are voluntary, non-profit societal organizations with important tasks that relate to the civil protection responsibilities of government. Both organizations recruit, train, certify and deploy volunteers to provide protection and/or relief to citizens in the Netherlands and abroad (the Red

⁴⁸⁰ Because the companies have to arrange for their own emergency response officers, and certified training can be obtained from many suppliers, it was impossible to find any total numbers of trained people annually. The occupational safety inspection or the Ministry of Social Affairs did not publish this information.

Cross). In return, they receive government subsidies, complemented by private donations. Another type of agency that usually plays a role in the aftermath of a crisis provides victim support.

Where Dutch civil protection services depend on the work of volunteers, their duties, qualifications and compensation are carefully detailed in formal agreements. Firefighters have to meet the same training and exercise qualifications as professionals, and their turn out needs to be highly reliable, so they stick to precise schedules and routines. Dikereefs have contracts with water boards that specify the duties and compensation of the volunteers.

A special category of volunteers' organizations are the water rescue services: the rescue brigade on inland waters, and the Royal Dutch Rescue Service at sea. They can be deployed to assist government in case of floods. An agreement between the Ministry of Security and Justice and the rescue brigades (mainly operational on inland waters) stipulates that the brigades will assist in emergency situations, and that it can mobilize 84 units and 1,680 volunteers. The government provided the brigades with 90 fully-equipped lifeboats, specially designed to steer through flooded residential areas and evacuate people. The Dutch Rescue Brigades actively collaborate with the Security Regions to prepare for disaster response situations (http://www.reddingsbrigade.nl/rvr). The rescue work at sea by the Rescue Services is coordinated by the National Coastguard (receiving the emergency requests from ships), and the response is conducted in close cooperation with fire service and police.

The Dutch Red Cross

The Royal Decree 'Red Cross' of 1988, stipulates the cooperation with and assistance by the Dutch Red Cross in case of emergencies (including war) and disasters. The organization has a number of core tasks to support the professional emergency response in case of disasters. Its volunteers also participate in crisis response exercises to train and exercise with emergency professionals and local authorities.

- Provide medical assistance at the incident location by sending in a Quick Response Medical Assistance Team. The Red Cross can mobilize within an hour 1,200 volunteers at any given time 24/7. Teams include eight volunteers that form a medical unit with professional first responders on site: a unit consists of two ambulances, a mobile medical team, a SIGMA and an emergency medical officer.
- 2. **Support municipal government to provide shelter and relief for the evacuated population.** The Dutch Red Cross can mobilize 3,000 trained volunteers to assist municipalities in providing shelter and relief.
- 3. Support municipal government in registering missing and tracing persons and restoring the contact with their relatives. The Red Cross can also provide a telephone team to assist in the registration of missing persons. The Red Cross has trained 600 volunteers to assist in this task.

The Dutch Red Cross provides in addition:

- a logistical service to supply bandages, mattresses and blankets and so on;
- a connection service to contact all Red Cross volunteers timely and efficiently, even when regular communication lines (such as telephones, cell phones, Internet) fail.

The Red Cross aligns with the 25 safety regions in the Netherlands. It falls under the command of Regional Emergency Aid coordinators, whose task is to fortify the contact networks of those safety

regions. The professional apparatus of the Dutch Red Cross is assembled by 500 employees (plus a 46-professional staff abroad). Emergency aid is ensured by 13,700 volunteers. A total of 2,000 are responsible for reception and care (R&C), which includes actions such as offering assistance with setting up reception centres or helping with relief for evacuated people. Another 600 are dedicated to enabling information on relatives during emergency situations (IOR). Furthermore, rapid deployment medical assistance groups (SIGMA) are formed by a total of 1,100 volunteers, and 10,000 others are available for providing event support.

2.4.2 Role of profit-oriented organizations

An increase of outsourcing traditional government civil protection tasks to the private sector was neither substantiated nor confirmed by the literature and the interviews. The role for profit-oriented organizations in civil security does not so much stem from delegation or outsourcing of tasks to the private sector, but mainly from the fact that 80 percent of the critical infrastructures in the Netherlands are private property, owned by companies. Companies own the electricity grids, Internet cables and servers, pipelines and transportation networks and hubs. By definition, they have both a major stake and a major role in securing these infrastructures and in providing continuous service. Government, for instance the Ministry of Economic Affairs or the Ministry of Infrastructure and Environment, plays a coordinating rather than directive role in many cases of crisis response in those sectors. In terms of crisis preparation, sectors vary widely in their cooperation with government. In some sectors, government actors and private actors barely know (of) each other, in other sectors joint exercises are organized. Companies have their incentives to mainly prepare and practice internally, because they like to keep government off their back as long as possible, even when an incident occurs (source: interviews). Companies do seem to become more and more aware of the added value of crisis preparation and training.

Historically, the Dutch government works closely with salvage companies for salvaging ships or shipwrecks after incidents at sea (with multi-year tenders that enable government to order for immediate salvage operations when necessary). Other specific water-related equipment or services cannot be left to the market because there is limited demand. Such resources are also deployed in terms of operational assistance elsewhere in the EU upon request.

In specific areas, there are public-private partnerships (PPS), such as traditionally within the medical emergency sector. Hospitals provide medical emergency service, and ambulances are partly in private hands. Also for instance between local authorities and company fire services PPS exists. These are all individual, local agreements, and they do not reflect national policy. There is no indication of a trend towards private fire services operating instead of the public ones or employing private security firms in traditional policing. Private companies do play a major role in providing security around soccer games and other sports and dance events.

3. Quality Measures

3.1. Effectiveness

3.1.1 Assessment through professional and political inquiries

General assessment

In general, interview respondents (and the number of documents found) indicate a high density of investigation in the Netherlands. Both structural inspections and reports, and ad hoc investigations are conducted frequently, by a multitude of authorities.⁴⁸¹ Wijkhuis and Van Duin et al even call it 'evaluation drift' (2012, p.50). With respect to generic civil protection, the IIOOV has a structural investigation program on 'the state of the art' in all security regions (Reports in 2011, 2010, 2009 and 2008). Its findings and conclusions will be included in this assessment.

Inspectorates (on public safety, on environment, on occupational safety, and so on) conduct investigations on the causes of consequences of accidents and on disaster response when relevant to their mandate. They publish their own reports on their organizations' websites, and provide copies upon request to citizens and media. The independent Investigation Council for Safety (*Onderzoeksraad voor de Veiligheid*) has a strong legislative mandate to conduct an investigation on any crisis it selects as important and relevant for learning from accidents. It can overrule the inspectorates and the district attorney in confiscating material as evidence for accident investigation. Similar to the inspectorates, the Council publishes reports on its website, presents them in the media and provides copies upon request to citizens and media.

The state of the art investigations (report 2011) assess whether the Security Regions have effectively implemented their tasks. The inspection concludes on:

- Planning and Risk assessment;
- Information exchange during crises and exercises;
- Mobilization;
- Crisis communication, registration, relief and shelter.

Incident evaluation

Because of the multitude of severe incidents and a strong professional investigation culture in the Netherlands, five recent incidents have been selected for the inquiry assessment.

⁴⁸¹ See National Law for the Security Research Council (*Onderzoeksraad voor de Veiligheid*) <u>http://wetten.overheid.nl/BWBR0017613/geldigheidsdatum 15-04-2013</u> for their responsibility and authority to instigate investigations after incidents. Some Inspectorates, such as for public health, foreEnvironmental protection, have a statutory basis, others base their authority on policy documents developed by the ministry in charge (Inspection of Security and Justice)

Turkish Airlines crash

On February 25, 2009, a Turkish Airlines plane crashes near the runway of Schiphol Airport, with 128 passengers and 7-person staff on board. The plane breaks in two but does not catch fire. The accident takes the lives of five passengers and four cabin crew members. The media reporting and evaluation by the IOOV are predominantly positive. The inspection praised the first response by police, fire brigade and medical emergency units, as well as the support by citizens, airport staff and municipal civil service teams. Communication to the media was timely, accurate and welcome. The inspection also concludes that interdisciplinary exercises between the various teams have paid off in this incident response (IOOV report Poldercrash, 2009, p.9-10). Required improvements (p.11):

- The information exchange between the emergency response teams partly failed;
- Triage and first treatment of victims lacked accuracy;
- The emergency room (112 call centre) should improve its role as information hub;
- Registration of victims revealed shortcomings and slowness;
- Shelter and reception of relatives should be improved.

Assault on royal family in Apeldoorn

On Queen's Day (national celebration of the queen's birthday), April 30, 2009, a disturbed man committed suicide by driving his car through the crowd towards the royal family, causing eight casualties among bystanders along the way. The IOOV positively appreciates the emergency response to the incident. Because of the preparation for and operation of the festival event, first responders arrived at the scene of the incident almost immediately. Much went according to plan (IOOV report Apeldoorn, 2009, p.37).

Some pivotal aspects of the emergency response require improvement: the information exchange on the first assessment of the incident and the up-scaling of the operational response. Protocols are in place for assessing and organizing the proper (proportionate) response to an incident, but confusion reigned over which level of response this case applied to. Communication tools did not function smoothly. The debriefing and transfer of the case from the regional police to the national criminal investigation detectives should have been timely and more accurate. Registration and identification of victims (and consequently, informing relatives) fell short (IOOV-report, pp. 38-42).

Fire at Chemie-Pack

A fire at a chemical plant in Moerdijk on January 5, 2011, causes no casualties, but requires a massive operational response from the fire services, severely pollutes the environment (water, soil) and generates a chemical cloud that drifts over two adjacent regions and upsets local communities in a large area.

The inspection concluded that the municipality of Moerdijk has too little strategic CM capacity to cope with potential incidents in its large chemical industry (p.11). Its disaster plans were outdated, its fire service had too little (specialist) response capacity and training. These conclusions also implicate the larger region (Midden- en West Brabant) of Moerdijk (IOOV-report Chemie Pack, 2011, p.11-12).

The operational response to the first emergency call is rapid, but largely unstructured and uncoordinated. The upscaling protocol is not followed: it takes too long before the appropriate strategic level takes over. The response to the complex situation lacks decisive and unambiguous leadership. A common operational picture of the situation between the operational teams and the strategic levels involved is lacking, and subsequently affects the communication between teams and towards citizens and media in a negative way (pp. 15-18).

Strabrechtse Heide (heather/bush fires)

On the warm summer evening of July, 2, 2010, part of the *Strabrechtse Heide* (heather) catches fire. It takes the effort of more than 3,000 emergency workers in the following week to put out the fire.

The Inspection is positive about the operational command and the rapid division and implementation of tasks in the first hours. Coordination and cooperation between professional services are exemplary. Operational partners in this crisis seem to know each other and collaborate smoothly. Bilateral information exchange works efficiently.

Improvements are required in the cooperation and coordination of municipalities. The three affected municipalities varied in their upscaling and response; this lack of uniformity hindered collaboration between municipalities and confused citizens as well as the agencies involved. Strategic decisions and crisis communication were hindered by the lack of a common operational picture of the situation (IOOV report Strabrechtse Heide, 2011: 18-19).

Shooting Alphen aan de Rijn

On a sunny afternoon of April 9, 2011, a 24 year old citizen of the Dutch town Alphen aan de Rijn (73,000 inhabitants) walked into a shopping plaza and fired at the crowd. After he killed six people and wounded sixteen more, he took his own life on the spot. In his house, the police find a letter indicating that the killer placed three bombs in nearby shopping centres (turns out to be a hoax). This is the first mass shooting taking place in the Netherlands since WWII.

The Inspection concludes that emergency responders arrived quickly, helping victims and clearing the incident scene. A lack of multidisciplinary contact in the first hour hampers information exchange and causes the medical teams to be uninformed of remaining threats on the incident scene. The municipal response in terms of registering, contacting and sheltering victims and relatives is considered adequate and effective. The use of the LCMS network information exchange platform between response agencies is not problem-free.

The inspection praises the decisive operations on scene and rapid information exchange between the mayor and his team and the on-site commander. The mayor of Alphen aan de Rijn is in charge of the overall crisis management response. A major priority is given to public communication on the incident and threats, this effort results in a balanced and informative communication according to the Inspection (IOOV report Alphen, 2011, pp 7-20).

Findings: Effectiveness

In some cases, investigations explicitly point at shortcomings in the crisis response that allowed the situation to deteriorate, and that even cost lives. Notable examples are the investigation report by

the Research Council of Safety (*Onderzoeksraad voor de Veiligheid*) on the fire at the detention centre of Schiphol. The presentation of the report was accompanied by a suggestive video animation of the chain of events and concluded by stating that the victims would be alive if the preparation and response had been better. The IOOV reports are usually milder in tone, but still very critical when it comes to rapid deployment of response teams, command and coordination, and exchange of information.⁴⁸² These are the most recurrent issues in the reports. The culprits of any alleged wrongdoings are never named personally, but their organizations are. Another process of CM that receives criticism is communication to citizens. Government agencies seem to find it difficult to catch up with modern technology and the use of social media. CM teams at all government levels tend to lock themselves in a room until they have sorted out the crisis, before they go public with a message. The Chemie-Pack incident made painfully clear that in the outside world, information goes around and rumors spread, and that government loses credibility if it lags behind in its communicative effort. Investigations are always concluded by practical recommendations. Incidents normally lead to adjustments, they do not directly lead to reforms. Usually, a government commission is created after a severe incident whose recommendations lead to reform.

3.1.2 Limits to national capacity

The Netherlands has in none of the above cases requested external assistance. The Netherlands has only once requested (and received) assistance from the other states through coordination by the EU's Monitoring and Information Centre (MIC). During the severe winter weather of 2010, unprecedented snowfall and prolonged winter conditions necessitated the Dutch to request road salt supplies. Over time, several contributions were made to disaster response and relief, predominantly to third countries (see section 4).

The Dutch policy position in international agreements and political discussions on the matter of international assistance is that priority should be given to (financing of) enhancing local capacity and regional assistance. Sending teams and equipment across the continent or across the globe may be attractive from a public relations point of view (the perfect photo opportunities), but is seldom the most effective nor efficient form of support. Within the EU the Dutch prefer the current situation (every member state is responsible for organizing their national capacity in relation to their national risk assessment – member states provide each other assistance upon request) above the new proposals to pool or organize operational response capacity at the EU level.

Declaration of state of emergency: see sections 2.1 and 2.2

3.2 <u>Efficiency</u>

The Dutch civil security system seems to change continuously in response to nationally initiated reform efforts. The Security Regions legislation was implemented recently, the police regions are being restructured, and in the meantime national authority on CM shifted from the Ministry of

⁴⁸² One of the interview respondents notes that there is conspicuous difference between the IOOV reports commissioned by the municipalities (such as Apeldoorn, Poldercrash) and the ones commissioned by the central government (such as Moerdijk): the latter are much more critical in tone. It was beyond the scope of this research to further investigate this assumption.

Interior to the Ministry of Security and Justice (former Ministry of Justice). Internally, within the Ministry of Security and Justice, the former counterterrorism coordinator and his bureau now head the security directorate-general which absorbed the former directorate for civil protection. Local and regional initiatives to arrive at a more uniform, standardized approach are manifold.

It is unclear whether efficiency considerations are the main driver of reforms because most proposals do not refer explicitly to cost-saving motivations. Even though the political sensitivity of the security theme instructs policy makers not to cast their policy initiatives in this domain in terms of costs and benefits, this does not mean such motivations do not exist. The Ministry of Security and Justice does mention efficiency as one of the reasons for reforming the police in its annual budget report over 2011 (Annual report National Budget 2011, Ministry of Security and Justice, article 23, p.1).

In 2011, the Ministry of Security and Justice details an expenditure of 6.1 billion euro. The 2011 expenditure exceeds the 5.75 billion budgeted (on a 272 billion euro total budget for national government expenditure) and indicates an increase of 12 percent vis-a-vis the 5.433 billion euro (Annual report National Budget 2010, Ministry of Interior, article 23, p.1). Of the total expenditure in 2011, 4.4 billion (72 percent) went to regional and interregional police, 0.7 billion (12 percent) to national police, 0.2 billion (3 percent) to security regions (including budgets for emergency medical service and fire service), and 0.3 billion (5 percent) to quality management of both police and security regions (Annual report National Budget 2011, Ministry of security and Justice, article 23, p.1). These costs represent the majority of total expenditures on civil security though, since the cost of police and to a lesser extent fire service and emergency medical service capacity are all included.

According to interview respondents from the Ministry of Security and Justice, the current reorganization of the police costs more than the previous situation and no cost saving is to be expected there. Also, the upcoming merger of the Emergency Health Services with the regional public health agencies is driven by considerations on effectiveness rather than efficiency. The regionalization of the fire departments does include a (partial) cost saving ambition, but this was not the primary motive for reform (and it is as of yet unclear if any savings will result from the entire regionalization). The same goes for the current merger of the emergency call rooms (operating 112 calls).

The Dutch government does not have a clear view over how much the state spends in total on CM preparedness and response. Spending and revenues are scattered over a range of government levels and sectors. For instance, the Ministry of Security and Justice does specify what they spend directly on the security regions. But the security regions also receive funding from the municipalities who delegated tasks to the regional level. Consequently, the security region currently gets cut from both sides (6 percent less from the central government, 5 to 10 percent less from the municipalities). The motivation behind this is the current economic recession which puts much pressure on government spending on all fronts.

Investments have been made in recent years in several new technological systems. There is no special budget for innovation, several departments have funding for equipment and renewal. Cost

benefit analyses do play a role, mainly in the tender process. Usually these innovations are very costly, for instance, the C2000 communication technology, the LCMS 2.0 network information exchange system, the equipment of the integrated emergency control rooms (112 call centres), and they meet much scepticism in their early years.

Public debates

The regionalization of the fire service has been a source of dispute in recent years. The fire service used to be locally organized, a responsibility of municipalities. The majority of firefighters are volunteers. Fire services are challenged by a decrease in numbers of volunteers, and by rising costs of professional staff. Economics of scale and professionalism would be enhanced by regionalization of the fire service, which was planned as part of the Security Regions legislation. Municipalities and local fire brigades contested these plans because the reorganization would increase local dependency on regional services (see the website of the Association of Dutch fire service volunteers, at http://www.brandweervrijwilligers.nl/dossiers/dossiers-regionalisering/).

Also, the Security Regions legislation stipulates that the first emergency response unit from the fire service should arrive on site within 18 minutes from the emergency call. In some sparsely populated areas, this norm is infeasible. Fire service executives argue that it would be unwise to invest a disproportionate share of the scarce means in increasing capacity to meet the norm for rural areas, when chances of saving lives are low anyway. In the current household, with modern insulation and electric wires all over the place, fires can be lethal within five minutes. The 18-minute norm is outdated, and preferably resources should be invested in prevention and increase of resilience (Amsterdam commander Van de Wiel, representing the National Association of Fire Services, in *NRC* August 6, 2011).

3.3 Legitimacy

3.3.1 Political support

The civil security system seems to be subject to constant reform, and receives continuous attention from Parliament (as a consequence of lobbying efforts by regions and local authorities to influence reforms, and as a consequence of incidents, media attention for crises and investigation reports). This country study does not find indications of declining legal support, overall severe criticism, or legitimacy deficits regarding the civil security system.

Although ministers are formally and ultimately responsible for failures of civil service in their department and agencies, ministers in the Netherlands seldom resign as a consequence of crises or failing management thereof. A notable exception was the resignation in 2006 of the minister of justice and the minister of housing in reaction to a highly critical report on the fire in an airport detention centre that caused the deaths of 11 asylum applicants who were temporarily detained in the facility. The ministers had to step down because the consequences of government failure had been so severe (no personal culpability for the ministers involved) that resignation would be the only (and most drastic) appropriate political gesture an executive could make towards Parliament.

Incident related reforms

Enschede 2000, Volendam 2001 – Security Regions legislation

The evaluations of the fireworks factory explosion in 2000 and the fire in a bar in Volendam in 2001 gave a strong impetus to reform. Investigations concluded that the organization and scale of the disaster response had been too limited and had lacked professionalism to meet the challenges of the disasters at hand. A national committee concluded that many municipalities lacked skills and capacity to respond to any type of disaster (Commissie-Brouwer, VNG, 2002). The commission strongly recommended cooperation and increase of scale. All this resulted in the Security Regions Law that was enacted on October 1, 2010 (*Brochure Wet Veiligheidsregio's, deel 1, aanleiding, p.8*).

Terrorist incidents 2000-2004 – Reorganization of the Directorate General

Assassinations in 2001 and 2004, and the terrorist attacks on 9/11 instigated important reform in the Dutch domain of counterterrorism. The government decided in 2004 to create the National Coordinator Surveillance and Protection. The organization is a Directorate-General of the Ministry of Security and Justice. Its main duties became modernization of the safety and security system; processing of information on threats and risks; and coordination of safety and security issues with other departments and agencies, local authorities and the regional police forces.

Fire at Chemie-Pack Moerdijk 2011 – Cross-regional cooperation and coordination

This crisis revealed some gaps in the legislation and in the protocols for when transboundary crises occur because it affected several regions. The regions had to cooperate, and the national level supported the regional efforts, but the situation made clear that much could be improved. A bilateral commission was established (with representatives from regions and central government) to reach agreements to smoothen future regional cooperation and coordination, and specify when the central government plays a role (see also letter of the minister of security and justice to Parliament, 3 July 2012).

3.3.2 Legal support

In order to study the effect of ombudsman cases on crisis preparation/response laws and/or actions, this study included an examination of the ombudsman annual reports of 2009, 2010, and 2011 to see whether the ombudsman presents any aspects of the civil security system as an issue that warrants concern. Two issues surfaced:

Q-fever. Q-fever victims complained to the ombudsman that government had compensated goat farmers (the infectious source of Q-fever was goats) for their loss of cattle, but infected patients were not compensated for loss of income or other incurred costs. The ombudsman investigated the matter and recommended the government to compensate the victims (source: TK 2011–2012, 33 172, nr.2). The national government decided to provide 10 million euro for a Q-fever victim support centre (providing advice, research, coaching), but denied responsibility to compensate the victims directly financially (NRC, April 11, 2013).

Police. The ombudsman annual reports present a great number of individual complaints on policing, but these complaints do not seem to relate to recent reform initiatives such as the reorganization of the national police (ombudsman annual reports, 2009, 2010, 2011). The ombudsman instead praises the professionalism of the police (Ombudsman Annual Report 2009, p.16), in contrast and in reaction to earlier reports (Van den Brink, 2007, Ministry of Interior 2006; Adang et al, 2009) that discerned a depravation trend of the relation between police and citizens. The ombudsman pays much attention in its report to this issue and doubts whether this trend reveals an actual pattern of deterioration, or the fact that both citizens and police expect too much and therefore increasingly register complaints that do not reflect an actual increase of the number and severity of incidents (p.16-24).

Most legal cases regarding the civil protection system in the Netherlands pertain to incidents with casualties among first responders. For instance there have been three diver incidents (Urk, 2007, Utrecht, 2001 and Terneuzen, 2008) where fire service volunteers have died because of improper training, procedure or equipment. The incidents with the fire service divers motivated many smaller municipal fire services to quit operating a diving team as a specific skill because they could no longer uphold the safety requirements in terms of training and equipping the staff. With the regionalization of the fire services, economy of scale will help to overcome this problem.

3.3.3 Popular trust and support

Popular perceptions – general

Citizens in the Netherlands feel relatively safe/secure. The most recent Dutch poll (*Risico en Crisis* barometer, June 2012) reveals that the 75 percent of the Dutch do not worry about the probability that they ever get involved in a major disaster (with another 21 percent of the respondents reacting neutral). Special Eurobarometer 383/2012 indicates that the Dutch worry slightly more than average (=EU27) about natural disasters and manmade accidents than about terrorism and conflict crises. See also section 2.3.1 of this study. The majority of citizens think their government is doing enough to fight terrorism (71 percent) and disasters (64 percent) (Special Eurobarometer 371/2011). Incidents do indeed seem to affect popular perception and trust in the short run, but confidence returns in due time (in the absence of new incidents). It is impossible to relate electoral results directly to Dutch crises and crisis management in general.

In Barometer 328, on 'The Need for the EU to Support Member States in Times of Crisis', only 17 percent of the Dutch indicate that their government might not have sufficient national means to face a major disaster (compared to 20 percent average of the EU 27).

4. Dutch Civil Security in the EU Context

Since the creation of the EU's MIC, the Netherlands has only once requested (and received) assistance from the other member states. During the severe winter weather of 2010, unprecedented snowfall and prolonged winter conditions caused a sudden shortage of road salt. The Dutch requested road salt supplies through the MIC and received offers for up to 1 million tons of salt from Austria, Belgium, Denmark, Estonia, France, Greece, Ireland, Italy, Norway and Poland. One could

conclude that EU assistance to the Netherlands has been limited so far. Over time, several contributions through MIC were made to disaster response and relief, predominantly to third countries (see table below).

Assistance period (including pre-alert)	Crisis type and country affected	Request/Contribution by the Netherlands
24.08 - 05.09.2007	Forest fires in Greece	Contribution: 2 helicopters Cougar
13.05 - 17.06.2008	Earthquake in China	Contribution: in-kind assistance
30.09 - 09.10.2009	Earthquake in Indonesia	Contribution: MIC assessment and coordination team deployed on site
07.01 - 21.01.2010	Floods in Albania	Contribution: MIC assessment and coordination team deployed on site
11.01 - 25.01.2010	Snowfall in the Netherlands	Request: 80-100 million kg of salt for roads
12.01 06.04.2010	Earthquake in Haiti	Contribution: 1 Urban Search and Rescue team
29.04 - 23.08.2010	Gulf of Mexico oil spill (United Stated of America)	Contribution: 3 Koseq Rigid sweeping arms, 1 ocean buster, 2 current busters
17.05 - 25.06.2010	Floods in Poland	Contribution: 1 team, 1 pump
25.05 - 01.07.2010	Floods in Hungary	Contribution: 100,000 sandbags
11.03 - 11.05.2011	Earthquake in Japan	Contribution: 2,000 mattresses
20.06 – 29.07.2011	Volcano eruption in Argentina	Contribution: toxicology, European Civil Protection team
13.10 - 19.10.2011	Floods in Southeast Asia	Contribution: experts
24.10 - 22.11.2011	Earthquake in Turkey	Contribution: tents and non-food items

Source: European Community Civil Protection Mechanism: Activations overview, 2012

The Netherlands is actively contributing to civil protection initiatives and activities through the EU. The Netherlands participates selectively in the EU Exchange of Experts programme, in the EU civil protection mechanisms training programme and EU-led civil protection simulations. The Dutch seek to contribute according to their specialisations (defining what expertise and equipment they can contribute) and needs in terms of risk assessment and national exercise schedules (defining which exercises and training could best be joined at the EU level). See section 3.1.2 for the Dutch policy position on EU assistance.

The survey measuring Dutch citizens' awareness of the EU as coordinator of civil protection indicates limited awareness. Special Eurobarometer 383/2012 shows that when asked whether they were

aware of the EU coordinating civil protection both inside and outside its borders, 38 percent of the respondents answered positively, while another 57 percent were not familiar with this task. Nevertheless, a large majority of the Dutch population (79 percent) are confident that in case of a disaster, coordinated EU action is more effective than countries acting individually. As many as 92 percent of citizens believe that not all states possess sufficient national means to deal with major disasters, and they support EU coordination in light of their agreement (91 percent) that such events can have cross-border effects.

The same source depicts that only 16 percent of the Dutch population consider themselves fairly informed about civil protection activities of the EU, alongside 54 percent not very well, and 29 percent not at all informed on the same matter.

5. Conclusion

Historically and culturally bestowed with risk awareness and prevention motives to fend off water, the Dutch became good at exactly that: investing in prevention and matching response capacity to known risks. The Netherlands has had its share of man-made accidents in the past decades, but natural disasters or high numbers of casualties or victims are extremely rare. The constitutional and legal framework fragmented responsibilities and authority to such an extent that coordination and cooperation between many agencies involved is a necessity at all times. According to existing studies and interviews for this case description, this renders the system and its response a bit slow. The upside is that involvement of all parties increases legitimacy and support (checked and balanced at all times). Also, administrative authorities and operational agencies across the disciplines and the territories are relatively familiar with each other and each other's way of working, which enhances the results of their cooperation in crises. Budgets financing the system are also scattered, which makes establishing causal relations between costs and benefits nearly impossible. Efforts to promote efficiency are uncoordinated and the results often unclear. Citizens' trust in government crisis management capacity is relatively high, and citizens' risk perception is low. Nevertheless, each crisis and large-scale incident is evaluated and investigated (too) intensely (Wijkhuis and Van Duin et al, 2012), and the civil protection system is subject to constant reform and adaptation. While the constant ambition to 'do better next time' deserves praise, the system seems rather restless and this begs the question whether too many adaptations and changes are not part of the problem instead of the solution. In the mean time, operational response often occurs timely and smoothly because emergency officers are highly trained, experienced and well-connected and tend to work around impending reorganizations, recently introduced tools and new protocols

In our conversations with practitioners and in the reading of the many reports, we could not detect a deep awareness of EU aims and activities in the crisis and disaster domain, nor did we notice a widely shared need for an enhanced role for the EU. As in other Member States, EU action lacks visibility. This is an issue that should be addressed and that can be part of EU value-added.

The potential added value of the Dutch civil protection system (strengths) would be;

- Risk awareness and prevention efforts
- o Interdisciplinary and intersectoral cooperation at all levels (local, regional, national)
- o Constant lesson drawing and improvement efforts

• High quality operational response (trained, educated, exercised, and integrated) The potential added value of comparative lessons for the Dutch (current weaknesses) could be:

- The benefits of centralization of authority (speed, decisiveness, transparency)
- The benefits of institutionalization and consolidation of laws, routines and practices
- The experience from sites where major natural disasters occur with many casualties (as the Dutch have not experienced such crisis types in the past half century).

Annex I: Coded Data



1	Introduction	Scoring instruction	Score	Source
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Van Duin 2012
1. b	Is the crisis management approach primarily based on military or civilian operations?	Civilian = 2	2	Van Duin 2012
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	In exceptional situations =	1	Van Duin 2012
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly specific threats = 2	1	Van Duin 2012
2	Analytical dimensions	Scoring instruction	Score	Source

2.1	Cultural and historical aspects			
2.1.1	Administrative tradition			
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	
2.1.1.b		Parliamentary system = 1 Presidential system = 2	1	
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	1	
2.1.1.d		Consociational democracy = 1 Majoritarian democracy = 2	1	Lijphart, 1968, 1984
2.1.1.e	Is delegation constructed in a top-down or bottom- up fashion?	Top-down=1Bottom-up=2Both = 3	3	Van Duin 2012; Brainich 2009
2.1.2	Culture			
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		38	http://geert-hofstede.com/countries.html
2.1.2.a.ii	Geert Hofstede country national cultural score - IDV		80	http://geert-hofstede.com/countries.html
2.1.2.a.iii	Geert Hofstede country national cultural score - MAS		14	http://geert-hofstede.com/countries.html

2.1.2.a.iv	Geert Hofstede country national cultural score - UAI	53	http://geert-hofstede.com/countries.html
2.1.2.a.v	Geert Hofstede country national cultural score - LTO	44	http://geert-hofstede.com/countries.html
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular	0.71	http://www.worldvaluessurvey.org/
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression	1.39	http://www.worldvaluessurvey.org/
2.2	Legal & constitutional aspects		
2.2.1			
	Statutory basis		
2.2.1.a	-	2	Brainich 2009

2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?		1	Wet Veiligheidsregio's 2010, Politiewet, 2012, Gemeentewet
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	Yes = 1	1	Brainich, 2009
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	Yes = 1	0	Brainich, 2009
2.2.2	Political dimension			
2.2.2.a		At the national level = 1 At the regional level = 2 At the local level = 3	3	Brainich, 2009
2.2.2.b	government does policy formulation for civil security FIRST AND	At the national level = 1At the regional level = 2At the local level = 3	1	Wet Veiligheidsregio's 2010, Politiewet, 2012, Gemeentewet
	FOREMOST rest?			
2.2.3	FOREMOST rest? Operational dimension			

2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1	0	Brainich, 2009
2.2.3.c	Is the exercise system formalised by law or executive mandate?		0	Brainich, 2009
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	5	interviews: 1 annually
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	3	Waterproof in 2008, Cyberstorm III in 2010, Indian Summer in 2012
2.2.4	External dimension			
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	Yes = 1	1	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	14	

2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?		14	
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	One or two times = 1 More than two times = 3	0	interviews, MIC
2.3	State-citizens relations			
2.3.1	Expectations			
2.3.1.a	formal/legal obligation or	request by public authorities = 1 Regular private		interviews
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	interviews

2.3.2.b		No = OYes, at the local/regional level = 1Yes, at the national level = 2Yes, at both local/regional and national levels = 3	1	interviews
2.3.2.c	Does the government have a central website with updated information on crisis events?	Yes, at the local/regional	2	interviews
2.3.2.d	(Facebook, Twitter etc.) to	Yes, at the local/regional	1	Interviews: Police twitters
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	Yes, at the local/regional	2	http://www.nederlandveilig.nl/nl-alert/
2.3.3	Education			
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		0	interviews

2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1To members and limited public outreach = 2To member and wide-spread training programmes for general population = 3	1	rescue services and red cross
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	Yes, moderately (once per	1	observation
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?	Yes = 1	0	interviews
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number		
2.4	Role of private sector			
2.4.1	Role of societal/ non- profit organisations			
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	red cross mainly

2.4.1.b	actors play an official/legally mandated	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	1	rescue services on water, red cross on medical and registration
2.4.2	Role of profit-oriented organisations			
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	hospitals for instance
2.4.2.b	actors play an official/legally mandated	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	1	
3	Quality measures	Scoring instruction	Score	Source
3.1	Effectiveness			
3.1.2	Limits to national capacities			
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	1	MIC
3.1.2.b	state of emergency or	legal provisions for state	NA	

2.2	state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA	NA	
3.3	Legitimacy			
3.3.1	Political support			
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	3	
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.		
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.		
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	1	
3.3.2	Legal support			

3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?			
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0	http://www.nationaleombudsman.nl/
3.3.2.c.		Partial (legally defined leeway for operational crisis management) = 1	0	unclear
3.3.3	Popular trust and support			
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man- made disasters?	percentage for "Agree"	64	Special Eurobarometer 371 (2011)
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	percentage for "Agree"	71	Special Eurobarometer 371 (2011)

3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	1	through Red Cross
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	0.8	Red Cross volunteers are 4,800 in total
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.		
4	Civil security in the EU context	Scoring instruction	Score	Source
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011		-
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011		-
4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis, Simon (2010). National Participation in EU Civil Protection.
4.d		Register the number for the 2009-2010 training cycle	32	Hollis, Simon (2010). National Participation in EU Civil Protection.

4.e	-	Register the number for 2002-2012	8	http://ec.europa.eu/echo/policies/prevention_preparedness/preparedness_en.htm
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002- Sept. 2012)?	Register the number for 2002-Sept 2012	0	-
4.g		Register total financial assistance in million euro for 2002-Sept 2012	0	-
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	40	Special Eurobarometer 383 (2012)
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	79	Special Eurobarometer 383 (2012)

Annex II: H1N1 in the Netherlands⁴⁸³

1. Timeline

Amil 24 th 2000	Official randomic (according to WILO definition, based on first figures)
April 24 th , 2009	Official pandemic (according to WHO definition, based on first figures:
	62 fatalities/1,000 infected in Mexico)
	Dutch government decides to implement the Pandemic protocol,
	conform with the ECDC expert opinion of April 25 th , 2009. Dutch
	government decides to be prepared, informs all hospitals and health
	-
	care facilities on pandemic protocol. No further drastic measures are
	taken: borders stay open, and so do schools and other community
	facilities. The Public Health Department decides to combat the spread
	of the disease by preventively administering antiviral drugs to those in
	close contact with infected persons (ringprofylaxe). Government had
	4.7 million doses of antivirals in storage. All medical professionals are
	obliged to notify the government of any suspicious infections. The new
	Influenza H1N1 type A is <u>classified as a category A disease</u> (which
	means that the minister of public health and the central government
	are now in charge of crisis management policy and decision making)
April 28, 2009	Ministry of Foreign Affairs advises tourists not to travel to Mexico.
April 30 th , 2009	First infected patient in the Netherlands arrives at Schiphol airport
May, 2009	Government sends brochures and posters to all public places (schools,
	hospitals, daycares, stations, libraries, etc), advertises and broadcasts
	communications on preventive actions with respect to H1N1
May 18 th , 2009	Minister of public health decides to order 34 million doses of vaccine
	(to vaccinate each member of the population twice)
June 11 th , 2009	WHO announces phase 6 (pandemic)
June 21 st , 2009	Number of infected persons in the Netherlands exceeds 100
June 26 th , 2009	A total of 118 infected persons in the Netherlands so far. Cabinet urges
	Department of Public Health to draft a vaccination and a

⁴⁸³ All information stems from the comparative study by Van Duin et al (2012), chapter 5 "Mexicaanse Griep (pp.35-43) and the Berenschot (2011) report "Evaluatie Aanpak Nieuwe Influenza A (H1N1), unless otherwise specified in this annex. The Berenschot report is publically available at http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2011/03/14/kamerbriefevaluatie-nieuwe-influenza-a-h1n1---de-mexicaanse-griep.html

	communication plan.
July 30 th , 2009	<u>Creation of a special telephone team</u> for Q&As. The team received 13,700 calls already in the first week
July 31 st , 2009	Number of infected persons in the Netherlands grows to 500
August 4 th , 2009	First patient dies of H1N1 (patient had already had a negative medical condition)
August 7 th , 2009	Dutch Public Health Agency announces that from this moment on, the H1N1 influenza can be treated as a 'normal' influenza due to its mild profile
August 15 th , 2009	A total of 1,473 persons infected in the Netherlands
August 19 th , 2009	Government <u>launches a nationwide crisis communication campaign</u> (all households receive a letter and a brochure, television, radio and newspaper advertisement, special website, etc)
September 15 th , 2009	Vaccination plan is completed. <u>Government (minister of public health</u> <u>advised by the Public Health Council) decides to prioritize groups for</u> <u>vaccination</u> : medical risk groups, elderly, health care professionals are vaccinated first. Later, children under 5 years old are also included in the vaccination group, which means the plan for mass vaccination will be implemented in all regions (i.e. great numbers at once - this cannot be done by local medical practitioners to their registered patients, but needs to be done in concert by a coordinated effort of public health agencies and Red Cross volunteers.
September to November, 2009	Several people die of influenza H1N1 in the Netherlands (among them are also previously healthy people)
October 27 th , 2009	Minister of public health announces that government will sell 19 million doses of the vaccine it had ordered, because the epidemic in the Netherlands is mild, and vaccination is not needed for the whole population
November 2 nd , 2009	Hospitals and general practitioners <u>vaccinate all designated risk groups</u> , as well as all health care professionals who work with high risk patients/clients
November 9 th , 2009	Minister of public health explains at a national talk show that the vaccine entails no significant risk http://pauwenwitteman.vara.nl/Archief-detail.113.0.html?tx_ttnews%5Btt_news%5D=13469&tx_ttnews%5Bba
Last week of	All security regions implement the mass vaccination plan for children

November/third week of December, 2009	aged 1-4 years
December 24 th , 2009	Government announces the end of epidemic (less than 51 infections
	per 100,000 inhabitants). The H1N1 influenza had caused 60 casualties
	in total (compared to 100-250 for the regular seasonal flu).
January 17 th , 2010	The last 17 million doses of vaccine are finally delivered (but not used)
July, 2010	Media criticize the minister of public health for the unnecessary
	purchase of vaccines for the entire population (hindsight wisdom seems
	to play some role here). The total cost of the redundant vaccines
	amounts to 144 million euro (figures based on a journalistic investigation by television station RTL).
	http://www.rtl.nl/components/actueel/rtlnieuws/2010/07_juli/26/verri
	jkingsonderdelen/tijdlijn-mexicaanse-griep.xml
	http://www.nrc.nl/nieuws/2011/09/28/overmatige-inkoop-
	griepvaccins-kost-144-miljoen/
	http://www.elsevier.nl/Politiek/nieuws/2010/7/Ab-Klink-blunderde-bij-
	aankoop-miljoenen-vaccins-ELSEVIER271672W/

2. Actors

The new influenza H1N1 type A was classified as a category A disease by the minister of public health, which in public health law means that crisis management is centralized and the minister of public health is in full charge of the situation. The Public Health Agency (RIVM, with its Centre of Infectious Disease Control, Clb) advises the minister and together with the Ministry directs the implementation at local and regional level.

An *outbreak management team* (OMT) of high civil servants and medical experts advises the top executive civil servants team (BAO) that evaluates the political-administrative feasibility of the expert advice, and then provides the minister with recommendations on the measures to take. Depending on the interests concerned, decisions are made either by the minister of public health or by the cabinet of ministers.

At the regional and local level, public health agencies implement the medical measures decided centrally. Local government (headed by the mayor as commander in chief in crisis situations and the municipal council as highest authority) is in charge of public order and safety, as well as implementation of measures such as cancelling events or closing schools (which eventually proved not necessary) and facilitating mass vaccination (accommodation, safety, traffic circulation).

Private actors were also involved, e.g. pharmaceutical companies that provided the vaccines and antiviral medicine, or hospitals and private medical practitioners that treated the patients. NGOs such as the Red Cross assisted locally to implement the mass vaccination.

3. Public-private sector relation.

The central government invited some key private sector (medical) experts to join the Outbreak Management Team that advised the minister. In August and September 2009, the Ministry of Public Health organized regional meetings with health agency professionals (as well as with political-administrative local executives) to inform them about the legal provisions of the Public Health Act in case of a pandemic, the division of responsibilities in crisis management, the measures announced by the minister so far, and possible scenarios in the upcoming months. In the aftermath of the crisis, democratic representatives in Parliament became suspicious about pressure by the pharmaceutical industry on the minister of public health to decide early on the purchase of vaccines. The new minister of public health decided to commission an investigation into the matter (pending).

4. Key decisions

A number of decisions are central to the way Dutch authorities handled the epidemic:

- the decision by Dutch government to implement the Pandemic Protocol;
- the classification of H1N1 type A as a category A disease and the transfer of authority for crisis management policy and decision making to the minister of public health and central government;
- the preventive administration of antiviral drugs to contacts of infected patients and medical personnel;
- the government request to medical practitioners that any suspicious infection be reported;
- the dissemination of brochures and posters to all public places;
- the purchase of 34 million doses of vaccine;
- the availability of a special phone line to address questions about the epidemic;
- the launch of a nationwide crisis communication campaign to individual households;
- the prioritization and vaccination of medical risk groups and health care professionals;
- the vaccination of children aged 1-4 years
- the decision in December to sell 19 million redundant doses of vaccine;
- the announcement that the epidemic has come to an end. In total, 62 people have died of H1N1 in the Netherlands during 2009.
- the assignment of professional inquiries to evaluate the pandemic response

5. Aftermath

In 2010, the Ministry of Public Health commissioned a consultancy firm (Berenschot) to conduct an independent evaluation in order to learn lessons on the administrative executive crisis management process and key decisions. Berenschot completed its report on March 9, 2011. The Public Health Inspectorate conducted a professional inquiry into the work of the emergency health services during the pandemic (completed February 1, 2011). On March 14, 2011, the minister of public health presented both reports to the Parliament. lt is publically available at http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2011/03/14/kamerbriefevaluatie-nieuwe-influenza-a-h1n1---de-mexicaanse-griep.html.

On September 29, 2011 the (new) minister of public health debated with Parliament on the justification of the influenza vaccines purchase in 2009. The previous minister of public health was no longer in office due to the (unrelated) electoral loss of his Christian Democratic Party, and the creation of a new government coalition as a result of the elections. On December 23, 2011, the minister of public health responded to questions of Parliament by installing an inquiry commission to investigate the (redundant) purchase. On October 24, she sent a letter to Parliament stating that the administrative High Court has decided on the publicness of all information required for the investigation, and that she will inform the Parliament as soon as possible on the investigation results (no news yet). The minister informs Parliament in the same letter that the total cost of the response to the H1N1 influenza pandemic of 2009 in the Netherlands amounts to 341 million euro (see 'Kamerbrief Commissie Aanschaf Vaccins Nieuwe Influenza (H1N1)', Letter to Parliament October 24, 2011).

No political crisis or particular upheaval resulted from the 2009 influenza pandemic and the government response to it. The general tone in the media is critical (government should not have overreacted to what turned out to be a rather mild flu, and now the expenses on millions of doses of vaccines are wasted), but the debate and criticism does not increase or escalate. The criticism does not have any political consequences in terms of sanctions, motions, or resignations. No specific reforms were initiated as a result of the crisis. In fact, the 2009 influenza put the new Public Health Law and the crisis management decision making structure to an excellent 'real life' test.

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Norway

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Executive Summary

The Norwegian state has a long-standing tradition of protecting its citizens from a range of threats from natural disasters, infectious diseases, industrial accidents, critical infrastructure failure, to terrorist attacks. This case study provides a broad and detailed description on the main features of the modern Norwegian civil security system. It explains how it functions, it describes the system's political and cultural context, and it addresses the changes that have occurred since the Oslo bombing and the Utøya shootings in 2011 July 22. The coordination of human and material resources to prevent, prepare, respond to, and recover from, various crises is constructed along three guiding principles of responsibility, decentralization, and conformity. This not only means that responsibility for crisis management should be at the lowest possible level, but that the state and its society must also operate under normal standards, regardless of the type or extent of a particular crisis. As this study shows, most areas of the civil security system are infused with these defining principles. This can be seen, for example, in the discussion on the cultural elements that inform Norwegian society, the production of legislation, or in operational procedures used in responding to crises. In addition to these areas, this study also provides detailed descriptions on Norway's administrative and legal traditions, its external cooperative endeavours, as well as the way in which the private sector and citizens interact with civil security system. In order to further understand the system, this study investigates three quality measures based on the extent to which the system is effective, efficient, and legitimate. An annex is also included that depicts the principal descriptive features of the study, as well as a case study on the H1N1 virus. Set within the dark shadows of the events that took place on July 22 - that could have been avoided through existing security measures according to Norwegian state authorities – this study concludes by highlighting the need for an increase in vigilance and efficiency of the Norwegian civil security system.

Key Findings

1. *Horizontal communication*. There tends to be a fair amount of variation in municipal disaster risk preparedness in terms of updating local Risk and Vulnerability Analysis (ROS): "Norwegian governance model is hierarchical and poorly suited to cooperation across sectors"

2. *Vertical communication.* The communication between local and national level of civil security and the protocol for including additional actors remains fairly *ad hoc*.

3. *Values*. The civil security system rests on three principles (responsibility, decentralization and conformity). This means that responsibility for crisis management should not only be at the lowest possible level, but that the state and its citizens must also operate under normal standards, regardless of the type or extent of a particular crisis

4. *Information*. Since January 2012 the DSB maintains and runs a website, 'Kriseinfo', that is designed to provide up-to-date information on approaching, current, as well as recovery from, crises. This is understood as the main medium used by the state to inform the public.

5. *Change*. The events of 22/7 have produced a number of important changes to increase the effectiveness and efficiency of the civil security system. This has occurred in the context of a more organic change of the system that has evolved since the late 1990s and early 2000 as a result of the changing global geopolitical system.

1. Introduction⁴⁸⁴

The Norwegian civil security system is based on the guiding principles of liability/responsibility, decentralization and conformity. This means that each citizen or institution is responsible for their own safety, that the responsibility for crisis management should be at the lowest possible level, and that the state and society must operate under normal standards regardless of the type or extent of a particular crisis. According to these principles, the civil security system addresses 'major accidents' defined as an 'occurrence which has an uncontrolled development and which immediately or later causes serious danger to humans, the environment or material values' (Storting 2002, § 4.g).⁴⁸⁵ These emergencies include common reoccurring disasters, such as floods, fires, and transport and industrial accidents, as well as atypical disasters such as the recent Oslo bombings and Utoya shootings in 2011. While Norway has a history of few disasters (Christensen, Fimreite and Lægreid 2011), flooding is the most common disaster that reoccurs with the most frequency and that takes up a majority of deaths and economic damages caused by disasters in Norway (PreventionWeb 2012). Other recent disasters include the MS Sleipner shipwreck in 1999, the Barentsburg mining accident in 1997, the Torghatten plane accident in 1988, and the Alexander Kielland oil platform accident in 1980 (Odegaard, n.d)

The dominant crisis management approach is based on an 'all hazard' perspective. This means that the civil security system includes the prevention, preparedness, and response to, and recovery from, a wide range of threats that include rock falls, earthquakes, marine pollution, climate warming, industrial accidents, and acts of terrorism. For a list of the major crises that occurred in Norway in the last decade please refer to Table 1.1.

Civilian crisis management bodies make up the majority of the organizational structure in the Norwegian civil security system. This does not mean, however, that cooperation with the military is side-lined. Instead, there exists a healthy cooperative relationship with the military when civilian resources are deemed insufficient. This relationship is built on the modern 'Total Defence' concept that involves preparation for war, the protection of Norwegian sovereignty, and assistance in peacetime crisis situations. The military also conduct intelligence work, participate in civilian rescue missions, and maintain responsibility for the Norwegian Coast Guard (Storting 2012b, p.94, Commission 2012).

⁴⁸⁴ We thank Mette Bakken for her useful comments on this article.

⁴⁸⁵ The Civil Protection Act shares a similar definition on 'adverse events' as 'events the deviate from the norm, and that has resulted or may result in loss of life or damage to health, property and the environment' (JD 2010).

Year/ Month	Crisis description	Crisis category	# of persons killed	# of persons injured	# of persons affected
2000	Lindesnes municipality	Flood	-	-	600
2000	Åsta train accident	Transport accident	19	30	-
2001	Flood ⁴⁸⁶	Flood	-	-	1,500
2004	Rocknes shipwreck	Transport accident	18	-	12
2006	Neo-Nazi group	Terrorism	1	-	-
2007	Vest Tank Explosion	Industrial accident	-	-	*
2008	Storms Sondre, Tuva, Urlik, Vera and Yngve	Storms	-	100	-
2009	H1N1 epidemic	Epidemic	29	-	900,000
2011	Outbreak of Tularaemia	Infectious disease	-	-	39
2011	Storms Dagmar, Berit, Cato and Emil	Storms	4	-	500
2011	Oslo	Terrorism	-	1	-
2011	Oslo bombings	Terrorism	7	15	-
	Utøya shootings		69	60	-
Total			147	206	902,651

Table 1.1Crises in Norway: 2000-2012

Source: Christensen, Fimreite and Lægreid 2011, Larssen 2011, EM-DAT 2012, Storting 2012, GTD 2012⁴⁸⁷ * 'many people' living close to the accident site were affected, no specific number is available (DSB 2007d).

The Ministry of Justice and Public Security (MoJPS) holds the executive responsibility for overall coordination on this wide range of threats.⁴⁸⁸ However, according the principle of liability/responsibility each state department is responsible for their own safety and their own field of threats in the first instance. The Ministry of Health and Care Services, for example, is generally responsible for pandemics, while the Ministry of Defence is responsible for cyber and terror attacks. Additionally, the Directorate for Civil Protection and Emergency Planning (DSB) is responsible for coordination and cooperation with various levels of governance within and outside of Norway based on an 'all hazard' approach. Table 1.2 provides a recent overview of the main threat categories that DSB prioritised in 2012.

⁴⁸⁶ Note that no crisis description could be found to corroborate the EM-DAT source.

⁴⁸⁷ Note that the information provided may not be exhaustive and only based on the referenced sources. Furthermore, only terror attacks that either results in an injury or fatality are included. For a more comprehensive overview on terror attacks see: <u>http://www.start.umd.edu/gtd/</u>

⁴⁸⁸ Note well that the Ministry of Justice and the Police has, since the 22/7 terror attacks, changed its name to the Ministry of Justice and Public Security (MoJPS).

Table 1.2 National Risk Picture: 2012

Natural events	Storms and hurricanes				
	Floods				
	Landslide				
	Influenza pandemic				
	Sola-storm				
	Volcanic eruptions				
Major accidents	Hazardous substances				
	Ship accident				
	Nuclear accident				
	Fires				
	Accidents in offshore operations				
Intentional events	Terrorism				
	Security policy crises				
	Cyber attacks				

Source: Stortinget, 2012b

2. Analytical Dimensions

2.1 Cultural and historical aspects

2.1.1 Administrative tradition

The Kingdom of Norway is a constitutional monarchy and a consensual democracy with a unicameral parliament system. The 1814 constitution established three branches of government. Legislative power is vested in the Parliament (*Storting*). Executive power is vested in the king in council, and judicial power in the Supreme Court and a high amount of power resides with the prime minister (Stortinget 2012a, 2012c). While the executive power resides with the king, it is the Storting that holds authority and the constitutional and parliamentary responsibility of the executive is held by the cabinet or government. Norway is divided into 19 counties (*fylke*) and 430 municipalities. Each county is governed by an elected county administration (*fylkestinget*) and a governor (*Flykesmannen*) who is appointed by the king and acts as a representative of the Norwegian state (Oslo and Akershus are managed by a single governor). Each municipality is governed by an elected council ward.

Norwegian civil security is shaped by the principles of liability, decentralization, and conformity. Liability means that each individual and each ministry is responsible for its own safety. Decentralization denotes a focus on handling emergencies at the lowest possible level, and conformity emphasizes that regardless of what societies are exposed to, they ought to maintain normal standards of behaviour (Commission 2012, DSB 2012f).⁴⁸⁹ For an overview of the civil security system see Figure 2.1.

⁴⁸⁹ Another guiding principle that constitutes Norwegian civil security is its attachment to the concept of Total Defence with a focus on societal security. This means 'mutual support' between military and civilian defence organizations (cf. Lango, Lægreid and Rykkja 2011, 173).

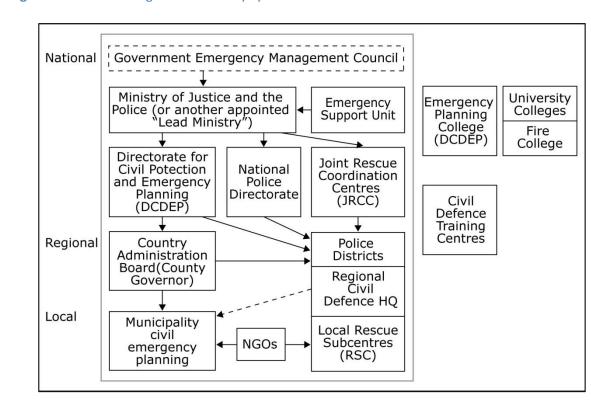
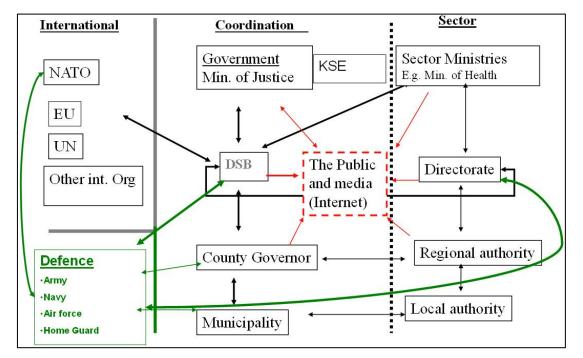


Figure 2.1 Norwegian civil security system



Source: Commission 2012

The DSB is the main protagonist for facilitating and constructing national preparedness plans based on an 'all-hazards' approach. It is also expected to support the MoJPS, report to the government, and provide information and supervise other ministries, the counties and municipalities. Additionally, the national, regional (counties) and local levels (municipalities) are involved in regular DSB exercises with the aim of providing efficient crisis management and communication at all levels. However, it is debatable to what extent cooperation between these levels has been effective (cf. Forskningsrådet 2012); an issue that has re-emerged in the wake of the July 22 terrorist attacks (cf. section 3.1.2). The DSB acts under the authority of the MoJPS. The latter coordinate's general emergency planning, develops national guidelines, makes principal decisions on national preparedness, and coordinates different sectors (Commission 2012, Britz 2007). When there is uncertainty on which ministry ought to coordinate response, the prime minister appoints the lead ministry. The Norwegian Police Security Service (*Politiets sikkerhetstjeneste* - PST) and the Police Directorate (*Politidirektoratet* - POD) are, in turn, responsible for protecting national security interests that include countering espionage, sabotage and terrorism.⁴⁹⁰

The response phase is based on a decentralized principle where the responsibility for a disaster resides at the local level.⁴⁹¹ This means that each municipality, together with local rescue subcentres, the private sector, and emergency services, are the first responders who are expected to manage a disaster according to their own capacity.⁴⁹² The procedures for up-scaling or down-scaling a crisis are not fully regulated, but tend to be based on an ad hoc process. This has received some attention in post 22/7 evaluations that underline challenges for coordinating efforts between the municipalities and the state (Lægreid 2012).⁴⁹³

When the national level is activated, responsibility lies with the lead ministry, which is usually the MoJPS, but it can be other ministries depending on the nature of the disaster and specific policy instruments available to each ministry (MSB 2009, p. 167).⁴⁹⁴ The lead ministry is supported by the Government Emergency Management Council, which is now called the crisis council (Kriserådet). This is the highest administrative body for coordinating crisis management. The council's tasks are to ensure coordination between various sectors, the provision of information to the public and media outlets, and to clarify mandates and budgets (MoJPS 2011-2012, 6.1.3).⁴⁹⁵

⁴⁹⁰ This role that is complemented by the Defence Intelligence Service (*Etterretningstjenesten*) and the National Security Authority (NSM). The NSM are also connected to the MoJPS, whereby the NSM is obliged to report to the MoJPS concerning issues involving civil protection (Lango, Lægreid and Rykkja 2011, 175).

⁴⁹¹ It is important to note that this is not a fully decentralized system as the DSB play an important assisting and coordinating role at the local levels (Pursiainen, Hedin and Hellenberg 2005, p. 16)

⁴⁹² If necessary, the regional level of governance is initiated which transfers responsibility to the council governor (*Flykesmannen*) – the state's representative. This rapidly increases the need for communication between a number of actors that can include the civil defence force, emergency services, the county governor and municipalities. The importance of this communication is underlined in the annual 2008 DSB report and formalized in DSB Strategy 4 (DSB 2008, p. 7).

⁴⁹³ Provisions for horizontal cooperation between municipalities are stipulated in the Norwegian Public Health Act, which requires that a municipality must offer assistance if it receives a request by another municipality.

⁴⁹⁴ Lead ministries are decided based upon (1) the character of the crisis, (2) which department has the best expertise and access to information about the crisis, (3) and which department has the most appropriate tools for managing the crisis (MoJPS 2011-2012, 6.1.3).

⁴⁹⁵ The permanent members of the council include secretaries from the Prime Minister's Office, the Ministry of Justice, the Ministry of Defence, the Ministry of Health and the Ministry of Foreign Affairs. The crisis council and the 'lead ministry' are relatively new organizational features that emerged with the restructuring of the civil protection system in 2006 in order to improve crisis coordination. Since the events of 22 July 2011, it has

A permanent government Crisis Support Unit (KSE) supports the crisis council and also acts its permanent secretariat. The KSE has a 24-7 civil situation centre that is comprised of the Ministry of Defence (responsible for national and international military operations), the Foreign Ministry, and the MoJPS. Since the events of 22 July 2011, KSE has received a larger budget which is designed to strengthen its capacity through increased training, rehearsals, and simulation exercises (Ibid). The DSB also provides a facilitating and coordinating role at the national level, and can draw on the Civil Defence Organization as its operative arm. There are 20 civil defence districts, five camps, five schools and five regional inspectorates for inspections and control of electrical safety (Commission 2012). Approximately 50,000 people serve in the Civil Defence Organization and roughly one third can be deployed for peacetime emergencies (MSB 2009, p. 167).

2.1.2 Government and social culture

In order to gain a better understanding of Norwegian social culture, the Geert Hofstede index on national culture is used, which is divided into five measurable dimensions: power distance (PDI), kinship versus individualism (IDV), gender (MAS), control (UAI), and short-term versus long terms perspectives.⁴⁹⁶ These dimensions are described below and are tentatively connected to the civil security system (see Table 2.0).

Table 2.0Geert Hofstede cultural dimensions

Cultural dimensions	Norway
1. Power Distance (PDI)	Decentralized
2. Kinship versus individualism (IDV)	Individualist
3. Gender (MAS)	Solidarity
4. Control (UAI)	Malleable
5. Short-term versus long-term perspectives (LTO)	Short-term

Source: Hofstede n.da

- 1. PDI. The first dimension focuses on power. It reveals that Norwegians prefer a decentralized system of power, where organizational culture is consensus-driven and that direct communications between managers is encouraged (Hofstede n.da). This dimension is reflective of Norway's consensual approach to democracy and its principle of decentralization for civil security cooperation.
- 2. IDV. The second dimension defines Norwegian society as a 'loosely-knit social framework' that emphasises the individual. This means that there are distinct boundaries between work

been decided that the threshold for calling the crisis council should be lower and that there is a need for a clearer description on the expectations of the lead ministry (Ibid).

⁴⁹⁶ The original 'Hofstede dimensions of national culture' were organized around the first four dimensions. Since then a fifth dimension (LTO) was added in the early 1990s. Based on the World Value Survey a sixth dimension called 'indulgence versus restraint' was added in 2010. As there is no statistics on this dimension, the world value survey is used to complement the five dimensions.

and private life, and that communication is direct, and that management focuses on the 'management of individuals' (Ibid). This dimension is reflective of Norway's civil security system. A good example of this can be seen in an annual report from DSB that has the following subheading: 'A Safe and Robust Society – *Where everyone takes Responsibility*' (DSB 2008, emphasises added). A connection to this dimension can also be made to the principle of conformity in Norwegian civil security.

- 3. MAS. The third dimension focuses on gender. Here, Norway is defined as more 'feminist' than 'masculine'. That is, it prioritises cooperation, modesty, [and] caring for the weak' rather than 'achievement, heroism [and] assertiveness' (Ibid). This means that decision making is often made through consensus; solidarity is emphasised and self-development encouraged. The minimization of hierarchical structures can also be connected to the principle of decentralization.
- 4. UAI. The fourth dimension focuses on the extent to which people wish to control uncertainty in the future. Norway is classified as a malleable society that emphasises practice over principles. This means that people are willing to receive new ideas, take risks, improvise, and that there is a focus on planning (Ibid).
- 5. LTO. The fifth dimension emphasises short-term and long-term perspectives on virtuous behaviour. Norway is classified as a society that has a short-term perspective. This means that there is a focus on maintaining stability, and quick results are expected. The idea that a premium is placed on maintaining stability in Norwegian culture can also seen to be reflective of the principle of conformity in its approach to civil security.

An additional indicator of culture used in this report is based on the World Value Survey (WVS) that inter alia investigates (1) the extent to which national culture holds traditional or secular-rational values and (2) the extent to which society is an industrial or post-industrial society.⁴⁹⁷ In regard to the former, Norwegian national culture maintains an increasingly secular-rational perspective that does not consider religion to be overly important.⁴⁹⁸ In regard to the latter (post/industrial), the WVS shows that Norwegian culture has increasingly developed towards self-expression, which places Norway as the second most 'self-expressed culture' in the world after Sweden.⁴⁹⁹ The first indicator is reflective of the decentralization principle in Norwegian civil security and the MAS dimension. The

⁴⁹⁷ Out of the many variables investigated in this survey, traditional/secular rational values and survival/selfexpression values explain more than 70 per cent of the cross-cultural variances on more specific scores (Inglehard n.d, cf. Inglehard and Welzel 2005). The first describes the extent to which national culture holds traditional or secular-rational values. This index is based on a score that roughly goes from -2 to 2. The lower the score, the more traditional is national culture. Norway has been surveyed four times. The first survey was conducted in 1981, producing a value of 0.89, and last in 2006, producing a value of 1.39 (Inglehard n.d).

⁴⁹⁸ This means that Norway attaches less importance to parent-child ties, authority, absolute standards, and traditional family values. Divorce, abortion, euthanasia, and suicide are not necessarily rejected as appropriate social behaviour (Ibid).

⁴⁹⁹ This means that Norwegians generally favour subjective well-being, quality of life and self-expression. Survival is taken for granted due to a long period of prosperous growth in advanced societies (Ibid).

second indicator, that takes survival as taken-for-granted, does not seem to fit with any of the principles underlying the Norwegian approach to civil security. Instead, it may be interpreted as a cultural-based barrier to more effective implementation of civil security as motivation stemming from survival is weak. However, depending on how deep this cultural element is, it may be changing since the 22/7 events.

2.2 Legal and constitutional aspects

2.2.1 Statutory basis

Crisis responsibilities are legally institutionalized at the national, regional and local levels through a number of key resolutions and acts.⁵⁰⁰ The degree of legal institutionalization does not seem to differ widely across the national, regional, and local levels.

The major reforms to the Norwegian civil security system occurred in the 1990s when it gradually widened its focus from preparing for war – based on the 'Total Defence' doctrine – to also including societal security and safety (*samfunssikkerhet*). A number of political discussions and documents were produced in the early and mid-1990s that questioned the definitional status of the total defence concept in light of the new post-Cold War security context.⁵⁰¹ This culminated in the transformation of the Norwegian civil security system in 1998 (Husabø 2008, p. 29). This report marked a widening, rather than a shift, on the concept of security to include the traditional emphasis on preparing for war (the Total Defence doctrine) with an increasing emphasis on preparedness and response to peacetime disasters. A committee on the vulnerability of society was consequently established in 1999. The final report from this committee provided much of the inspiration and basis for institutional reform and legislation on civil protection (Ibid). While a separate ministry for civil protection was recommended, the final outcome saw the responsibility divided between the MoJPS and the Ministry of Defence. The DSB was also created in 2003, which incorporates three former

⁵⁰⁰ The national level is constituted by the following legal provisions: the Act relating to Prevention of Fire, Explosion and Accidents involving Hazardous Substances and the Fire Services' Duties connected with Rescue Operations (DSB 2002); the Act relating to Inspection and Control of Electrical Plants and Equipment (MSB 2009); The Act on the Control of Products and Consumer Services (Regjeringen 1976); The Act on Civilian Defence (MSB 2009). The regional level is constituted by the following legal provisions: the Royal Resolution of 18 April 2008 on the Instruction for work related to the safety and security of society and civil protection at the County Governor's offices; the Royal Resolution of 12 December 1997 on the Guidelines for coordination during crises and peacetime catastrophes; and the Guidelines for the County Governors' use of formal objections in land-use planning cases according to the planning and building act (Husabø 2008, p. 14). Also see the War Act of 15 December 1950, the Supplies Act of 14 December 1956 (this was recast to include peacetime crises in 1974), the Security Act of 20 March 1998, the Act of Social and Health Preparedness of 23 June 2000, the Police Act of 4 August 1995, the Fire Protection Act of 8 December 2000, the Fire and Explosion Prevention Act of 14 June 2002, the Planning of Building's Act of 14 June 1985, the Protection Against Pollution Act of 13 March 1981, the Regulation of 4 July 1980 on the Main Principles of the Organisation of the Search and Rescue Services, the Act on Municipal Responsibility for Sectoral Risk, Vulnerability Assessment and Emergency Plan, 1 January 2010 (Commission 2012).

⁵⁰¹ The series of political discussions and outcomes are reflected in the following documents: the 1990-1993 'Long-term Plan for Civil Protection'; the *Buvik* Committee on civil protection; the 1992-1993 Storting Report No. 24; and the 1993-1994 Storting Report No. 48.

directorates.⁵⁰² Further restructuring ensued in 2006 with the creation of the Government Emergency Management Council to enhance coordination, as well as the introduction of the 'lead ministry' in times of crisis (MSB 2009). More recently, the Civil Protection Act was established in 2010 (JD 2010), and a number of white papers have emerging since 22/7 that focus on strengthening the civil security system (cf. section 3.1.1).

2.2.2 Political dimension

The executive responsibility for crisis preparedness and response rests with the Rescue and Emergency Planning Department at the MoJPS. However, as noted above, in times of crisis, the responsibility can move to the Government Emergency Management Council, which is usually chaired by the minister for MoJPS or the 'lead ministry' (cf. Figure 2.1). At the regional level, the head of civil protection and emergency planning is responsible to the county governor, who is, in turn, responsible to the MoJPS. The county governor (*Flykesmannen*) also receives instructions and orders from other ministries and agencies (Husabø 2008, p. 13). Municipalities are in turn responsible to the County governor and to the DSB.

Specific arrangements for crisis management response are set in place in the form of crisis management plans at the municipal and county levels. However, based on the principle of conformity, the state, its institutions and individuals are expected to operate under normal standards regardless of the type or extent of a particular crisis. This means that a 'state of emergency' or 'martial law' – meaning the impositions of military rule over civilians – does not strictly exist in the Norwegian context. However, according to the Civil Protection Act, citizens are required by law to assist and obey local authorities in times of emergencies which may include the use of their property or other assets, such as vehicles (cf. JD 2010, §5, 7, 18).

2.2.3 Operational dimension

The implementation of civil security policies are carried out by all actors involved in civil protection from the ministerial level to the local authorities and private sector parties. The DSB is the lead agency that inspects and oversees inter-ministerial, regional, and local implementation (Husabø 2008, p. 12). As the system is decentralized, attention is focused on implementing rules and regulations at the local level.⁵⁰³

Operational tasks and responsibilities are orchestrated around planning, risk assessment, communication and logistics.⁵⁰⁴ The municipal level is expected to prepare crisis management plans

⁵⁰² That is, the directorate for products and electricity, the directorate for fire and explosion safety, and the directorate for civil protection

⁵⁰³ The municipality and the DSB provide an important inspection role to enforce legal obligations in this regard (cf. ND 2010, ch.VIII). For example, the regulations set by the *Act relating to the Prevention of Fire, Explosion and Accidents* is controlled by municipalities who hold the authority to stop private or public activity, issue fines, and enforce execution (Stortinget 2002, §38-40).

⁵⁰⁴ Until recently, the communication between different emergency agencies has been problematic due to the use of different communication channels and technology. The state has recently invested in a common nationwide digital radio communication system for all emergency sectors with the aim of providing a more confidential and efficient method of communication (Ibid, 59). The communication system between the local,

for specific events, such as flooding or infectious diseases. This Risk and Vulnerability Analysis (ROS) is required by law and ought to be comprehensive in its approach. It includes, for example, crisis management, notification lists, resource lists, evacuation plans, and plans for public and media communication (Stortinget 2012b, p. 56). This also extends to logistics, where municipalities ought to have a list of what equipment can be used, as well as additional personnel and services from NGOs and private companies. The municipalities are furthermore expected to establish their own training for political leadership (Ibid). The DSB monitors the ROS through annual municipal reports, helps to structure the ROS through providing a guide on regulation on emergency preparedness, and requires updated map data (Ibid, p. 57). The county governors also hold a supervisory role and are encouraged to facilitate training at the local level. The county governors are also an important medium for informing municipalities of approaching crises. If a flood is imminent, for example, the Norwegian Water Resources and Energy Directorate – which has a 24/7 flood forecasting system – alerts the county governor, who then makes the decision to forward the warning to the relevant municipalities.⁵⁰⁵

The case of the Vest Tank explosion

A good illustration of the Norwegian civil security system 'in action' is the case of the Vest Tank accident.⁵⁰⁶ This is classified as an industrial accident/fire emergency. In May 2007 a tank exploded at the Sløvåg Vest Tank Company in the Gulen municipality. This explosion caused a series of fires that destroyed buildings and tanker trucks. These and other related explosions also released an unidentified quantity of harmful gas that affected the health of persons living nearby the site of the incident.⁵⁰⁷

Like all municipalities, Gulen is legally obligated to maintain an overview of risks and supervise crises.⁵⁰⁸ Gulen emergency response personnel actively participated in responding to the explosions, including the municipal physician. The municipality took the decision not to activate formal crisis management, and maintained contact with the police, the mayor and other actors. In the recovery phase the municipality organized a series of meetings to investigate the cause of the explosion. There was, however, some confusion over what type of responsibility the municipality should exercise (DSB 2007d, p.8).

county, and national levels is in place and overseen by the 'lead ministry', which is usually the MoJPS, the crisis support unit, and the Government Emergency Management Council. The lead ministry, with the support of the DSB, are responsible for monitoring crisis situations.

⁵⁰⁵ Additionally, the warnings are issued on the Internet and teletext, as well as the Directorate for Public Roads, hydropower companies, and the media (NVE n.d.). Once the response and recovery phases are complete, reports and evaluations of the crises are often produced by the DSB and published on their website, as well as the Kriseinfo website.

⁵⁰⁶ While this example may not be as 'typical' as a flood, neither is it entirely novel. According to EM-DAT data base, Norway experienced six major disasters between 2000 and 2009. These are equally divided between floods, storms, and transport accidents. The Vest Tank incident is chosen because it provides a good example of how the system works. The information on this accident is mainly informed through a DSB publication on lessons learnt (DSB 2007b).

⁵⁰⁷ The response and recovery phases involved a number of different actors that included the Gulen municipality, the Hordaland police district, the county governor of Sogn and Fjordane, the Norwegian Coastal Administration, the Norwegian Institute for Public Health, the Norwegian Food Safety Authority, the Norwegian Pollution Control Authority (SFT), and the DSB.

⁵⁰⁸ cf. §1-3 paragraph 5 of the Municipal Health Services Act (DSB 2007b, p. 8).

After attending the scene, the local police transferred responsibility to the Hordaland Police District.⁵⁰⁹ The police district coordinated with various agencies including the DSB, the Norwegian Coastal Administration, and the municipality. The police also contacted Civil Defence who supplied personnel and equipment during the response phase of the accident.

The regional level of crisis management was activated by the county governor once reports of illness from gas exposure were made. The governor issued legal and professional advice on environmental health protection, and cooperated with the SFT, the police, the mayor, and the Public Health Institute. While the county's role was to give advice and guidance, it did consider taking on a coordinating role; however, the municipality wished to maintain its position as the lead coordinator (DSB 2007d).

The national level was activated through the supervisory and coordinating role of the DSB. Upon receiving information on the explosion the DSB made contact with the Gulan police, the Norwegian Coastal Administration, and the Bergen Fire Services. The DSB also contacted and sent a situation report to the MoJPS. In terms of recovery, DSB withdrew permits from the Vest Tank Company and participated in interviews and meetings, and provided professional advice to the Police (DSB 2007d).

2.2.4 External cooperation

Norway is involved in a number of transnational initiatives, such as a bilateral agreement with Russia on search and rescue for people in distress in the Barents Sea (DSB 2012g), and multilateral agreements with Sweden, Denmark, Iceland and Finland on rescue services (NORDRED), and pollution control (Commission 2012). Additionally, DSB also has bilateral contacts with Portugal on climate adaptation.⁵¹⁰ Regional provisions are also an important part of the Norwegian's civil security system, such as cooperation in the Barents Euro-Arctic Council and the Arctic Council. Norway also participates in the Director General meetings for Civil Protection in the Council of the Baltic Seas States (CBSS), and is a member of the Nordic committee for cooperation of electrical safety (DSB 2009).⁵¹¹ Additionally, Norway participates in larger regional organizations such as the EU, the Council of Europe, the OECD and NATO (Senior Civil Emergency Planning Committee), as well as

⁵⁰⁹ According to the Police Act, the police hold the responsibility for all kinds of rescue activities (MoJPS 1995, Ch. 27§1, cf. DSB 2007d, p. 9).

⁵¹⁰ A significant motivating factor for participating in the Barents and in Northern Scandinavia is due to the large geographical space, and the low number of resources: it can be more effective to use neighbouring capacities and personnel if they are closer to the disaster site (DSB 2009a, 2012a). When a disaster becomes too large for a country to manage alone is another motivating factor that can trigger external support.

⁵¹¹ The Working Group on Emergency and Rescue Services Cooperation (WGERS) is part of the Barents Euro-Arctic Council (BEAC) as well as the simulation exercises known as 'Barents Rescue'. The Arctic Council's civil security institution is the Emergency, Prevention, and Response Working Group (EPPR).

international organizations such as the UN and WTO (for more on Norway-EU cooperation see section 4).⁵¹²

2.3 Relations between the civil security system and citizens

2.3.1 Expectations

The formal responsibility of the citizen is based on the three principles that constitute the ethos of the Norwegian civil security system: the principles of liability, decentralization, and conformity (DSB 2008) (see section 2.1.1).⁵¹³ It is also important to highlight that each man and woman aged between 18 and 65 years may be called to civil defence duty by law (Sivilforsvaret 1956, §23; JD 2010). The conscripts are provided with basic emergency training and can be called to assist in emergencies (Sivilforsvaret 2012). Obligations for individuals are also specified in the 2010 Civil Protection Act, which instructs individuals in times of emergency to obey orders given by regional and local authorities and to provide the use of private property or equipment if deemed necessary (JD 2010, §5).

Based on a number of surveys conducted between 2002 and 2008, the Norwegian public believe that the most likely crises that could occur in the future include (in descending order) industrial and transport accidents, natural catastrophes, and pollution accidents. Roughly half of the respondents believe that terror attacks, electrical cuts, and global epidemics are likely to happen. The least-likely events that the public believed could eventuate include, war, food-related crises, and nuclear incidents (DSB 2009c, p.24). Citizen expectations of the civil security system are positive. Based on the abovementioned survey, around 65 percent of respondents noted that their general impression of the Norwegian civil security system was good.⁵¹⁴

⁵¹² While not directed at Norwegian civil security, Norway is active in humanitarian relief efforts connected to civil security. The International Humanitarian Partnership, for example, is an informal cooperative venture between Danish, Swedish, Dutch, Finish, and Estonian emergency agencies. The aim of this partnership is to provide logistical support to UN agencies (Commission 2012). Norwegian cooperation with various UN agencies includes the International Strategy for Disaster Reduction (ISDR), the UNs Disaster Assessment and Coordination (UNDAC), the International Search and Rescue Advisory Group (INSARAG), the World Food Programme (WFP), the UNs High Commissioner for Refugees (UNHCR), the joint UNEP/OCHA Environment Unit (JEU), and the Office for the Coordination of Humanitarian Affairs (OCHA). Some results emanating from this cooperation include Norway's management of the European Forum for Disaster Risk Reduction (DRR), cooperation with Cuba and Uganda in promoting DRR, cooperation between various state agencies and county governors on climate related issues, and UN-certification of the Norwegian Search and Rescue Team as an Urban Search and Rescue Team as part of INSARAG (DSB).

⁵¹³ Liability means that the individual is responsible for his or her own safety. The latter means that the citizen and organizations are expected to operate upon normal standards regardless of the challenges it faces (MSB 2009, 165). Decentralization means that responsibility ought to lie at the lowest level unless capacities are overwhelmed.

⁵¹⁴ Respondents could choose from the following categories: not sure, bad impression, mediocre, good, and very good (DSB 2009, 31). In terms of the public's impression on the system's ability to manage specific threats, over 73 per cent of the respondents believed that responsible agencies on civil protection could effectively manage natural catastrophes, large transport accidents, and industrial accidents. Over 57 per cent of the

Citizen activity tends to be fairly good in Norway despite a general decrease in the number of volunteers enlisted in civil security agencies (Husabø 2008, p. 26). It is estimated that roughly 25,000 people provide between 2 to 3 million hours of free service each year (MoJPS 2002, p.9).

2.3.2 Information

From January 2012 the DSB now maintains and runs a website, 'Kriseinfo', that is designed to provide up-to-date information on approaching, current, as well as recovery from, crises. This is understood as the main medium used by the state to inform the public.⁵¹⁵ This is also connected to other electronic forms of communication, such as Twitter and cell phones. Other forms of communication include national, regional, and local radio, television and newspapers, as well as emailing. Sirens are also used as a source of warning for immediate danger by the Civil Defence. There are 1250 alarms situated across Norway that can be used in peace time for incidents such as gas leaks and flash floods, as well as in war time (Sivilforsvaret n.d).

Information on potential crises and alarms is delivered by the municipalities that often have readymade crisis-communication templates and a wide range of media at their disposal, depending on the type of disaster. These can include the Internet, emails, telephone, letters, press releases and conferences, external meetings, publications, promotions, personal contact and the use of the media (DSB 2007c, p. 16). However, there also tends to be an expectation that citizens should be proactive in finding information on websites. A survey on Norwegian citizens' perceptions illustrates an increasing preference for electronic sources of information on crises.⁵¹⁶

2.3.3 Education

The DSB arrange and facilitate a wide range of education and awareness initiatives from children's television programmes to master degrees.⁵¹⁷ The main institution for education on civil security is the National Emergency Planning College (NUSB), which is managed by the DSB. This institution runs approximately 50 courses per year that target local government employees, the emergency services, the armed forces and volunteer groups. Graduate students also have the option of doing an

respondents believed that responsible agencies could manage large pollution incidents, electrical cuts, foodrelated crises, and pandemics. Between 49-57 per cent believed that national and local agencies could manage terror attacks, and only 33-36 per cent believed that the agencies had the capacity to effectively deal with the outbreak of war or a nuclear accident (DSB 2009c, p.30).

⁵¹⁵ cf. <u>www.kriseinfo.no</u>

⁵¹⁶ The most preferred source is via national television, followed by national radio. Based on six surveys carried out between 2002 and 2008, it was also shown that the latter is generally decreasing in popularity (from 35 to 31 per cent), and that television has generally increased (from 51 to 58 per cent). Text messaging has also increased from 19 to 32 per cent, as well as the Internet from 0 to 24 per cent. Local and regional newspapers are also an important source of information, although their popularity has generally decreased from 37 to 27 per cent (DSB 2009c, p.33).

⁵¹⁷ DSB, for example, have collaborated with a popular children's television programme, 'Hut i Heita', where it has produced four short videos aimed at educating children between the ages of 7 to 11 (cf. http://www.dsb.no/no/Ansvarsomrader/Opplaring-og-kompetanse/Filmer-for-barn/). The DSB has also been involved in designing a computer game for children to foster knowledge on crisis preparedness and prevention, as well as an educational website on fire prevention (cf. <u>http://www.questcity.eu/</u> and www.brannvettskolen.no).

international masters degree in Disaster Management in cooperation with Buskerud University College. The NUSB and the University of Stavanger also offer an international masters degree and a PhD in Civil Protection and Emergency Planning. In addition to the NUSB, the Norwegian Civil Defence provides courses, which are under purview of DSB. The quality of the educational material is fairly high. The educational material is proactively distributed by DSB as well as crisis information.⁵¹⁸

2.4 The private sector

2.4.1 The role of societal, non-profit organizations and NGOs

Societal, non-profit and non-governmental organizations play an important role in the Norwegian civil security system in both preparedness and response phases. It is estimated that these organizations include roughly 25,000 active members that provide between 2 and 3 million hours of free service each year (MoJPS 2002, p.9). The Norwegian Red Cross (established in Norway in 1865), for example, covers a wide range of tasks from mountain rescue services to caring for the elderly and sick. It has roughly 170,000 members and 18 district offices.⁵¹⁹ The Norwegian Society for Sea Rescue (RST) (established in 1891) is a voluntary membership-based organization that has 57 stations across Norway, and boasts a fleet of 25 boats that operate on a 24/7 basis.⁵²⁰ The Medical Corps of Norwegian People's Aid (NPA) has 72 local corps, 2,000 volunteers, and 12,000 members, and The Voluntary Organizations' Forum for Rescue (FORF) (a conglomerate of nine NGOs) provides an institutional bridge and overarching coordination system between NGOs and the Norwegian civil security system.⁵²¹

The state recognizes the importance of these organizations, and this is reflected in their financial contributions and cooperation. In 2008, the MoJPS decided to double its financial support to NGOs to NOK 12.2 million. This includes *inter alia* coverage of insurance and reimbursements (Husabø 2008,

⁵¹⁸ While it is difficult to locate the total number of people trained within a year, the following statistics ought to provide an indication on the high number of people trained. First, in the autumn of 2012 NUSB will offer 20 courses that can accommodate up to 509 students (DSB 2012e) (At the end of 2011, NUSB employed 22 people (NSD 2012)). Second, the Civil Defence trains approximately 800 persons per year (Sivilforsvaret 2010).

⁵¹⁹ An important sub-division is the Search and Rescue Corps consist of 322 local corps and 7,000 voluntary and trained members. The former are also on 24 hour standby. This body takes part in roughly 90 per cent of all rescue operations involving volunteers (Husabø 2008, p. 26). Additionally, the Red Cross also provide ambulance services to the public health system.

⁵²⁰ The RST collaborate with the two Search and Rescue Centres run by DSB, and also maintain a boat register (RST n.d.)

⁵²¹ NPA is involved with *inter alia* search and rescue, first-aid, accident-preventions and sea rescue (Husabø 2008, p.26). Additionally, it aims to educate local communities including schools and business on first aid procedures (NPA 2007, p. 9). The NGOs in FORF include the Norwegian Red Cross Search and Rescue Corps, the Norwegian Speleological Society, the Norwegian Aero Club, the Norwegian Peoples Aid, the Norwegian Radio Relæ Liga, Norwegian Search and Rescue Dogs, the Norwegian Society for Sea Rescue, the Norwegian Mountain Rescue Group, and the Norwegian Guide and Scout Association (FORF 2012, p. 4).

p.25).⁵²² In addition to this, the FORF has recently signed an agreement with the police that holds specific provisions for compensation ((FORF 2012). Just like the health services, the armed forces and the fire service, NGOs operate under the authority of the police in time of peace (Husabø 2008, p. 25). Another important partnership agreement that reflects the importance of the civil society is the Norwegian Emergency Preparedness System (NOREPS) that provides international humanitarian aid.⁵²³

2.4.2 The role of profit-orientated organizations

Profit-orientated organizations in Norway play an important role in the preparedness and response phases of crisis management. A number of companies cater for an international clientele. For example, the transnational organization 'Scandinavian Water Technology' provides drinking water stations, storage and purification systems, the Norwegian-based company 'Drytech' and 'Compact for life' provides freeze-dried meals, and AnsuR Technologies' provide visual mapping technology. Other products produced by Norwegian firms include satellite communication and visual mapping, water purification systems, building and housing materials, agricultural tools, blankets, emergency shelters, emergency stretchers, protection equipment, and transport and logistics.⁵²⁴

The role these and other organizations play in preparedness or prevention depends upon their services and qualification criteria when working with state agencies. Scandinavian Water Technology, for example, helps international organizations and states with planning and implementation of stocks, such as the NOREPS stocks in Oslo. The company also provides specialized training to organizations. As a member of NOREPS, this company is also under certain qualification obligations that concern the price, the availability of the product, and the quality (NOREPS, n.d). Similarly, 'Compact for life' also provides key stockpiles of emergency food in Norway and abides to NOREPS quality conditions.⁵²⁵

⁵²² Informal agreements between NGOs and the state were already apparent in the 1970s when the Search and Rescue service initiated a consensual relationship with the MoJPS (MoJPS 2002, pp.5-6).

⁵²³ Membership includes the Ministry of Foreign Affairs, DSB, the Red Cross, various NGOs and suppliers of relief goods. Its capacities include standby personnel, a stockpile of relief goods and logistic expertise. While urban development of slum areas may be at the fringes of civil security, it is nevertheless an important part of prevention activities.

⁵²⁴ Information from this paragraph was sourced from links provided by the Norwegian Emergency Preparedness System website: http://noreps.no/

⁵²⁵ Private enterprises can also be requested to play a coordinating role in crisis management at the national level. If it is considered necessary and helpful the crisis council can extend its membership to include a specific company in times of emergency (MoJPS 2011-2012, 6.1.3).

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

The events of 22/7 shook the entire civil security system in Norway. This began with a series of internal and external inquiries and evaluations producing a number of recommendations and changes to the financial, institutional, operational, and strategic focus of the system.⁵²⁶ In particular, internal evaluations were carried out by the Police Directorate (POD), the PST, DSB, the fire and rescue services, civil defense, the Health Directorate, the crisis council, the Crisis Support Unit, the Rescues Coordination Centre, the National Security Authority, the directorate for emergency communications and the Hole and Oslo municipalities (MoJPS 2011-2012, 3.1). In addition to these reports was an external evaluation on the entire functioning of the civil security system on 22/7.527 These conclusions and evaluations have produced a number of proposals for strengthening the civil security system, a number of which have been backed by a revision of the national budget for 2012. This includes an additional: 600 million NOK to the government administration for re-building and increasing the general security of the ministries; 30 million to upgrade the mobile network for emergencies; 21 million NOK to PST for investments in cyber security communications, control and surveillance; 14 million for a new helicopter hangar in Svalbard and 6.3 million for helicopter emergency assistance and training at Rygge; 11.5 million for improving the radio network in the ministries; 9.9 million for the creation of a new civil situation centre in the MoJPS to provide information on civil emergencies; and 4 million to NSM (Ibid, 11.1).

Another direct outcome from internal and external evaluations is the MoJPS action plan to prevent radicalization and violent extremism. This document not only lays out the responsibility of each sector in the civil security system, but also provides for specific measures that either introduce or strengthen new organizational structures and strategic plans. These are divided into four areas: developing knowledge and information, strengthening cooperation and coordination between sectors, strengthening dialogue and encouraging greater involvement, and providing support to vulnerable and at-risk persons. Some examples of these initiatives include: establishing a team of

⁵²⁶ Professional and political inquiries aim to improve effectiveness of the civil security system in the aftermath of major crises. A good example of this is the 2004 tsunami that influenced the major changes in Norwegian civil security (Stortinget 2012b, p.68) and the events of 22/7.

⁵²⁷ This detailed report issues six major findings: (1) The attack on the Government Complex on 22 July could have been prevented through effective implementation of already adopted security measures. (2) The authorities' ability to protect the people on Utøya Island failed. A more rapid police operation was a realistic possibility. The perpetrator could have been stopped earlier on 22 July. (3) More security and emergency preparedness measures to impede new attacks and mitigate the adverse effects should have been implemented on 22 July. (4) The health and rescue services managed to take care of the injured people and next-of-kin during the acute phase in a satisfactory manner. (5) The government's communication with the general public was good. The ministries managed to continue their work despite the devastation. (6) With better ways of working and a broader focus, the Police Security Service could have become aware of the perpetrator prior to 22 July. Notwithstanding, the commission has no grounds for contending that the Police Security Service could and should have averted the attacks (NOU 2012, Ch. 19).

researchers in the field to develop and promote useful knowledge; developing a standard manual on 'preventive talks' for police authorities; and establishing an inter-sectoral coordination groups to follow-up the action plan. Government and local (municipal) officials have also been tasked to organize meetings ('dialogue forums) at the local level between immigration organizations, minorities, religion and faith groups (MoJPS 2011, pp.27-32). While not directly connected to the action plan, other noteworthy additions and modifications to the system include an annual unified threat assessment by the PST and NSM and the creation of a new PST counter terrorism center (Faremo 2013a).

Reports published on the various crises that have occurred in the last decade are similarly self-critical and comprehensive. A review of some of these reports – that include floods, fires, transport accidents, and the 2011 terror attacks (DBE 2000, DSB 2007a, 2007b, 2011, 2012) – reveal a number of general patterns. First, attention is often focused on the municipal level that is responsible for establishing and maintaining its own crisis management plans and risk maps. Second, criticism tends to focus on the lack of planning and preparedness (DBE 2000, p. 3) rather than response. For example, organizations or companies are criticized for not meeting legally defined industrial standards, or those standards set by the fire protection act. Indeed, it is often organizations, or the lack of communication between organizations, that is highlighted as the weak link. Third, the causes of crises are emphasised more than crisis escalation as being preventable if the security system had performed better. However, this is partly biased to the majority of reports on fires. Fourth, the lack of up-to-date preparedness and prevention strategies at the municipal level is a common feature in a number of reports. As noted above, considering that the civil security system is decentralized, this is a particularly important weakness in the system.

3.1.2 Limits to national capacities

Initiatives that have emerged since 22/7 will certainly strengthen the Norwegian civil security system. However, at least two issues hinder the improvement of the system. First, municipalities must be more active in preparedness, and prevention activities. Many of the abovementioned initiatives require local municipalities to be active in preparing disaster preparedness plans. In this regard, two 'models' have been established in the municipalities that aim to coordinate 'local services and crime prevention' through the so-called 'police councils', and the coordination of local crime prevention that links practitioners with the private sector and voluntary organizations (Faremo 2013b). However, overall preparedness is still limited. According to a municipality survey conducted in 2012, two-thirds of all municipalities have a holistic contingency plan based on outdated risk and vulnerability analyses (MoJPS 2011-2012, 4.6.1). In a decentralized system it is vital that municipalities be more active in preparedness, prevention and response activities. A second challenge that remains relevant for the Norwegian civil security system is coordination between government institutions. According to a recent critique of the system the:

Norwegian governance model is hierarchical and poorly suited to cooperation across sectors. Established schemes and institutions are deeply entrenched in their own traditions, routines and tacit norms and values...although there have been several government reports calling for increased coordination, especially in the wake of a crisis,

Norway still does not have an emergency preparedness law or a separate "ministry of societal security

Lægreid 2012

Keeping these issues in mind, the devastating events of 22/7 have certainly drawn the civil security system into the public limelight. Many of the initiatives proposed or in place will presumably provide handsome pay-offs in the future. However, this will only be ensured if horizontal *and* vertical coordination and communication between the various sectors is enhanced.

Another way of understanding the limits of the Norwegian civil security system is through requests for international assistance. This has occurred on at least two occasions in the last decade when Norwegian authorities contacted the EU's monitoring and information centre with a 'pre alert' message. This resulted in technical support to Norway with the provision of satellite imagery and facilitating assistance for its firefighting capacity (cf. section 4).

As noted previously, the guiding principle of conformity in the Norwegian civil security system means that 'states of emergencies' are not prioritised as effective measures in times of crises. However, the Civil Protection Act does make it clear that citizens are obligated to obey the requests of civil protection authorities in times of crises (JD 2010, §5). The legal involvement of citizens through Civil Defence is not considered a limiting but an enhancing feature of the system.

3.2 Efficiency

The efficiency of the Norwegian civil security system tends to be based on functional concerns first, and then financial concerns. The following figures sourced from the 2011 and 2012 national budgets provide a good indication of the amount spent in the civil security system. First, and more broadly, the two ministries that are mostly responsible for the Norwegian civil security system were allocated a total of 5.8 percent of the total budget of 1237.5 billion Norwegian kroner (RMF 2011). This can be broken down into the Ministry of defence (3.5 percent) and the Ministry of Police and Justice (2.3 percent).⁵²⁸ Second, and more precisely, based on available figures from the 2012 national budget, the DSB was allocated 0.01 percent or 148.3 million Norwegian kroner (MoJPS 2012, RMF 2012).⁵²⁹ As previous figures could not be found, it is currently difficult to show whether expenditures overrun the budget (also see section 3.1.1).

The major restructuring of the system in the early 2000s does not appear to be influenced from financial considerations, but more by the changing threat environment after the Cold War. The lack of privatization of the civil security system also seems to reflect this general pattern, where functional concerns are promoted before financial considerations. Indeed, the recent investment by the state into a common emergency communications system was motivated not by financial considerations, but rather by the increase in effectiveness and inter-organizational coordination. As

⁵²⁸ These figures are based on the expenditure of these ministries rather than allocated budgets for the year 2011. The expenditure of the Ministry of Defence was 39.2 billion and the expenditure for the Ministry of Justice and the Police was 26.4 billion Norwegian KR.

⁵²⁹ The total national revenue for 2012 is estimated at 1237.5 billion.

far as the available documents on Norwegian civil security reflect, there has been no clear instance where the budgets and expenditure on civil security has forcibly entered into public debate. The major investments made to the civil security system after 22/7 do not seem to be directly motivated by a cost-benefit calculus, but rather from the evaluation reports on the Oslo bombings and Utøya shootings.

3.3 Legitimacy

3.3.1 Political support

A majority of political interventions, debates, question and inquiries on the Norwegian civil security system tend to come from an internal government impetus, rather than the result of a particular crisis. Of course, inquiries have been made in the aftermath of signature crises such as the 2004 tsunami and the 2011 Oslo bombings and the Utøya shootings.⁵³⁰ However, and as noted previously, reforms have been shaped by a general widening of the referent point of protection from the state to the individual; from war, to natural and manmade disasters. This widening has most likely due to the geo-political changes that occurred at the end of the cold war and the long period of peace experienced by Norway that has been punctuated by various natural and manmade disasters. Yet, there have been no instances where a major crisis has led to the collapse of government or the ousting of a particular minister or government official. The major reforms that have taken place have been primarily spearheaded by various committees set up in the government, such as the 'Buvik Commitee' in the early 1990s or the 'committee on vulnerability of society' in the late 1990s and led by the former prime minister, Kåre Willoch. The report produced by Kåre's committee received a great deal of attention leading to a number of white papers as well as organizational and judicial changes. Of course, the severity of the events that took place on 22 July 2011 may be an exception, which has produced a number of institutional and legal changes. However, this has certainly not led to the idea of an illegitimate government.

3.3.2 Legal support

There is little record of any crisis management-related laws that have been directly challenged in the last decade, nor have there been any laws or actions on crisis management that have been presented to the ombudsman (for a list of all testimonials from the ombudsman see: Sivilombudsmannen 2013). Of course, there have been continual developments to the legislation on civil security, which has become particularly apparent post 22/7 (or more information on this see section 3.1.1). Likewise, there have been few debates on the friction between civil liberties and the protection of human rights on one hand, and the provision of security on the other. However, this is certainly seen as an important aspect in new proposals, particularly after 22/7. For example, in a recent speech by the minister of justice and public security, Grete Faremo noted that the new white paper on civil security (to be presented to parliament in the spring):

⁵³⁰ Indeed, the Norwegian Parliament website lists only seven questions and interpellations on issues relating to Utoya.

Our approach to this challenge must balance the need for control and freedom of expression. We need to find an acceptable balance between the need for security and the need for privacy. We need to ask questions on how we can prevent terror and violent extremism, and still promote openness and a culture of dialogue - which we take such great pride in, in our nation. We have to improve our ability to provide security and protection without reducing our liberty and freedom.

Faremo 2013b

While this statement may not represent a public debate, it does (at least) reflect the importance the MoJPS places on communicating its efforts on striking a balance between civil liberties and security with the general public.

3.3.3 Popular trust and support

According to the views of both the general population of Norway and its civil servants, there are no significant legitimacy issues. A study on this question showed that there is no substantial gap between citizens' perspective on the Norwegian crisis management ability and the perspectives of civil servants (Christensen, Fimreite and Lægreid 2007, p.33). While this study was made before the July 22 attacks, other 'trust variables' analysed in this study such as political efficacy, social trust, and religiousness also reflect a society that is confident in the state's ability to provide protection (Ibid). Indeed, this also reflects the cultural outcomes in section 2.1.2 that demonstrate a tolerant society. The previous discussion on popular opinion also reinforces this point, where a majority of citizens generally felt safe and had confidence in the civil security system.

A further example of the societal trust in the civil security system is via a comparison of citizen's trust in the state's crisis management before and after a signature crisis (note that there is currently no available public survey post 22/7/2011). The first survey was taken two months before the 2004 tsunami and the second survey was taken in September 2006. The first question investigates citizens' impressions of current crisis management. Here, 72 percent of respondents had a good impression or a very good impression in 2004. Two year later when the same question was asked, 75 percent of the respondents had a good impression or a very good impression in 2004 (DSB 2009c, p.31). The second question concerning citizen's trust was specific to the ability of the system to cope with different types of disasters. Out of the list of ten types of disasters, there was a percentage increase in trust for all types, except for terror attacks which fell from 61 to 57 percent. The average increase in trust over all the types of disaster in the two years went from 64 percent in 2004 to 68 percent in 2006 (Ibid, p. 30).

4. Norwegian Civil Security in the EU Context

Norway has been particularly active in the European Community mechanism for civil protection, both as participant in training exercises, exchanges, courses, and providing assistance through the Monitoring and Information Centre (MIC) at the European Commission. Norway is also involved with

other activities via the Commission's Directorate General for Humanitarian Aid and Civil Emergency (ECHO) (Hollis 2010). DSB participates in various EU projects and takes an avid interest in related areas such as the environment, electrical safety, product safety, the transport of dangerous goods and CBRN management. Norway has participated in at least 11 requests for assistance in the last decade (Hollis 2010; ECHO 2011). A majority of these requests were made from countries outside of the EU, such as the 2011 earthquake in Japan, the 2010 floods in Pakistan, or the 2008 tropical cyclone in Myanmar. The type of assistance provided is mostly in the form of specific material or financial contributions. Examples include salt supply for the 2010 heavy snowfall in the Netherlands, tents to the 2008 Kyrgyzstan earthquake and oil-catchment instruments for the 2010 oil spill in the Gulf of Mexico. Norway has also activated the MIC on two occasions: not as 'requests for assistance' but as a 'pre-alert/early warning message'. The first was for the 2007 oil spill, were the MIC assisted by providing satellite imagery. The second request was for the 2008 forest fires in Froland. In this case, the MIC facilitated assistance, resulting in aerial firefighting capacity from the Czech Republic, Germany, Italy and France (ECHO 2011). Judging on the two requests made by Norway, it appears that the motivation for assistance comes from an overwhelmed national capacity in the case of fires, and the need to access particular information, such as satellite imagery for the oil spill.

Norway has been comparatively less active in participating in simulation exercises, training programmes and exchanges of experts that are coordinated through the community mechanisms for civil protection. It has not participated in a simulation exercise and has only contributed a few personnel to the exchange programme and training courses (Hollis 2010).

5. Conclusion

Since its beginnings, the Norwegian civil security system has widened and deepened to include an allhazard approach, uniting both civilian and military components. Norway's traditional 'total defence' concept has now changed to include a wider perception on threats that aims to prevent and prepare for natural and manmade disasters. This shift has been largely due to the changing political and global environment since the end of the Cold War. The 1990s and early 2000s are thus considered periods of change and restructuring of the Norwegian civil security system, where societal security and safety (samfunssikkerhet) have received increasing importance. The events of 22 July 2011 have also led to a revision of the civil security system, culminating in inter alia an increased budget, initiatives to strengthen coordination, and knowledge production. These changes are set against a more consistent cultural backdrop where three general principles constitute the character and function of civil security in Norway. These principles include responsibility, decentralization, and conformity. As noted previously, this means that responsibility for crisis management should be at the lowest possible level, but that the state and its society must also operate under normal standards, regardless of the type or extent of a particular crisis. The system is complemented by three additional actors, namely, the private sector, external actors and non-governmental organizations. Perhaps the most significant of these three is the latter, which provides a large number of volunteers and equipment for preparing and responding to crises. While cooperation could be improved in some areas, such as updating local Risk and Vulnerability Analysis (ROS) reports, the general organizational structure is fairly sound as demonstrated in the examples and case studies within this report. Yet, as Europe and the world continue to grow more interdependent,

Norway must increasingly look toward effective cooperative endeavours with neighbouring countries in order to be a more resilient country in the future.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 NORWAY

1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Storting 2002, § 4.g	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	Commission 2012	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	2	Storting 2012b, ch.8	The military is used when the civilian operations require additional assistance. It does not occur in exceptional situations but not that regulary either.
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	DSB 2008	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				

2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1		
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1		
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	1		
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	1		
2.1.1.e	Is delegation constructed in a top- down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	2	MSB 2009	
2.1.2	Culture				
2.1.2.a. i	Geert Hofstede country national cultural score - DPI		31	http://geert- hofstede.com/coun tries.html	
2.1.2.a. ii	Geert Hofstede country national cultural score - IDV		69	http://geert- hofstede.com/coun tries.html	
2.1.2.a. iii	Geert Hofstede country national cultural score - MAS		8	http://geert- hofstede.com/coun tries.html	
2.1.2.a. iv	Geert Hofstede country national cultural score - UAI		50	http://geert- hofstede.com/coun tries.html	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		44	http://geert- hofstede.com/coun tries.html	
2.1.2.b	WorldValueSurvey'snationalscoreondimension1-traditionalvs. secular		1,39	http://www.worldv aluessurvey.org/	Year 2006
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		2,17	http://www.worldv aluessurvey.org/	Year 2006
2.2	Legal & constitutional aspects				

2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	3	p.8	
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2010	Civil Protection Act	
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1		
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1	1	JD 2010, §5, 7, 18	However, they are also expected to carry on business as usual
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	No = 0 Yes = 1	1	JD 2010, §5, 7, 18	
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	1		
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	1		
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis	No = 0	1		

	response at the national level?	Yes = 1				
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1	1			
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	0			
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	5			
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	9	Stortinget 2012b	EU, Barents	NATO,
2.2.4	External dimension					
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	1	DSB 2012d, Olsén 2011		
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	1	p.12		
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	> 10			
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross- border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	0			
2.3	State-citizens relations					
2.3.1	Expectations					

2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	2	
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	
2.3.2.b	Does the government have a system for radio/TV warnings	No=0Yes, atthelocal/regionallevel1Yes, atthenationalevel2Yes, atbothlocal/regionalnationallevels = 3	3	
2.3.2.c	Does the government have a central website with updated information on crisis events?	No=0Yes, atthelocal/regionallevel1Yes, atthenationallevel=2Yes, atbothlocal/regionalandnationallevels = 3	3	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = OYes, at the local/regional level = 1Yes, at the national level = 2Yes, at both local/regional and national levels = 3	3	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No=0Yes,atthelocal/regionallevel =1	3	

		local/regional and national levels = 3			
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1	0	No information could be found on the ministry of education website, although some schools may include civil emergency training, such as the use of the DSB-designed computer game (cf. P. 13)	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No=0Tomembers/professionaI=I=Tomembersandlimitedpublicoutreach=2Tomemberandwide-spreadtrainingprogrammesforgeneralpopulation3	3		
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	1		
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?	No = 0 Yes = 1	1		
2.3.3.e	If yes, please provide the overall volume of research funding for	Register the number	Unkow n		

	civil security				
2.4	Role of private sector				
2.4.1	Role of societal/ non- profit organisations				
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	MoJPS 2002	
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	2	MoJPS 2002	
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0Yes = 1	na	MoJPS 2011-2012, 6.1.3	Their involvement is based on a functional basis - if they are required to help if asked according to the nature of the disaster
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No=0Inpartsofcivilsecurity(e.g.emergencymedicine)=1In (almost)all aspectsof civil security = 2	na	MoJPS 2011-2012, 6.1.3	Ibid
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	2		

3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA Register the number	NA	JD 2010, §5, 7, 18	
	state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA		JD 2010, §5, 7, 18	
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	2		
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.	2		
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.	2		note that there were many inquiries made for the ministry's and govt. agencies involved with CP for the 22/7 event
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0		
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil	Register the number for 2000-2012.	0		

	security system have been filed?				
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0		
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None=0Partial (legally definedleewayforoperationalcrisismanagement)=1Extensive(e.g.nocivilianjurisdictionover military actors incrisiscrisismanagement)=2	0		
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	NA	Special Eurobarometer 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	NA	Special Eurobarometer 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	1		
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	25	MoJPS 2002, p.9	
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	25000	MoJPS 2002, p.9	
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with

					data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be comple ted by UI/IFHS	http://ec.europa.eu /echo/files/policies /disaster_response /EUCPM_activation s_since_01012007. pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be comple ted by UI/IFHS	http://ec.europa.eu /echo/files/policies /disaster response /EUCPM_activation s_since_01012007. pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis,Simon(2010).NationalParticipation in EUCivilProtection.SwedishNationalDefence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009- 2010 training cycle?	Register the number for the 2009-2010 training cycle	18	Hollis,Simon(2010).NationalParticipation in EUCivilProtection.SwedishNationalDefence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	1	http://ec.europa.eu /echo/policies/prev ention_preparedne ss/preparedness_e n.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	NA	http://ec.europa.eu /regional_policy/th efunds/doc/interve ntions_since_2002. doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	NA	http://ec.europa.eu /regional_policy/th efunds/doc/interve ntions_since_2002. doc	

4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register percentage	the	NA	Special Eurobarometer 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register percentage	the	NA	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in Norway

On 24 April 2009, the WHO issued a global alert about a new virus emerging from Mexico and the USA. One month later, reports of the first cases of the H1N1 virus were reported in Norway. The number of infected people continued to rise, reaching its highest frequency of illnesses in October. It is estimated that 900,000 people were affected and that the virus caused a total of 29 deaths. See figure 5.1 for a general time line of these events and the steps taken by the Norwegian civil security system.

Figure 5.1.	Timeline of Norwegian emergency response to the H1N1 virus ⁵³¹
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2009		
	24 April	WHO issues alert on new virus in Mexico and the USA
	27 April	Government Crises Council appoints the MHCS as the lead ministry to manage the approaching crisis. The MHCS delegate overall responsibility to the Norwegian Directorate for Health.
	May	First cases reported in Norway
	June	NIPH present new pandemic plan scenario based on observation and surveillance
	Sept	Vaccination begins: priority groups
	Oct	
	Oct	Vaccination begins: Entire population
0	oct-Nov	
Ĺ		
		Main wave of illness caused by Virus affects Norwegian population. 29 deaths.
2010		

Feb 3 Million doses of vaccine applied, approx. 900 000 people affected

The executive responsibility for managing the crisis was placed firstly on the Ministry of Health Care Services (MHCS) by the crisis council. The MHCS, in turn, delegated overall responsibility to the Norwegian Directorate for Health (NDH). Other actors at the national level included: the Norwegian Institute for Public Health (NIPH) (responsible for securing vaccines and for providing advice to the MHCS); the Norwegian Medicines Agency (NMA); and the DSB. The key actors at the regional and

⁵³¹ For a more detailed account see DSB 2010, pp. 42-47.

local levels included the county governors, the municipalities and the municipal health care system (DSB 2010).⁵³²

The following key decisions were made. First, the NIPH set up a system of surveillance at the national level, and the NDH set up a 'plan support secretariat' with the DSB to provide support to health care services/personnel involved in response and recovery at national, regional, and local levels. Second, the NIPH made important modifications to the original plan scenario developed in 2006 according to the type and extent of the risk posed by H1N1.Third, the vaccine was approved by the NMA. Fourth, priority groups were vaccinated, according to the pandemic plan in September, and the entire population in October.

Communication with the public was conducted by the NDH and the NIPH. These included press conferences, briefings, television adverts, announcements in media, posters, brochures, and the Internet. Through this media the NDH and NIPH first issued information on hygiene and protection. Later on, information on how to obtain vaccinations was disseminated. According to the main evaluation report published by the DSB (2010), the general public was satisfied with state-to-citizen communication. Communication with the private sector could have been more efficient. The state relied on private transport companies to distribute the vaccines. This resulted in a number of delays and inadequate information between the suppliers and the consumers (DSB 2011a, 9).

The main evaluation report totalling 212 pages on the crisis was prepared by the DSB (DSB 2010, cf. DSB 2011a). It provides an overall positive evaluation on the management of the H1N1 breakout. There were, however, some nuanced criticisms on how the system could perform more efficiently next time, such as clarifying the roles and responsibilities of the NIPH and the NDH, the formalization of inter-agency cooperation (DSB 2011a, p.7), the lack of a cost-benefit calculus on the side-effects of the vaccine (Ibid, p. 8), and the lack of appropriate local communication between GP's and the chief municipal officer (Ibid, p. 12). According to the report, the general public perception of the government's way of handling the crisis was positive.

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Poland

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Executive Summary

The Polish civil security system has been developed gradually after 1990 and is not entirely completed. The flood in 1997 revealing weaknesses of the civil security system triggered the restructuring process. Currently, the crisis management system is organized according to three administrative levels (municipal, county and provincial) with particularly a coordinative and communication role for provincial governors. Emergency plans are prepared at all three administrative levels. In the operational sense, fire service (both the professional State Fire Service and voluntary fire service) engagement is crucial. It is linked to the National Fire Fighting and Rescue System. The position of the civil defence (currently marginalized) and the shape of a civil protection system are discussed. The Supreme Audit Office published in 2012 a negative opinion on the state of the civil defence system. The Polish system involves several bodies and agencies dealing with particular risks, while the crisis management system, as coordinative structure, represents basically an all-hazard approach. The role of the private sector in the civil security system is limited, while NGOs are important and cooperate closely with the state institutions. The Voluntary Fire Service is the biggest part of the voluntary sector in Poland. The technological background of the civil security system is under development: flood maps are being prepared, the emergency telephone number 112 is implemented but not fully operational for the whole country, information and warning systems based on information technologies are in infancy, while the old sirens system is obsolete. The most significant crises are related to floods (in 1997, 2001 & 2010). There are also transportation accidents. A special case is the presidential airplane accident in 2010, killing 96 high-ranked officials. It generated a fierce discussion about security procedures for state officials. Terrorism is not a serious threat in Poland. The effectiveness of the Polish civil security system is assessed by several bodies and from various points of view. The Supreme Audit Office controls the performance of the administration, focusing not on effectiveness but on compliance with the law. The Office has evaluated the crisis management system, the civil defence system and the water rescue, criticizing several aspects while giving positive opinions as well. Efficiency assessments can hardly be found in Poland in the area of civil security. Rather, underfunding is considered as a source of inefficiency. Financing of the system has been stable in the years 2000-12, but is considered to be too low. There are apparently no major conflicts and controversies about legal aspects of the civil security system. Firefighters are highly trusted. For most risks Poles are less afraid than the average European. The only exception is natural disasters. Accessing the EU in 2004 increased international cooperation and enforced efforts to make the system coherent with international (particularly the EU) context. After accession to the EU, Poland increased engagement in the work of committees and working groups dealing with the EU's civil protection. Poland activated the EU's Monitoring and Information Centre during the flood of 2010 and contributed to several MIC-coordinated interventions. Bilateral agreements are signed with all but one of Poland's neighbours, and cooperation is considered as rather smooth.

Key Findings

- 1. National Fire Fighting and Rescue System. The establishment of the National Fire Fighting and Rescue System, as the integrated system for coping with day-to-day rescue operations, and of use for crisis situations is considered as a good solution. The system was established with the central role of the State Fire Service and integrating previous fragmented and not coordinated institutions.
- 2. Cooperation with non-governmental organizations. Non-governmental organizations have an important role in crisis management. It particularly applies to voluntary fire brigades but also the Mountain Rescue Service and the Water Rescue Service have significant roles.
- 3. The system of crisis management. The system of crisis management is considered as a good solution in the Polish context. It is a framework with coordinative and informative functions without direct operational tasks. Such a shape of the system stems from the constraints of the functioning existing structures, and weaknesses of the previous system. The lack of coordination was one of the most problematic issues during the flood of 1997, leading to establishment of the new system.
- 4. Popular expectation that the state is to deliver help in any case. A problem of the Polish civil security system is related to the citizens' expectations that the state has the obligation to help with little responsibility of citizens themselves. It can be attributed to two reasons: (a) the legacy of communist times, when the state had the dominant position and controlled all aspects of social life. (b) At the same time it can be attributed to Polish cultural traits. In Hofstede's variables, Poles accept centralisation and hierarchical organisation. Yet, Poland is individualistic at the same time, with the expectation that people take care of themselves. Altogether it poses a challenge for civil security, leading to difficulties within rescue operations (disobedience etc.).
- 5. Moral hazard is a problem. Evolutionarily, Polish politicians have learned that substantial and unconditional help to victims is treated as a must (as the method to satisfy voters' expectations). As a result there is little insurance coverage and little drive for individual preparedness and prevention.
- 6. The growing role and high trust towards fire brigades makes them immune to efficiency driven reforms. High trust towards firemen makes any efficiency driven reform difficult. After 1990 the crisis management system has been transformed from being a part of national defence towards the civil sector. The fire service is the skeleton of the new system. The state fire service has gained a strong position and independence. Similarly, voluntary fire brigades dominated the third sector in several respects. As the popular image of firemen is very good and they are trusted, to undertake a reform in the name of efficiency is difficult and would require a "civilian" control over the fire brigades.
- 7. In some areas of civil security the communist-like discrepancy between the plans and the delivery remains. There is a tendency to establish and to continue plans which are unrealistic in terms of budgetary capabilities. For instance, for years it was estimated that about 20 percent of the needs in terms of flood protection infrastructure are financed. After 1990 there was a huge financial shortage. EU accession (2004) has been helping in terms of EU-funds that constitute a significant part of investment. Moreover, it makes a bias towards investment leaving aside maintenance.

List of Abbreviations

ACM	Act on Crisis Management
CBOS	Centrum Badania Opinii Spolecznej (Centre for Public Opinion Research)
CINAA	Committee for Investigation of National Aviation Accidents (Komisja Badania Wypadkow Lotniczych)
СМТ	Crisis Management Team
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
ECDC	European Centre for Disease Prevention and Control
FYROM	Former Yugoslav Republic of Macedonia
GCMT	Government Crisis Management Team
GCS	Government Centre for Security
INSARAG	International Search and Rescue Advisory Group
MIC	Monitoring and Information Centre
MON	Ministerstwo Obrony Narodowej (Ministry for National Defence)
NIK	Najwyzsza Izba Kontroli (Supreme Audit Office)
РСК	Polski Czerwony Krzyz (Polish Red Cross)
PKBWK	Panstwowa Komisja Badania Wypadkow Kolejowych (The State Railway Accidents Investigation Commission)
WUG	Wyzszy Urzad Gorniczy (Higher Mining Authority)

1. Introduction

Poland is, comparatively, not particularly exposed to natural hazards, while socioeconomic crises are relatively serious. Among the natural disasters, floods cause the biggest losses, while socioeconomic risks include wars, socioeconomic and political conflicts. After the Second World War, there were several devastating floods (the Millennium Flood in 1997), major transportation accidents (the presidential airplane crash in 2010), industrial accidents (particularly in coal mines) and violent socioeconomic conflicts (demonstrations and fights with police and armed forces in 1956, 1970, the declaration of martial law in 1981). Also, there was a smallpox epidemic in 1963 (99 deaths). The list of major crises between 2000 and 2012 is presented in Table 1.

Year/ month	Crisis description	Crisis category	Damage		
			# of persons killed	# of persons injured	# of persons affected
06/2001	Flood	Natural disaster			15,000
01/2003	Avalanche	Natural disaster	8	5	
06/2006	Building disaster (Katowice)	Industrial accident	65	170	
11/2006	Methane explosion in the coal mine (Halemba)	Natural disaster	23		
07/2007	Storm ("White squall")	Natural disaster	12	About 15	
01/2008	Plane crash in Miroslawiec	Transportation accident	20		
03/2008	Storm	Natural disaster			1,060
01/2009	Extreme low temperature	Natural disaster	298		
2009/20 10	AH1N1 Virus	Infectious disease	182		
04/2010	The presidential airplane crash (Smolensk)	Transportation accident	96		
05/2010	Flood	Natural disaster			100,000
11/2010	Extreme low temperature	Natural disaster	200		
03/2012	Train crash (Szczekociny)	Transportation accident	16	57	

Table 1: List of Crises (2000-2012)

Sources: CRED 2013; Chmielewski 2007; NIK 2011; Chief Sanitary Inspectorate 2010; WUG 2006; CINAA 2011; MON 2008; PKBWK 2012; Kundzewicz i Matczak 2009.

Some of the crises were of national importance, involving mobilisation of the various services, while most caused local or regional disturbances.

The definition of crisis (sytuacja kryzysowa – literally: a crisis situation) is provided in the Act on Crisis Management (ACM) of 2007 (amended). The crisis is understood as "a situation that has negative impact on the security of people, on property in considerable size, or on the environment, causing a significant reduction in the operation of the competent authorities of the public administration because of the inadequacy of the possessed power and resources". The definition was changed, due to the verdict of the constitutional court (of 21 April 2009) recognizing the previous definition unconstitutional (the wider description is provided in chapter 3.3.2). The definition put emphasis on the inability of the public authorities to cope with the consequences of an event.

Additionally, The Act on the State of Natural Disaster of 2002 defines other basic terms: natural catastrophe (katastrofa naturalna) which includes weather related events, seismic, fires, pests, infectious diseases of humans and animals, and others; and technical failure (awaria techniczna): a sudden, unforeseen damage or destruction of assets/built properties resulting in a break in use or property loss. According to the law, large scale catastrophes are called disasters (klęska żywiołowa) and they involve extraordinary measures and help from specialized institutions (Bac 2011). The aim was here mostly the clarification of responsibilities for action in case of an emergency, as the 1997 flood showed ambiguities in the interpretation of the regulations (Wojnowska-Ciodyk 1997).

Defining the Polish civil security system requires caution, since it is still under reconstruction. There is no clearly defined area which can be called the civil security system (system bezpieczeństwa cywilnego). This expression is present in the literature (Wyzwania bezpieczeństwa cywilnego..., 2007), yet in the legislation the notions of civil defence, citizen (civil) protection, crisis management, and rescue can be found. Basically, the current system is based on the ACM, which defines crisis management (zarządzanie kryzysowe) as: activity of public administration authorities as an element of the national security management system, which consists of preventing crisis situations, preparing to take control over them by way of planned activities, responding in case of emergencies, removal of their effects and the reconstruction of the resources and critical infrastructure (ACM, 2007, section 2, author's translation).

According to this definition, these are public authorities who are responsible for crisis management. There are also several other security and rescue services involved in civil security. The civil defence system exists in Poland. In 1997 it was moved from the Ministry of Defence to the Ministry of Interior and in 2000, the chief of the State Fire Service became the chief of the Civil Defence (Malinski 2012). However, the shift from the functional role of the preparation for the protection of civilians in case of armed conflict to the civilian role is not clear. Citizen (civil) protection is also in the grey zone as several attempts to define this area via the law failed.

The Polish civil security system can be considered as rather sectoral with some elements of the allhazard approach. There are several, relatively independent services focused on the particular risks. Despite certain attempts to establish an all-hazard structure, the sectoral approach remains. The crisis management system, which could be considered as an all-hazard device is only a coordination platform, and in practice, an action is undertaken by specialised agencies. It can be argued that after 1990 the State Fire Service has widened its area of competence. The establishment of the national rescue and firefighting system was an element of unifying the system, based on the state fire service. This system is focused on response and rescue and it does not cover all the risks.

The Polish crisis management system is basically civilian, with a major role for the fire brigades. Also several specialized services and agencies are under civil control. The police have auxiliary tasks for civil security, and similarly – the Army. However, the Army is prepared for civil crisis operations and is often called for. The regulation of the army participation in the civil operations is defined in the law on crisis management.⁵³³ Military assistance to civilian authorities is restricted to cases when the civilian authorities face capacity shortage.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Poland is a republic and a unitary state (The Constitution of the Republic of Poland, 1997: article 3). The prime minister and the council of ministers constitute the Polish government. The executive power rests with the council of ministers and the president. There are two houses of Parliament: the Sejm (Lower Chamber) and the Senate (Upper Chamber), which are the legislative bodies. The council of ministers is responsible to the prime minister and the Sejm. The council of ministers is responsible for law enforcement and national security and defence. The president has generally limited competences (taking into account that he/she is elected in general elections) but has some competences in the area of national security. The president nominates the prime minister, who proposes the composition of the council of ministers. The governmental system can roughly be called a parliamentary-cabinet. As the Polish political party system has been re-established after 1989, it is volatile. A proportional election system led to difficulties in establishing a stable government, and some reforms have been made in order to stabilize the party system. All the governments after 1989 have been coalitional.

Polish administration structure

The subsidiarity principle is declared in the Constitution. Territorial self-government is the primary organisational structure of local government. Poland consists of 16 provinces (województwo samorządowe – on average about 20 thousand km² and 2 million inhabitants), 380 counties (powiat), and 2,478 municipalities (gmina), including 892 towns. Local governments, as legally recognized bodies having their own property, were restored in 1990 (after the fall of communism) and it was considered as one of the major elements of the political system change. The heads of the local governments (marszałek – for a province; starosta – for a county; wójt/burmistrz – for a commune)

⁵³³ According to the ACM: "if in an emergency situation the use of other capabilities and resources is impossible or may prove to be insufficient, unless other regulations state otherwise, the minister of national defence, at the request of the governor may provide him with the subunits or units of armed forces of the Republic of Poland" (ACM, 2007, section 25, author's translation). The use of the armed forces for domestic purposes is potentially controversial and strict limitations are placed on their employment. The most important conditions are: firstly, the armed forces can be employed only if civil capacities are overwhelmed. Secondly, there is always a need for a formal request from the civil authorities. Moreover, employment of the armed forces during an emergency must be based on law (the ACM, the Police Act). It should be planned as well.

are elected in popular elections. In 1990 the lowest level of local government was established, and it was expanded in 1999 for the county and regional levels. The decentralization and devolution of power is clearly visible in Poland, after 1990. However, the starting point was the very centralised, communist administration structure.

Currently, the competences of the regional governors in the area of security are one of the main tasks. Public authorities at all levels of administration have relevant competences related to security issues. It is regulated by the legal acts dividing the tasks and responsibilities.

The current civil security structure

The system of crisis management is established at each level of administration: national; ministerial/departmental; provincial; county; and communal. There are three bodies at each level: the crisis management authority; the consultative and advisory team and the crisis management centre (Table 2).

Administrative level	Crisis management authority	Consultative and advisory body	Crisis Management Centre
National (central)	Government, the prime minister	Governmental crisis management team	Government Centre for Security
Departmental	Minister, head of the central authority	Crisis management team (In ministry, or central office)	Crisis management centre (In ministry, or central office)
Provincial	Governor (wojewoda)	Regional crisis management team	Regional crisis management centre
County	County head (starosta)	District crisis management team	District crisis management centre
Communal	Mayor (wójt/burmistrz)	Communal crisis management team	Municipal/city crisis management centre (is not required to create)

Table 2. Crisis management system in Poland.

The crisis management system is based on the constitutional institutions, in particular on the council of ministers. The Parliament and the president act only when extraordinary measures need to be taken, e.g. during a state of natural disaster.

The council of ministers is responsible for crisis management at the national level. Additionally, the council of ministers is responsible for the maintenance of public order and the internal security of the state. It is empowered to declare a state of emergency. In urgent cases, crisis management is executed by the minister competent for internal affairs, who informs the prime minister of his actions. The national authorities for civil protection are: (a) the Ministry of the Interior; (b) the Government Centre for Security (GCS); (c) the National Headquarters of The State Fire Service with the chief commandant acting also as chief of the National Civil Defence (subordinated to the Ministry of the Interior).

At provincial level, a governor is responsible for civil security. A governor heads a crisis management team (CMT) and has wide competence in coordination and in linking the local system with the central government. Governors coordinate the prevention of all types of hazards, and assist lower governmental levels if their resources are inadequate. Operationally, and in practice the role of governors is crucial. Governors coordinate and supervise planning and response on county and municipal levels.

At the county level a county head is responsible for crisis management on the county territory. It includes planning, response, organisation of exercises, prevention etc.

At the municipal level the main tasks include fire protection, the maintenance of public order, the monitoring of threats, early warning systems, alarms and the coordination of rescue operations and evacuations. The head of a municipality (wójt/burmistrz) defines civil protection tasks for all institutions that are operational within the municipality.

Declaration of a disaster is undertaken at the level where crisis occurs with immediate informing of upper and lower levels of the crisis management system.

At the lowest level, the municipal one, establishment of a crisis management centre is not required. Thus, more responsibility for security rests on the county level.

With regard to response, actions are adjusted to the territorial scale of an event. The system assumes that response is centralised to the extent necessary in a given situation. Planning is required at all levels of the administration and for the appropriate territorial scale. In case of a disaster, the response generally starts at the local, municipal level. However, it depends on the scale and type of an event. The administrative body obtaining information on a threat is responsible for initiating an action regarding a possible crisis (ACM, 2007, section 21). This body has the obligation to inform relevant bodies on the upper and the lower levels of administration. Up-scaling is a typical procedure presumed in the law. If a crisis exceeds the given territorial scale and capacities, the responsible bodies of higher administrative level are activated.

The system of crisis management presented above is mainly coordinative for securing the appropriate information exchange. On the operational level, the most important element of crisis management action is the State Fire Service, which is a major part of the National Firefighting and Rescue System (it include also Voluntary Fire Service brigades; the Mountain Rescue Service and the Water Rescue Service, hospitals, ambulance service etc. However, the National Firefighting and Rescue System deals mostly with everyday actions. It is activated also in case of a crisis.

There are several governmental/administrative bodies related to civil security and crisis management: the State Police (having a supplementary role in emergency situations); municipal police (uniformed local government formation established to protect public order and peace in a municipality); military police (police for armed forces) the Border Guard (agency that performs border control); the Government Protection Bureau (provides antiterrorism and security services for the Polish government); Internal Security Agency (domestic intelligence agency), Intelligence Agency; Central Bureau of Investigation (police force fighting organized crime). They have auxiliary role in crisis management.

2.1.2 Government/societal culture

Based on Hofstede's variables, Poland is hierarchical, individualistic, masculine, uncertainty avoiding and a short-term oriented country (Hofstede et al., 2010). This mixture has several ambiguities. Poland is a hierarchical society in terms of the relatively high level of acceptance for inequality. It involves acceptance for centralisation and hierarchical organisation. It is a society where everybody has his/her place. While hierarchical, Poland is individualistic at the same time, with the expectation that people take care of themselves. It involves also relying on close family. Poland is a masculine society, driven by competition, achievement and success rather than caring for others. Standing out of others is accepted, based on performance and achievement. At the same time, Poles exhibit a very high preference for avoiding uncertainty. It entails reliance on rules, and distrust towards innovative and unorthodox ideas and behaviour. Poles are short-term oriented, expecting quick results, respecting traditions and norms.

In terms of Inglehart's values dimensions, Poland is located as a country with a strong (compared with most other European countries) score on the traditional (vs. secular-rational) values and on the survival (vs. self-expression) values. In the global cultural map Poland is a part of the Roman Catholic territory. Within the European context it is rather exceptional, even compared with other post-communist countries, which are more secular-rational and self-expression oriented. Some changes are observed, along the general trend linking GDP per capita growth with an inclination to more secular-rational and self-expression values (Inglehart and Baker, 2000). The shift was observed towards a more secular-rational direction, not into self-expression however (between 1990 and 1997).

The characteristic of Poland in Hofstede's and Inglehart's frameworks are in line with some other observations. In the 1970s, Polish society was described by sociologists as a coalition of families united into the nation (Nowak 1979). This view is confirmed lately by Czapinski (2006) noting a "social vacuum" between nation and family.

In the 1990s analyses of Polish society, lack of civil activities, avoidance in taking risk in the labour market, waiting for the state to provide all services, a lack of innovative business drive etc. were noted and attributed to the psychological traits originated from the communist era. Yet, a pragmatic shift in the values pattern has been discussed (Ziolkowski 1994), noting that values-driven opposition to the communist system transformed into a dominance of the more individualistic approach of taking care of one's own business. At the same time, self-organization of Poles is noted as well as the ability to cope with societal challenges (Gliński et al., 2004).

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The basis of the civil security legal framework is declared in the Constitution. The Constitution of the Republic of Poland of April 2nd 1997, in art. 5, makes the state responsible for ensuring the security of citizens. In Art. 146 of the Constitution, the council of ministers is attributed the responsibility for ensuring internal security and public order. In article 228 it is stated that in situations of particular danger, if ordinary constitutional measures are inadequate, any of the following appropriate extraordinary measures may be introduced: martial law, a state of emergency or a state of natural disaster. Extraordinary measures may be introduced only by regulation, issued according to the statutes, and are required to be publicized.

The most important legal provision in the area of civil security is provided by the ACM of 26 April 2007. It specifies the authorities responsible for crisis management, their tasks and the general principles for crisis management. This act defined the basis for the integrated system of crisis management in Poland, establishing the composition and function of the crisis management system (Górski 2007).⁵³⁴ There are other acts defining the structure of the civil security system in Poland. The Act on the State of Natural Disaster of 18 April 2002 specifies the conditions for implementing extraordinary measures in case of disasters (both natural or man-made). The Act provides definitions, rights and restrictions on the public during the announced state of disaster, specifies the authorities responsible for implementing tasks and draws general principles for consequence management (see chapter 1). The Water Act of 2001 attributes the responsibility for flood protection to administrative bodies. The Act on National Emergency Medical Services, 2006) defines the medical rescue system. The Fire Protection Act (Fire Protection Act, 2009) codifies the rescue system and the national firefighting system. The civil defence system is regulated by the Act on general obligation to defend (The Act on General Obligation to Defend the Republic of Poland, 1967).

Work on the Act on Protection of the Population is continuing. During the last 20 years a few proposals of the act have been drafted but none has been accepted within the whole legislative procedure.

In 2000 the tasks for civil protection were assigned to the State Fire Service. In 2002, the act on disasters (The Act on the State of Natural Disaster, 2002) came into force. It defines basic terms: natural catastrophe; technical failure and allocates responsibility for action. Within the Polish legal system, the three states of emergency are defined: martial law, state of emergency and natural disaster emergency (The Constitution of the Republic of Poland, 1997). According to the Act on the State of Natural Disasters, large scale catastrophes are called disasters (klęska żywiołowa) and they involve extraordinary measures and help from specialized institutions (Bac 2011). The aim here was mostly the clarification of responsibilities for action in case of an emergency, as the 1997 flood showed ambiguities in the interpretation of the regulations (Wojnowska-Ciodyk 1997).

Flood management as a part of the civil security system in Poland is defined in the law on disasters (2002) and in the water law (The Water Act, 2001), attributing the responsibility for flood protection to administrative bodies.

2.2.2 Political dimension

The constitutional responsibility for crisis preparedness and response rests on the council of ministers. It is confirmed in the ACM. The GCMT is formed in order to consult and advise the council of ministers concerning initiation and coordination actions to manage crises. The team consists of: (a)

⁵³⁴ The ACM is supplemented by the Act on National Emergency Medical Services (Act on National Emergency Medical Services, 2006) and by the Fire Protection Act Law on Fire Protection (Fire Protection Act, 2009). These acts constitute the national system of rescue and citizen protection, which is the system for everyday (non-crisis) operations (Płoskonka 2012).

The prime minister – as chairman; (b) the minister of national defence; (c) the minister responsible for internal affairs; (d) the minister for foreign affairs; (e) the minister coordinator of special services - if appointed. The secretary of the team is the director of the GCS. The centre is subordinated to the prime minister and provides support for the council of ministers, the prime minister and the team concerning crisis management.

The ACM defines the roles and responsibilities of appropriate public authorities at all levels of administration: the provincial level; the county level and the municipality one.

Policies on civil security are formulated by the ministry of interior, particularly within the Department of Rescue and Civil Protection. Also, the GCS, the Ministry of Defence are involved in the policy making, and the State Fire Brigade. However, the state fire service has the operational power, which gives it an advantage. The GCS is located close to the prime minister and its coordinative role also gives some influence.

The Polish Constitution (The Constitution of the Republic of Poland, 1997) defines the following states of emergency: martial law, state of emergency, and natural disaster emergency. The council of ministers is in charge of declaring the state, in accordance with the Constitution and the act on the state of natural disaster emergency. Up to now, it has not been declared as customary operations have been considered sufficient. One may see a reluctance to declare a state of emergency in connection with the bad memories of martial law in 1981.

2.2.3 Operational dimension

Implementation agencies

In practice, The minister of the interior has a vital role in crisis management as it is responsible for the maintenance of public order, the protection of the population in emergency situations and the prevention of disasters. Although most of the emergency services are subordinated to the minister of interior, each minister is responsible for actions in the field of civil emergency planning (planowanie cywilne) within their own area of competence. The GCS coordinates efforts in the field of crisis and emergency management. This includes e.g. a detailed presentation of methods and means of reacting to threats and mitigating their results, gathering information on threats and analysing collected materials as well as developing conclusions and recommendations for preventing and counteracting threats.

Operationally, for coordination and information the role of governors is crucial. They coordinate the prevention of all types of hazards, support efforts of local governments, and assist lower levels if their resources are inadequate. In an operational sense, the important roles are played by the State Fire Service, specialised services (under different ministers), and the armed forces. They report to their appropriate ministers. The State Fire Service is the main part of the National Fire Fighting and Rescue System (Krajowy System Ratowniczo-Gasniczy), which executes day-to-day rescue tasks and is responsible for operation in crisis situations. The Voluntary Fire Service has a substantial role as it is a very big organisation (see section 2.4.1.). The police have a supplementary role, with tasks regarding sustaining of public order. The Army is engaged if required. There are specialised bodies responsible for action in case of specific threats. For instance, in case of a flood: regional water management boards (Regionalny Zarzad Gospodarki Wodnej) are responsible for managing the reservoirs,

communicating, securing 24 hours-a-day duty supervisions etc.; the Institute of Meteorology and Water Management (Instytut Meteorologii i Gospodarki Wodnej) is responsible for monitoring and warning, Chief Sanitary Inspectorate (Panstwowa Inspekcja Sanitarna) is responsible for monitoring of sanitary situation, and vaccinations; Provincial land Melioration and Water Units Boards (Wojewodzki Zarzad Melioracji I Urządzen Wodnych) provide the stored resources for rescue action.

Operational tasks and responsibilities

In the ACM (art. 3) civil planning is understood as: (a) the overall organizational projects involving the development of plans, including emergency response plans, and programs, designed to optimize the use of available forces during crises, states of emergency and during war, in the fields of crisis prevention, in order to take over control of them, to react in crisis situations, to restore infrastructure and re-establish its original character; (b) planning in support of the Polish Armed Forces in case of their employment, and planning the use of the Armed Forces of the Republic of Poland for tasks in crisis management.

Civil Emergency Plans comprise: (a) gathering and processing information on capabilities and resources that can be used in crisis situations, during states of emergency, and during war (b) developing procedures which shall be applied in case of emergencies; (c) preparing crisis response plans.

The tasks of the GCS include assessment, analysis, monitoring of risks, and also communication in this regard. The Centre is to monitor and analyze the situation in the field of national security and associated risks; to prepare information and analysis for the assessment of risks or the possibility of their development; to develop conclusions and proposals on how to cope with threats. The Centre prepares reports and evaluations on risks and actions undertaken in this area. The director of the Centre is responsible for preparation of the Report on Threats to National Security (Raport o Zagrożeniach Bezpieczeństwa Narodowego). Mapping risks is part of the report. At the level of provinces, counties, and municipalities risks mapping, and assessment are parts of Civil Emergency Plans. These plans also contain characteristics of resources including the status of state reserves (oil, medicines, food stored for emergency situations) and evaluation of the possibility of their use. Plans are generic and are to be prepared every second year.

EURO 2012 Football Championships as an illustration of the civil security system in operation.

Before the EURO 2012 football championships, the preparations included international co-operation and exercises. The exercises were focused on the cooperation of different services. Energy failure, crash on the expressway and unrest after football matches were the scenarios of situations tested at the two day training exercise known as LIBERO II.

In June 2012 the prime minister issued a decree on the introduction of the first terrorist threat level due to the possibility of a terrorist event. As a consequence, the readiness of all services and administration throughout the country were increased. The events were secured by the services subordinated to the Ministry of Interior (police, the State Fire Service, the Border Guard, the Government Protection Office) with the support of the Ambulance Service, the Ministry of Defence subordinated services (e.g. military police) and civil society organizations (e.g. Red Cross). The activities of the National Fire Service during EURO 2012, as part of the National Firefighting and

Rescue System, were related to operational security of the events. Four stadiums (Poznań, Gdansk, Warsaw and Wroclaw), five fan zones (Poznań, Gdańsk, Warsaw, Wroclaw, Krakow), 14 accommodation centres and training, six railway stations and eight airports were covered by the service. The security measures involved a total of approximately 14,500 rescuers (including 1,450 firefighters of the Volunteer Fire Service) and about 3,300 emergency vehicles. In cooperation with the State Fire Service, the Polish Red Cross supported in securing the stadiums and fan zones in Gdansk and Warsaw, providing rescuers. At the request of the persons responsible for the safety of football fans, Red Cross rescuers supported other existing on-site services.

Police action focused on guarding public order and general security during the championships. Officers from the provincial commands of Poznan, Gdansk, Lublin, Krakow, Wroclaw, Rzeszow and the Metropolitan Police were involved. Every day, in every city hosting the tournament, there were about 6,000 police officers in service. Polish military police assisted the police (about 1,200 soldiers) and police officers from other countries participating in the tournament, and representatives of INTERPOL and EUROPOL. During Euro 2012, due to disruption of public order, the police arrested 652 people. 3,376 police escorts were carried out, involving 771 escort officer driving 39,716 km. The Euro 2012 security operation led the Police Command Centre in Legionowo.

Protection tasks were also carried out by officers of the Government Protection Bureau and included approximately 100 people. Border Guard activities included border controls and cooperation with the Ukrainian counterpart. Regulation by the minister of internal affairs in the period from 4 June to 1 July 2012 was carried out at the internal border control Schengen area and selected flight and ferry connections (sea). These activities, supported by the Border Guard police, military police, Road Transport Inspection and State Fire Service, inspected nearly 29,000 people, of whom 99 percent were foreigners.

Altogether, the operation of the civil system was assessed as successful, as there were no major crises during the championships.

2.2.4 External dimension

International cooperation is included in several legal provisions. The Ministry of Interior, the headquarters of the state fire services and the GCS cooperate with partners from other countries.

In terms of operational cooperation, bilateral agreements are of particular importance. There are nine agreements signed between Poland and other countries related to cooperation and mutual assistance in case of a disaster. For Poland's neighbouring countries, there are cooperative agreements with all but Belarus.⁵³⁵

⁵³⁵ The agreements are with: the government of the Russian Federation on cooperation in the field of prevention of industrial accidents, natural disasters and elimination of their consequences, signed in Warsaw on 25 August 1993; the Federal Republic of Germany on mutual assistance in emergencies and natural disasters or serious accidents, concluded in Warsaw on 10 April 1997; the government of the Republic of Lithuania on cooperation and mutual assistance in case of disasters, natural disasters and other serious accidents, signed on 4 April 2000 in Warsaw; the Republic of Hungary on cooperation and mutual assistance in the field of disaster prevention, natural disasters and other serious accidents and elimination of their consequences, done at Warsaw on 6 April 2000; the government of the Slovak Republic on cooperation and mutual assistance in case

The main rationale for agreements is the similarity of risk and benefits from wider availability of services. Also, as there are river borders and rivers crossing borders, cooperation is required in case of floods. There were six of these agreements initiated when Poland provided help abroad: with the Czech Republic, Germany, the Russian Federation, Ukraine, Lithuania, and Slovakia. Poland after 2000 requested foreign help twice: during the floods in 2001 and 2010, in both cases Poland received help. Requests for help were based on the provisions of the agreements. The request for help is not regulated in the act, but it is within the procedures. The minister of interior has the competences in this regard.

Additionally, Poland has agreements with border German states.⁵³⁶ An agreement has also been signed with the German Federal Emergency Management Technical Service and the Polish State Fire Service.⁵³⁷

There are also agreements between governors at the province level and their counterparts abroad.

The multilateral aid mechanisms operating within the EU, NATO and the UN are also ratified by Poland:

- a) for the EU: Treaty on the Functioning of the EU (Article 196); Council Decision 2007/779/EC, Euratom establishing a Community Civil Protection Mechanism.
- b) for NATO: the scheme to provide assistance during disasters to protect the population during war and natural disasters and resulting from human activities (approved in 1953); the Euro-Atlantic Disaster Response Coordination Centre (EADRCC) – established in 1998.
- c) For the UN: Resolution "Strengthening the Effectiveness and Coordination of International Urban Search and Rescue Assistance" (57/150 of 16 December 2002); INSARAG Hyogo Declaration adopted at the global meeting of the INSARAG in Kobe in 2010.

Poland is a member of the Visegrad group; the Salzburg Forum and the Proliferation Security Initiative. These are mostly consultative bodies.

of disasters, natural disasters and other serious accidents, signed in Bratislava on 24 January 2000; the Czech Republic on cooperation and mutual assistance in case of disasters, natural disasters and other extraordinary events, signed in Warsaw on 8 June 2000; the cabinet of ministers of Ukraine on cooperation and mutual assistance in the field of disaster prevention, natural disasters and other extraordinary events and the elimination of their consequences, signed in Warsaw on 19 July 2002; the government of the Republic of Croatia on cooperation in the field of prevention of natural disasters and technical failures and elimination of their consequences, done in Zagreb on 17 September 2003; the government of the Republic of Slovenia on cooperation in the field of prevention of natural disasters and other accidents and elimination of their consequences, signed at Warsaw on 13 April 2005.

⁵³⁶ These are the following: The agreement between the Ministry of Interior and the Saxon State Ministry of the Interior on mutual assistance during emergencies, natural disasters and other serious accidents in Slubice signed on 18 July 2002; The agreement between the Ministry of Interior and the Ministry of Internal Affairs of Brandenburg on mutual assistance during emergencies, natural disasters and other serious accidents in Slubice signed on 18 July 2002; The agreement between the Ministry of Interior and the Ministry of Internal Affairs of Brandenburg on 18 July 2002; The agreement between the Ministry of Interior and the Ministry of Internal Affairs of Mecklenburg - Western Pomerania on mutual assistance during emergencies, natural disasters and other serious accidents in Slubice signed on 18 July 2002.

⁵³⁷ Agreement between the commander in chief of the State Fire Service and the Federal Emergency Management Technical Service (THW), concluded in Warsaw on 20 August 1998.

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

State-to-citizens expectations / citizen obligations

Citizens' obligations are formulated in several legal documents: the Act on the General Obligation to Defence (1967); the Act on Fire Protection (1991); the Act on Crisis Management (2007); the Act on the State of Natural Disaster (2002); the Law on the State of Emergency (2002); the Act on Martial Law (2002).

Obligations include education in schools, and obligatory first aid training. It also involves contribution in case of evacuation. Plans show that more than half of the citizens are expected to use their own transportation in such a case. Some obligations arising from the Act on General Obligation to Defend, related to civil defence (for instance – obligation to take part in training exercises) are not enforced *de facto*.

The act on Natural Disasters formulates restrictions resulting from the introduction of the state of natural disaster.⁵³⁸ In accordance with the act on fire protection there are several obligations imposed.⁵³⁹

Citizens-to-state expectations. Poles perceive natural disasters (floods, earthquakes) as the most threatening (86 percent are concerned about them), while they are the least afraid of terrorist attacks. The level of concern about that is also high (72 percent), though (Table 3).

Type of disaster	Level of concern (%)				
	Very concerned	Rather concerned	Rather not concerned	Not concerned	Hard to say
Man-made	40	42	16	2	0

Table 3. Level of concern about types of disasters in Poland.

⁵³⁸ The restrictions include: 1) the suspension of certain business activities; 2) ordering the employer to dispose workers to the authority in charge of activities carried out in order to prevent the effects of a natural disaster; 3) requirement to undergo a medical examination, treatment, vaccination, and the use of other preventive measures and treatments necessary to combat infectious diseases and the effects of chemical and radioactive contamination; 4) requirement to undergo quarantine; 5) requirement to empty dwellings or other facilities; 6) requirement to evacuate from specific places or objects; 7) requirement or prohibition from staying in certain places, objects and specific areas; 8) requirement to perform personal services and contributions.

⁵³⁹ An owner, manager or operator of the building, facility or site shall in particular: (a) comply with the requirements of fire protection codes concerning construction, installations and technologies; (b) equip the building, facility or area with firefighting and rescue equipment; (c) ensure that persons who are in a building, facility, are in safety and/or have the possibility of escape, (d) prepare a building, facility or site for a rescue operation; (e) to train employees on fire prevention regulations; (f) establish procedures in the event of a fire, natural disaster or other local emergency.

disasters					
Natural disasters	46	40	12	2	0
Terrorist attacks	33	39	21	8	0
Military conflicts	36	37	18	7	1

Source: Eurobarometer, 2012

Poles have ambivalent attitudes to the state crisis management services. On the one hand the state is expected to deliver security and these claims are strong (Ministry for Interior 2, 2013; Think Tank, 2012). On the other hand, there is distrust towards the state and the state abilities and performance. This poses difficulties in emergency situations, as people typically do not trust that they could be fairly compensated by the state - if they are required to abandon their properties (PAS, 2012).

2.3.2 Information

Information on preparedness

Informing on preparedness is decentralised, and very much depends on local traditions and circumstances. Provincial governors have an important role with respect to information. On provinces' webpages information can be found on several risks, and instructions for citizens. Also counties and municipalities publicize information on preparedness on their webpages. The form and amount of the information vary, depending possibly on the type and scale of risks and the interest and skills of staff workers.

The State Fire Service also informs on risks on its webpages. There are occasional cases of social media use (like Twitter, Facebook). Also, in some cities SMS warning systems have been introduced.

The public alarm system is based on sirens (Abgarowicz 2011). The ministerial decree on the detection of contamination and of the authorities in these matters of Oct. 16th, 2006 (The ministerial decree, 2006.) concerns use of alarms in case of an air attack and contamination. The operation of the alarm system is within the responsibility of regional governors. The sirens system is tested.

Another channel is mass media. On the province and on the local levels there is cooperation in this respect, and information is disseminated via newspapers, TV and radio. The media generally are willing to inform on emergencies. Nevertheless, they have legal obligations to inform in case of emergency.

There are several other methods of information used, like posters; leaflets; church bells and others.

There are webpages with online information on the current meteorological and hydrological situation. This is based on data collection by the telemetric system introduced after the flood in 1997. The Institute of Meteorology and Water Management collects data and offers monitoring and forecasting to the public and to the civil security system.

Information on response

Alarms are issued by the appropriate crisis management authorities. In case of a flood it is a provincial governor. Crisis management authorities prepare alarm systems in their territories. As a result, except the cases of an air attack and a contamination event, the alarm systems are decentralized and not compatible. In an emergency situation various methods of informing are used, like posters, leaflets etc. Mass media are widely treated as effective information channels. Evaluations of crises responses are publicly available on the responsible institutions' webpages).

22 percent of Poles feel informed about emergency preparedness in their country, while 75 percent are not aware (3 percent do not know) (Eurobarometer, 2009). Regarding the situation in their own country, Poles feel less informed than the average EU citizen (albeit with minor differences). Overall this is a low level of knowledge. Concerning response to emergencies at the level of the European Union, a poll in Poland show that 18 percent of Poles feel informed, 79 percent are not aware (3 percent do not know). Regarding the situation in their own country Poles feel less informed on response to emergencies than the average citizen of the EU (11 percent difference). Regarding the situation at the EU level Poles are at the same low level as other EU citizens.

2.3.3 Education

There have been several information campaigns initiated by the government agencies: the Ministry of Interior; the State Fire Service and by province governors. These were on: promotion of use of 112 telephone number; on removing snow from roofs; on safety during winter holidays; on safety during winter recreation and sports etc. In the case of the ministry of Interior the role is very limited. These actions are initiated by the ministry, announced at the ministry webpage and disseminated by the spokesmen to the media. They are further overtaken by province governors. Yet, regional governors have independent and bigger roles in this respect.

Before and during the European Football Championships in 2012 an information campaign was carried out in Poland. Security issues were a (rather small) part of the campaign. In 2006 there was a campaign on bird flu. There was a leaflet prepared by the chief medical officer. Also the chief sanitary inspector was involved and other institutions (among them the episcopate of the Catholic Church). In 2009 there was a campaign on flu – by the Ministry of Health (leaflets were disseminated to schools etc.)

There have been several campaigns related to floods. The National Water Management Authority launched a campaign: To know more on water. In the Institute of Meteorology and Water Management there is a special working group dealing with information and education on flood preparedness.

The chief of the National Civil Defence (being the chief of the State Fire Service at the same time) coordinates the educational programme *Safe Life* (for primary schools – together with the Swedish League for Civil Defence (Civilförsvarsförbundet). There have been several information campaigns launched by the State Fire Service.⁵⁴⁰

⁵⁴⁰ The examples include: "Detector in every home": A campaign aimed at the detection of a fire in the early stages of its development, to prevent its spread and to reduce the number of victims of the fires; "Do not burn the grass": A campaign aimed against the burning of grass and plant residues; "Open house watchtowers":

These campaigns involved press conferences, interviews, briefings, and other means of informing.

Altogether, educational activities can be considered as based on passive methods.

Besides information campaigns, there are training programs, especially on first-aid and fire protection. They are obligatory, carried out in workplaces, but not always enforced. Their scale is difficult to estimate. There are also first-aid training sessions offered by NGOs (Red Cross, scouting organizations, etc.).

There are many training opportunities for professionals offered by state agencies (The Main School of Fire Service, State Fire Service schools, Provincial Headquarters of State Fire Service training centers, Research and Development Centre for Fire Protection) and by the private sector. The number of training activities is difficult to estimate (Ministry of Interior 1, 2012).

There are also pro-active campaigns. The Ministry of Interior launched a campaign on terrorism – how to behave in case of danger, how to behave in case of receiving a suspicious parcel; guidelines in case of being taken hostage, etc. Substantial work has been done by the Institute of Meteorology and Water Management concerning active methods of flood preparedness.

Research projects in the area of civil security are sponsored by The National Centre for Research and Development (applied projects and R&D) by the National Science Centre (basic research). In both cases research on security is only one area of a wider research programmes.

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

The Volunteer Fire Service is the substantial part of Polish third sector (Kancelaria Prezydenta..., 2011). It has also significant importance for the civil security system. However, the Volunteer Fire Service exists basically in the countryside and smaller towns only - in the bigger cities they are almost absent. The Volunteer Fire Service is an efficient tool in emergency situations. In the past several years a bigger engagement of spontaneous volunteers helping in emergency situations is incidentally observed (PAS, 2012). There is a close cooperation between the state fire service and Voluntary Fire Service. Altogether the headquarters of the State Fire Service has 18 agreements with non-governmental organisations. Some of the cooperating organizations are specialized in certain threats (e.g. Voluntary Water Rescue), while with others cooperation is due to their specific skills and resources useful regarding various threats (e.g. the Polish Medical Air Rescue). Some of the organisations have a wide range of skills, for instance, the Voluntary Fire Service. There are 16,403 brigades of Voluntary Fire Service, with 678,214 members (ZOSPRP ..., N.D.). 3,841 brigades are within the national rescue and firefighting system.

Repeated every year in May, the action is to promote fire safety among children and adolescents; "Live Safely": An educational campaign carried out by firefighters in primary schools all over the country. It was dedicated to the idea of promoting proper behaviour in risky situations (fires, floods, accidents, etc.); "In the face of a flood ...": A campaign aimed at informing the public on how to protect against flooding, how to act in time of flooding and how to minimize the effects of flooding; "No to Carbon Monoxide" (Nie dla czadu): The state fire services launched this campaign in 2011 aimed at preventing carbon monoxide poisoning. It was a radio campaign combined with promotion of carbon monoxide detectors, handing out leaflets, posters in national weeklies, direct meetings with firefighters, etc.). The Polish Radio cooperated in the campaign. There are a few categories of organisations (State Fire Brigade 1, 2012):

- a) Organizations having statutory rescue activities;⁵⁴¹
- b) Organizations having statutory humanitarian aid activities;⁵⁴²
- c) Firemen trade unions and firefighters foundations;⁵⁴³

The chief of the State Fire Service cooperates also, without formal agreement, with the following non-governmental organizations: Association of Fire Engineers and Technicians; Association of Polish Firemen; Pensioners Association of the Polish Fire fighters.

There are also other non-governmental organizations cooperating with the civil security system on regional and local levels. These are: military charity Caritas, Polish Amateur Radio Union; the Gymnastic Society "Sokół".

Although, civil society organisations play a relatively bigger role in the civil security system, as the volunteer fire service is by far the biggest part of the third sector in Poland. Generally, however, civil society organizations (non-governmental organisations) are much weaker compared with the West.

Non-governmental organisations have an important role in informing, education and training. Some of them are fundamental for some specific areas, like: rescue operations in the mountains, on inland waters, in mines. Also, the Volunteer Fire Service is important for the system as it is decentralized and often can be the first to take action. The roles and responsibilities are defined in plans prepared at all levels of administration.

The activities and equipment of some non-governmental organisations (e.g. Tatra Mountains Volunteer Rescue Service; Mountains Volunteer Rescue Service; Voluntary Water Rescue) are substantially financed by governmental bodies (RP 2012; Think Tank 2012). They can provide the operational element of the civil security system due to governmental financing. Thus, the inclusion of NGOs is based on an understanding: there are obligations assigned for them but at the same time they can demand subsidies.

Example: Red Cross

In Poland, the Red Cross has been operating since 1919. The organizational structure of the Polish Red Cross consists of four levels: national, regional, district and primary units. At the national level the Board of the Polish Red Cross operates. There are branches in all 16 provinces and in 250 counties. At the lowest level there are basic units: the School Circles of Red Cross, Voluntary Instructors Youth Group, blood donors clubs, emergency groups and humanitarian aid groups. The Red Cross operations in Poland include the protection and promotion of health, rescue and civil

⁵⁴¹Volunteer Fire Brigades Association of the Republic of Poland; Tatra Mountains Volunteer Rescue Service; Mountains Volunteer Rescue Service; Voluntary Water Rescue; Polish Aero Club; Polish Mountaineering Association; Central Mine Rescue Station.

⁵⁴²Caritas Poland; Polish Humanitarian Action; Polish Red Cross; Polish Committee for Social Welfare; Polish Ecumenical Council; Polish Scouting Association; Scouting Association of the Republic of Poland.

⁵⁴³The National Fire Service Section of the Independent Self-Governing Trade Union "Solidarity"; Firefighters Trade Union "Florian"; Independent Self-Governing Trade Union of Firefighters; Rescue Education and Technology Foundation.

protection and social assistance. Its operations are regulated by the Law of 16 November 1964 on the Polish Red Cross (Journal of Laws No. 41, item. 276). An integral part of the Polish Red Cross is the Polish Red Cross youth group. The rescue system of the Polish Red Cross is made up of specialized rescue groups spread across the country. In 2011, the Red Cross Rescue system included 22 groups (one - rescue special, one - emergency medicine, 20 - rescue) with 470 members and 6 groups of humanitarian affairs, counting 83 members. The groups participated in securing 1,510 meetings and events. They organized 342 training sessions and 471 rescue demonstrations, providing assistance to 7,336 people (PCK 2012).

2.4.2 Role of profit-oriented organisations

There are roles of profit oriented organisation within the critical infrastructure protection and – less important – in some other areas (Private company 2013). According to the ACM, protection of critical infrastructure includes cooperation between the public authorities and the owners of objects, installations and infrastructure equipment. The principles of the cooperation are based on prepared plans (on the national and the provincial levels).

Specifically, owners and holders of objects, installations or equipment of critical infrastructure are required "to protect it, according to separate regulations, are required to prepare and implement, according to the existing risk, their own critical infrastructure protection plans and maintain own backup systems to ensure the safety and maintenance operation of the infrastructure, until the full restoration, as well as designate a person responsible for maintaining contacts with the public administration for the protection of critical infrastructure".

As the ACM defines the tasks of critical infrastructure protection, this creates a market for training and designing procedures, delivered mainly by the private sector. It is supposed to diminish as the obligations of the companies affected by the law will be fulfilled (Private company 2013).

Each postal operator is required to have a plan of action in case of a particular emergency situation, defining and preparing the organizational and material action plan according to the expected threat. The requirement is based on the Postal Law (from 1 January 2013, art. 83 of the Postal Law of 23 November 2012). Previously, postal operators were obliged to draw up plans and arrangements on the basis of the Postal Law of 12 June 2003 and regulations of the ministry of infrastructure (Regulation of the minister of infrastructure of 9 January 2004 on an action plan operating in situations of particular danger; the Regulation of the minister of infrastructure of 30 December 2003 concerning the plan for public operator interaction with the military mail) (Stec 2011). The Polish Post has an agreement with respect to emergency situation obligations while other companies do not.

Factory fire brigades had a significant role before 1990. Currently there is in practice a regulatory vacuum in this respect. The ministry of internal affairs issues the acceptance of establishment and of dissolution of factory fire brigades, but in practice only accepts the application and does not have any blocking or enforcing competences. There are rescue groups in private companies. Chemical factories which are covered by the SEVESO 2 Directive have obligations in this respect.

Private companies are contracted for certain tasks related to civil security, for instance transportation companies secure logistic services for an emergency case. Also, sanitary equipment, and temporary shelters providers are contracted. These agreements are signed mostly on the local level. Ambulance services, which were fully within the state health system until 1990 are also contracted out nowadays.

Large private security firms offer a wide range of services. They offer rescue services, security audits for private companies, training exercises, etc.

The involvement of profit oriented companies is financed by the state as their tasks and services are contracted.

Example: Factory Fire Service LTD

Factory Fire Service LTD is a limited liability company and an independent economic entity with 100 percent responsibility for the refinery at Trzebinia. The Factory Fire Service LTD is an organizational unit of fire protection in the Trzebinia Refinery. It performs the following tasks of rescue for the refinery:

- identification of fire hazards, explosives and other hazards in the Trzebinia refinery;
- conducting fire and rescue operations and liquidation of local threats within their own activities;
- operational security work for the fire hazard at Refinery Group Trzebinia;
- the provision of fire hazard protection work for other businesses.

The Factory Fire Service LTD also runs a number of other services in the field of fire protection. It is equipped with specialized equipment designed to fight fires, natural disasters and other local threats. It works for the Refinery Group Trzebinia and within the agreed upon areas in consultation with the State Fire Service for other companies. Cooperation with the State Fire Service is based on the separate rules and regulations for detailed instructions.

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Effectiveness of the Polish civil security system is assessed by several bodies and from various points of view. First of all, the Supreme Audit Office controls the performance of the administration. The Office evaluates the crisis management system, the civil defence system and water rescue. Second, there are reports on accidents prepared by specialised bodies (like the State Commission for Investigation of Railway Accidents; The Commission for Investigation of State Aviation Accidents etc.). Thirdly, there are more general reports on security prepared by institutions like the National Security Bureau; the GCS, etc.). For further analysis in this case study, we have further investigated

eight reports of which some concern significant crises, while some others present more general assessments.⁵⁴⁴

Generally it can be argued that effectiveness is not a particular focus of assessments. The reports are mainly descriptive – in terms of presenting the case and in terms of actions undertaken.

The National Crisis Management Plan prepared by the GCS does not include effectiveness measurement or assessment. However, in the document responsibilities are attributed to the ministries and various bodies concerning particular risks. It can be thus assessed whether the tasks were realized, and procedures were followed. Moreover, the procedure of assessment and documenting of losses caused by disasters are also defined. This document has a purely planning character. It does not put attention to effectiveness assessment of future actions.

The report on security in Poland in 2010 contains mainly information on law enforcement. However, the information on "common security" (bezpieczeństwo powszechne), i.e. risks of fire, industrial risks, transportation accidents, flood risks, technical and construction risks) is also presented. In the report, mainly the number of incidents, events and interventions is provided, with some general guidelines for future improvements.

The report by the chief sanitary inspector deals with general sanitary status of the country in 2010. The AH1N1 epidemics, which was an important crisis in 2010, is one of approximately 50 other types

⁵⁴⁴ Ministerstwo Spraw Wewnętrznych i Administracji. 2011, Raport na temat stanu bezpieczeństwa narodowego, Warszawa. (Ministry of Interior and Administration, 2011. Report on the security in Poland in 2010. Warszawa.); Rządowe Centrum Bezpieczeństwa, Krajowy Plan Zarządzania Kryzysowego 2012. (GCS, The National Crisis Management Plan 2012.); Główny Inspektor Sanitarny, Stan Sanitarny Kraju w roku 2010, Raport Głównego Inspektora Sanitarnego. (Chief Sanitary Inspector, Sanitary status of the Country in 2010, Report of Chief Sanitary Inspector.); Państwowa Komisja Badania Wypadków Kolejowych, 2012. Raport nr PKBWK/1/2012, z badania poważnego wypadku kategorii A06, zaistniałego w dniu 12 sierpnia, 2011 roku o 16.15 na stacji Baby w km 128,615 linii 001 Warszawa – Katowice. (The State Railway Accidents Investigation Commission, 2012. Report nr PKBWK/1/2012, of severe accident research category A06, occurring on 12 August 2011, at 16.15 at the station Baby, at km 128.615 line 001 Warsaw - Katowice.); Podsumowanie działań służb podległych Ministerstwu Spraw Wewnętrznych po turnieju EURO 2012. (Summary of the activities of subordinate staff, the Ministry of Interior on the EURO 2012 tournament.); Komisja Badania Wypadków Lotniczych Lotnictwa Państwowego, 2011. Raport Końcowy z badania zdarzenia lotniczego nr 192/2010/11 samolotu Tu-154M nr 101, zaistniałego dnia 10 kwietnia 2010 r. w rejonie lotniska Smolensk Polnocny, Warszawa. (The Commission for Investigation of State Aviation Accidents, 2011. Final report of the safety investigation nr 192/2010/11 plane Tu-154M nr 101, occurring on 10 April 2010 in the area of Smolensk Airport NORTH, Warsaw.); Główny Urząd Nadzoru Budowlanego, 2006. Wyciąg ze Sprawozdania z działalności komisji powołanej przez Głównego Inspektora Nadzoru Budowlanego w sprawie ustalenia przyczyn i okoliczności katastrofy budowlanej w dniu 28 stycznia 2006 r. pawilonu wystawienniczego przy ul. Bytkowskiej 1 na terenie Miedzynarodowych Targów w Katowicach". (General Office of Building Control, 2006. Extract from the report on the activities of the committee appointed by the chief inspector of building control on determining the causes and circumstances of the disaster building on 28 January 2006, the exhibition pavilion at. Bytkowskiej 1 in Katowice International Fair"); Informacja o wynikach prac Komisji powołanej dla zbadania przyczyn i okoliczności zapalenia i wybuchu metanu oraz wypadku zbiorowego, zaistniałych w dniu 21 listopada 2006 r. w Kompanii Węglowej S.A. Oddział Kopalnia Węgla Kamiennego "Halemba" w Rudzie Śląskiej. (Information on the results of the work of the Commission appointed to investigate the causes and circumstances of inflammation and explosion of methane and collective accident, occurred on 21 November 2006 Coal Company SA Branch Coal Mine "Halemba" in Ruda Slaska.)

of sanitary risks. The history of epidemics is presented in short, the organisation and methods of coping with the risk and some suggestions for the future improvement of the system are also presented. The sanitary situation of the country was assessed as stable.

The three reports presented above are mostly descriptive and hardly any assessment of effectiveness of the preparedness and response is included. This can be attributed to the function of the documents, and by the fact that they focus on low scale (non-crisis) risks. Nevertheless, the lack of any comments on effectiveness seems to be significant.

In the table below (Table 5), reports are presented on three significant crises, on a railway accident and on security during the EURO 2012 (a crisis did not occur during the championships). The reports can be summarized as strongly focused on analysis of the causes of the crises. The one exception is Euro 2012 – since there was no crisis, the report focuses on the systems organisation, novel solutions, and the lessons learnt.

Table 5. Reports on five crises

	Halemba mine methane explosion	Railway accident in Baby	Security during EURO 2012	Presidential airplane crash in Smolensk	Collapse of exhibition hall in Katowice
Causes indicated?	yes	Yes	Yes	Yes	Yes
Response evaluated?	Not analysed	Not analysed	Yes, but as a potential (since there was no crisis)	Not analysed	Not analysed
Culprits pointed out?	Yes, organisation	Yes, personal and organisational		Yes, personal and organisational	Yes, personal and organisational
Focus of critics or praise	Criticism on preparedness and non-compliance	Criticism on non-compliance	Yes, prise on development of the system and new solutions	Criticism on lack of supervision, lack of regulations, lack of compliance	Criticism on design of the building, on construction, on maintenance
Reforms suggested	Yes	Yes	Yes	Yes	No

Sources: General Office of Building Control (2006); CINAA (2011); PKBWK (2012); Ministry of the Interior (2012); State Mining Authority, 2007.

In the reports, response is not evaluated and attribution of the responsibility for the crises are presented instead. In the report on the Halemba mine methane explosion, the causes of the accident are presented widely and in detail. Irregularities leading to the accident are identified. Similarly in other cases – the types of causes and misbehaviour of people are analysed. Criticisms vary from lack of proper regulations to non-compliance. Four reports suggest reforms while one (on the construction collapse) is entirely focused on the causes of the accident.

While these reports focus on the crises themselves, leaving aside the response, two reports by the Supreme Audit Office investigate the response system. The Supreme Audit Office's report on "Preparation of civil defence structures for the tasks in time of war and peace" (NIK, 2012) negatively assesses the existing civil defence system. The office negatively evaluated the structures of civil defence preparation, finding significant irregularities. Specifically the head of the Civil Defence did not specify the assumptions for civil defence plans in provinces, counties, municipalities and businesses. The existing defence plans were incomplete and contained outdated provisions. 29 percent of the civil defence chiefs in the controlled provinces, counties and municipalities do not appoint the formation of civil defence structures. In the conclusions it is argued that the current system of civil defence is inadequate.

The Supreme Audit Office prepared a report on realisation by the state authorities of tasks concerning crisis management (NIK, 2011). The report positively assesses the system operations in the cases of crises. However, several irregularities were noted. The construction of a coherent planning system of response to crisis is not finished. There are delays in the implementation planning by the authorities and institutions. In crisis situations, some investigated administrative units did not comply with the procedures. Also, information on the results of the audit concerning the functioning of the water rescue service (NIK, 2010) gives a positive assessment of the service's function (with several reservations).

Although the Office's reports deal with the civil security system, it is not effectiveness which is assessed but compliance with the law.

Altogether, one may argue that the existing system of evaluation hardly allows for analysis of the civil security system effectiveness.

There are no assessment reports done by professional companies. There were inquiries on the presidential airplane crash in Smolensk prepared by the parliamentary opposition, with conclusions questioning the results of the Commission for Investigation of the State Aviation Accidents.

3.1.2 Limits to national capacities

After 2000 Poland twice called for help, in 2001 and 2010. In both cases devastating foods were the reason. Due to the scale of the floods, Poland's national response capabilities were supposedly insufficient within the following days, and the minister of interior requested help. In 2010 Poland asked for help through the European Community Civil Protection Mechanism. Additionally, bilateral help was provided by the Czech Republic. Technical equipment was mainly requested, particularly pumps, as it was impossible to move the equipment quickly enough to all places in need.

Occasionally, Poland has asked for help within the existing bilateral cooperation agreements. These have been for smaller scale help.

3.2 Efficiency

Efforts in the name of efficiency can hardly be found in Poland in the area of civil security. Rather, underfunding is considered as a source of inefficiency (as it is stated in the report of the Supreme Audit Office on realisation by the state authorities' tasks concerning crisis management – NIK 2011). Also, financing the maintenance of flood protection covers only a small part of the required needs (PAS 2012). One reason for reforming the civil protection system is that the crisis management system and the civil defence system are functionally very similar.

Assessment of the costs of civil security is difficult since they are portioned. In the report of the Supreme Audit Office on the realisation by state authorities of tasks concerning crisis management, it is stated: "allocation of the tasks in the field of crisis management in the different chapters of the budget classification makes it difficult to estimate the actual expenses incurred for this purpose. Adherence to the proper classification of expenditures for tasks related to crisis management, particularly in the area of planning, will help to improve the transparency and efficiency of use of funds". Costs of the civil security system are difficult to track since they are in different ministries and parts of the administration.

Experts assess that overall spending on civil security has not varied in recent years, although there were occasional variations (Ministry of Interior 2, 2013; Ministry of Interior 1, 2012).

Altogether, the state budget spending for public security and fire protection in 2011 equals 3,078 million euro⁵⁴⁵ (4.3 percent of the state budget). It is smaller than spending for national defence: 4,565 million euro (6.3 percent of the state budget). Most of the spending within the public security and fire protection budget section goes to the police. The main spending at the central level are the following (approximately, in last year's): the headquarters of the State Fire Service has a budget of 30 million euro; voluntary fire brigades: 5.5 million euro; mountain and water rescue systems: 3 million euro; crisis management at the central level: 1.5 million euro.

In case of crisis management and fire service the spending goes also through the provincial, counties and municipal budgets. These are parts of general public administration.

In the case of civil defence, the current the measures provided in the state budget for civil defence in 2009-2013 amounted to approximately 7.3 million euro (30.5 million zł), on average in the years 2009-2013.:

The chief of National Civil Defence (*Szef Obrony Cywilnej Kraju*) does not have the competence to participate in the distribution of funds for the implementation of civil defence tasks in the provinces. The planned size of civil defence spending provided in 2009-2013 for implementation by the chief of National Civil Defence amounted to 0.03 million euro (0.125 million zł) on average in the years 2009-2013. :

Restructuring of the civil security system is not primarily driven by financial considerations, and privatisation is not an issue in the area of civil security. Certain civil security tasks are outsourced to private companies (see section 2.4.2) but this process have been carried out without specific cost-effectiveness considerations.

⁵⁴⁵ The exchange rate: 1 Euro = 4.2 Polish Zloty.

Yet, in the case of particular solutions, like the phone number 112, the costs are important. Apparently in the case of an investment, costs are considered, while maintenance is not treated as given. Public debates concerning civil security are focused on underfunding, not on efficiency (Think Tank, 2012).

3.3 Legitimacy

3.3.1 Political support

Major disasters usually involve criticism about the civil security system; however, underfunding is probably the prevailing issue. There is at least verbal support, among interested MPs, for civil security, but it is often restricted to particular areas, like the mountain rescue systems, or the volunteer fire service. There is verbal support for reforming initiatives (like the legislation on citizen protection); however, there is a problem with the execution. Several legislation initiatives on citizen protection eventually failed due to superficial political support. The initiatives on establishing a crisis management system and on the national fire and rescue system had political support, and were established without major controversies. Major disasters create momentum for reforms. Also there are some lobbying pressures, as with the state medical rescue which was supported by doctors.

Critical opinion on the current civil defence system has been expressed by the Supreme Audit Office. The report of the Supreme Audit Office of March 9th, 2012 was very critical about civil protection in Poland (NIK, 2012). In an interview with the director of the Department of Public Order and Internal Security of that office, questions arose about whether there is any need to sustain civil defence in Poland. The system was described as obsolete and to be changed (Bienkowski, 2013; Soloch, 2012). The system of the state fire service has been criticized as expensive, inefficient, and rigid.

The crash of the airplane in Smolensk on 10th April 2010 resulted in fierce discussions on the causes of the catastrophe and the responsibility. The minister of defence resigned in July 2011. After the catastrophe, discussions and opinions were expressed by politicians and experts on the security issue connected with the highest rank of government officials' security. The debate has been severe but to a large extent highly politicized and seemingly non-conclusive. Earlier, in January 23rd 2008 in an army plane crash, 20 people died among them several highest rank Air Force officers. It provoked a discussion on security procedures concerning travels of the army commanders.

The major reforms include establishment of the National Fire Fighting and Rescue System (1991-95) and the system of crisis management (2007). These reforms were basically driven by the disasters revealing weaknesses of the system.

3.3.2 Legal support

There are apparently no significant conflicts and controversies about legal aspects of the civil security system. The Supreme Audit Office report found administrative problems with responsibility overlaps in reporting between civil protection and the State fire service. It is considered as the problem to be resolved but not a major one.

The more serious discussion concerns the definition of crisis in the law on crisis management. The Constitutional Court's judgment of April 21st 2009 (K 50/07) questioned the definition of "crisis" in Article. 3 point 1 of the Act of 26 April 2007 on crisis management (Journal of Laws No. 89, item 590) and postponed the entry into force of the judgment for a period of 12 months from its promulgation.

The definition of crisis as formulated in the law on Crisis Management was based on the concept of "social ties".⁵⁴⁶ This was considered imprecise and ambiguous. The notion of "breaking or significant impairment of social ties" as the condition of a crisis referred to a sociological concept, which was considered imprecise. Eventually, it was argued, the conduct of the state institutions might lead to the possibility of using forces and resources in a way that undermines civil rights and liberties. As a result the law in this respect was recognized as unconstitutional by the court. An amendment of the law changed the definition of crisis in 2009. According to the new legislation, the occurrence of a crisis depends on hazards that adversely affect the safety of people or the environment to such an extent that the activities of the relevant departments and local government are no longer sufficient.

The ombudsman expressed serious concern about the avian flu situation in the country in 2010. According to him, the government "did not take any measures to prepare the health care system for the epidemic". Also there were several requests from the ombudsman for clarifications about shelters, concerning the citizens' right to have protection. As the shelter system is obsolete the ombudsman has been concerned.

3.3.3 Popular trust and support

Similar to other countries, in Poland, the largest percentage of respondents place their trust in firefighters (96 percent). They are followed by teachers (89 percent), armed forces (88 percent), postal workers (85 percent), and physicians (84 percent) (GfK Trust Index, 2011). Fire brigades are positively assessed by 91 percent of Poles (CBOS, 2010b; CBOS, 2010c). They are at the top of the all institutions.

Poles are peculiar in terms of risk perception. The highest percentage (27 percent) of Poles compared with other Europeans, answer "I do not know" for the question: "what do you think are the most important challenges to security?" (Eurobarometer, 2011). For most risks Poles are less afraid than the average European. The only exceptions are natural disasters. For the fight against terrorism, Poles are exactly in line with the European average. More than half think that the country does enough to fight organized crime (54 percent) - slightly more than the European average. Slightly less than a half think that the country does enough in managing natural and man-made disasters (44 percent), less than the European average. More than half think that the country does enough in securing European borders (58 percent - more than the EU average). Slightly less than half (46 percent - almost the EU average) think that the country does enough in fighting cybercrime (Eurobarometer, 2011).

The flood in Poland of 2010 did not change significantly the perception. The presidential airplane crash of 2010 left a sharp division between those distrusting the ruling parties and governmental actions, and those trusting the ruling parties and governmental actions.

Elections are seemingly not affected significantly by crises. After the last elections in 2011, the ruling parties remained in power, which could be evidence of popular support in the context of dealing with the flood of 2010 and the presidential airplane crash of 2010. Opinions on the authorities' performance in dealing with the flood were related to political preferences.

⁵⁴⁶ "The crisis - should be understood as being the consequence of the risks and consequently leading to the interruption or significant breach of social ties connected with serious disruption in the operation of public institutions, to such an extent that the used measures necessary to safeguard or restore security do not justify the introduction of any of the states of emergency".

Popular support is reflected also in voluntary fire service engagement. It is substantial in Poland, with 678,214 members. This represents 1 fire service volunteer per 56 non-volunteers. The number of volunteers has eroded in the last decades, similarly to other countries (State Fire Brigade, 2012).

Poles are sceptical about the ability of the state to cope with floods. Research conducted after the floods in 1997 and 2010 (CBOS, 1997; CBOS, 2010a), about reasons for the damages, show that Poles blame poor infrastructure defending against high water and weather (extraordinary rains). However, part of the blame goes to the (inadequate) state capabilities (Table 4).

Reason	(%)		
	Flood in 1997	Flood in 2010	
Weak preparedness for a case of a large flood	36	39	
Deficiency of equipment in case of such disasters	35	14	
Deficiency of good organization in such situations	31	9	
Poor action of central authorities	17	15	
Deficiency of funds	12	14	
Poor actions of local authorities	11	13	

Table 4. Answers for the question "What are, in your opinion, the main reasons for the huge damages caused by the flood?"

Source: CBOS, 2010a

In both flood cases, respondents indicated deficiency of preparedness for a big flood. Compared to 1997, in 2010 the improvement of the organization of activities was noted. The state has acquired the proper equipment. Evaluation of the activities of the different levels of government is more or less at the same level.

Asked to evaluate activities of the different levels of government (municipal, provincial, central), during the floods, Poles ranked municipal authorities as the more effective (score 4.48 out of 7), followed by the provincial authorities (4.29) and the central level gets the weaker mark (4.09).

4. Polish Civil Security in the EU Context

Poland actively participates in the European civil security cooperation. In 2002, Poland signed a memorandum of agreement with the European Community on Polish participation in the Community mechanism to facilitate the strengthening of cooperation on the protection of civilian rescue operations (memorandum on cooperation in the field of civil protection).

Within the memorandum, the National Centre for Coordination of Rescue and Civil Protection located in the headquarters of the State Fire Service, was specified as a unit appropriate to serve as

contact point as the national body responsible for coordinating rescue operations in the country, and which is currently in a relationship point of contact with the Member States of the European Union.

After accession to the EU, Poland increased engagement in the work of committees and working groups dealing with the EU's civil protection.

At the beginning of 2010, the Committee for European Affairs, at the request of the minister of interior and administration, decided to point to the headquarters of the State Fire Service as the lead agency in the working group of the EU Civil Protection (PROCIV).

Crisis communication was the priority of the Polish presidency in the area of citizen protection. On December 13, 2011, the EU Council for Justice and Home Affairs (JHA) adopted conclusions on a comprehensive approach to effective risk communication and communication in emergencies and crises. In draft conclusions, Poland proposed an approach pointing to the need of effective crisis communication and the use of modern technologies for disaster prevention, early warning, alerting, monitoring, and reducing the risks of disasters.

The EU Carpathex exercise in 2011 was an opportunity to check the functioning of the international aid coordination procedures. It was organized by the presidency in Podkarpackie Province in September 2011. The scenario assumed a number of serious events occurred at the same time. National resources were supported by foreign rescue teams, with activation procedures of the Community Mechanism for Civil Protection.

Poland activated the MIC in 2010 (see section 2.2.4.). Poland has contributed to several MICcoordinated interventions, such as forest fires in FYROM (2007); earthquake in China (2008); flood in Ukraine and Romania (2008); armed conflict in Georgia (2008); typhoon in Taiwan (2009); earthquake in Haiti (2010); floods in Albania and Romania (2010); earthquake in Japan (2011); explosion/power shortage in Cyprus; floods in Pakistan (2011); Syrian refugees in Jordan (2012). In most cases it was technical, material help.

40 percent of Poles are aware that the EU co-ordinates civil protection both inside and outside the EU. It is slightly more than the EU average. 84 percent of Poles (exactly the EU average) agree that EU Member States should be obliged by law to prepare and publish disaster management plans (Eurobarometer, 2012).

39 percent of Poles agree that a coordinated EU action in dealing with disasters is more effective than actions by individual countries. 51 percent of Poles agree that not all countries have sufficient national means to deal with a major disaster on their own. 40 percent of Poles agree with the statement that the EU needs a disaster management policy because man-made disasters such as industrial or chemical accidents are a threat and can have cross-border effects. 32 percent of Poles agree that pooling civil protection resources in the EU can be more cost-effective than each country managing their own resources. 44 percent of Poles agree that the EU should help any non-EU country worldwide hit by disasters by co-ordinating the sending of experts and equipment to affected areas (Eurobarometer, 2009). 26 percent of Poles feel well informed about the civil protection activities within the EU (Eurobarometer, 2012).

5. Conclusion

Poland is not particularly exposed to natural hazards, except floods which pose a catastrophic danger. Terrorist risk is considered low. Major transportation accidents (the presidential airplane crash in 2010), industrial accidents (particularly in coal mines) occur, but usually do not create serious crises. The Polish civil security system has been exhibiting significant changes caused by both catastrophes (the Millennium Flood of 1997) and changes of socio-political circumstances (the fall of communism in 1989/90, the EU accession in 2004). Starting from the centralised and military based system of the communist past the reforms undertaken after 1990 resulted in a relatively decentralised and basically civilian security system (Golc 2008). There are several legal acts constituting the legal background of current system. The Act on Crisis Management of 2007 establishes the crisis management system - the skeleton of the civil security system. It is organized according to the administrative levels (municipal, county, provincial, and governmental), and has mainly a coordinative and communication role. Provincial governors have a relatively stronger position within the system. Besides the Act on Crisis Management, the Act on the State of Natural Disaster of 2002 defines basic terms, like natural catastrophe, technical failure etc.; specifies the conditions for implementing extraordinary measures in case of disasters (both natural or man-made); defines rights and restrictions on the public during the announced state of disaster; and specifies the authorities responsible for implementing tasks. The states of emergency are defined by the Polish Constitution of 1997. The legal provisions of Poland's civil security system are generally solid. There are apparently no major conflicts and controversies about legal aspects of the civil security system. A problematic issue is the relation between the crisis management system and civil defence. Civil protection is derived from the tasks expected in case of armed conflict. Nowadays civil protection in the event of war is of secondary importance and the regulations on civil defence on this issue are hardly operational. Additionally the notion of citizen protection is not defined, although present in the doctrine.

The Polish civil security system can be considered as rather sectoral with some elements of the allhazard approach. There are several, relatively independent services focused on the particular risks (and responsibilities for different ministries). Despite certain attempts to establish an all-hazard structure, the sectoral approach remains. The crisis management system, which could be considered as an all-hazard device, is only a coordination platform, and in practice, actions are undertaken by specialised agencies. As a result, coordination still poses a challenge.

In accordance with the law, there are crisis management authorities established at all levels of administration and the emergency plans also prepared there. In the operational sense, fire service (both the professional State Fire Service and voluntary fire service) engagement is crucial. Also the National Rescue and Fire Fighting System, which is a system dealing with day-to-day rescue operations, is engaged in crisis situations. However, this system is focused on response and rescue and it does not cover all of the risks. Military assistance to civilian authorities is restricted to cases when the civilian authorities face a capacity shortage. It can be argued that after 1990 the State Fire Service has widened its area of competence. Despite a generally positive reputation, it is also criticized as a rigid and expensive structure building a dominant position.

The Polish crisis management system is basically civilian, with a major role for the fire brigades. Also several specialized services and agencies are under civil control. The police have auxiliary tasks for

civil security, and similarly – the Army. However, the Army is prepared for civil crisis operations and is often called for.

The effectiveness of the Polish civil security system is assessed by several bodies and from various points of view. The Supreme Audit Office controls the performance of the administration, focusing on compliance with the law. The Office evaluated the crisis management system, the civil defence system and the water rescue, criticizing several aspects while giving positive opinions as well. After the catastrophic flood of 2010 the system was positively assessed. Efficiency evaluations can hardly be found in Poland in the area of civil security. Rather, underfunding is considered as a source of inefficiency. Financing of the system has been stable in the years 2000-12, but is considered too low. At the same time the State Fire Service is regarded as expensive, though firefighters are highly trusted.

Poles expect help from the state in case of a disaster, while investing little in individual preparedness and prevention. It can be argued that moral hazard is a problem in Poland. For most risks Poles are less afraid than the average European. The only exceptions are natural disasters. Public training and education in civil security is weak and fragmented. There are classes on security and safety in school curricula but these are not always followed and their impact is weak. Public campaigns are launched by public bodies and agencies but they are considered mostly low profile and results are difficult to assess.

Voluntary fire brigades are widespread, but mostly in provincial Poland. Although they represent a substantial part of the whole Polish voluntary sector, they face declining interest among younger people. The profit-oriented sector has a limited role in the Polish civil security system, but in the area of critical infrastructure protection it is more visible.

Poland has signed agreements with the neighbouring counties since 1990s. Bilateral agreements are signed with all but one of Poland's neighbours and cooperation is considered as rather smooth. Accessing the EU in 2004 increased international cooperation and enforced efforts to make the system coherent within the international (particularly the EU) context. After accession to the EU, Poland engaged in the work of committees and working groups dealing with the EU's civil protection. Polish civil security forces participate and organize exercises and training. Poland activated the EU's Monitoring and Information Centre during the flood of 2010 and obtained help from several countries. Also Poland contributed to several MIC-coordinated interventions. International contacts can be considered as the newest factor influencing the shape of the Polish civil security system.

Annex 1: Coded Data

			AN	VIL PROJECT	
		Ν	APPIN	G PRTOCOL - WP2	
	Analysis of Civil Security Systems in Europe				
1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Act on Crisis Management, 2007	
1. b	Is the crisis management approach primarily based on military or civilian operations?	-	2	Act on Crisis Management, 2007	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?		1	Act on Crisis Management, 2007	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	2	Ministry of Interior 2	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)

2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	The Constitution of the Republic of Poland, 1997	
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1	The Constitution of the Republic of Poland, 1997	
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	The Constitution of the Republic of Poland, 1997	
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	1		
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	3	Górski, 2007; Act on Crisis Management, 2007	
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		68	http://geert-hofstede.com/countries.html	
2.1.2.a.ii	Geert Hofstede country national cultural score - IDV		60	http://geert-hofstede.com/countries.html	
2.1.2.a.iii	Geert Hofstede country national cultural score - MAS		64	http://geert-hofstede.com/countries.html	

2.1.2.a.iv	Geert Hofstede country national cultural score - UAI		93	http://geert-hofstede.com/countries.html	
2.1.2.a.v	Geert Hofstede country national cultural score - LTO		32	http://geert-hofstede.com/countries.html	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		-0.78	http://www.worldvaluessurvey.org/	Year 2006
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		-0.14	http://www.worldvaluessurvey.org/	Year 2006
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	2		
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2007	Act on Crisis Management, 2007	
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	Act on Crisis Management, 2007	

2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	Act on the State of Natural Disasters, 2002	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		1	Act on the State of Natural Disasters, 2002	
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?		2	Act on Crisis Management, 2007	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?		1	Act on Crisis Management, 2007	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1	1	Act on Crisis Management, 2007	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0Yes = 1	1	Act on Crisis Management, 2007	
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	1	Act on Crisis Management, 2007	

2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	NA		In 2013 there are 127 national excercises planned (State Fire Brigade 2, 2012). For other years data - not available.
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	NA		In 2013 there are 12 international or national with some international elements excercises planned (State Fire Brigade 2, 2012). For other years data - not available.
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?		0	State Fire Brigade 2, 2012	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	3	State Fire Brigade 2, 2012	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	2	State Fire Brigade 2, 2012	

2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"		1	State Fire Brigade 2, 2012	
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	the Act on the General Obligation to Defence (1967); Act on Fire Protection (1991); the Act on Crisis Management (2007); the Act on the State of Natural Disaster (2002); Law on the State of Emergency (2002); the Act on Martial Law (2002).	
2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	Abgarowicz, 2011.	
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	0	Ministry of Interior 2, 2013	

2.3.2.c	Does the government have a central website with updated information on crisis events?		2	Government Centre for Security, 2012	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	0	Ministry of Interior 2, 2013	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	0	Ministry of Interior 2, 2013	
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		1	<u>11. Provincial Department of Crisis</u> Management, 2013	

2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To member ands wide-spread training programmes for general population = 3	2	Ministry of Interior 2, 2013	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	0	Ministry of Interior 2, 2013; State Fire Brigade 2, 2012	
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		1	Ministry of Interior 2, 2013; State Fire Brigade 1, 2012	
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	16.6 million euro	Ranking list of financed grants in the call 3/2012, Available at: http://www.ncbir.pl/gfx/ncbir/userfiles/_public/ obronnosc/lista_rankingowa_czesc_ii_1.pdf	
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				

2.4.1.a		No = 0 Yes = 1	1	State Fire Brigade 2, 2012	
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	1	State Fire Brigade 2, 2012	
2.4.2	Role of profit-oriented organisations				
2.4.2.a		No = 0 Yes = 1	0	Private company, 2013; State Fire Brigade 2, 2012	
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	0	Private company, 2013; State Fire Brigade 2, 2012	
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				

3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	8	State Fire Brigade 2, 2012	
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	for 2000-2012. If	0	Ministry of Interior 2, 2013; State Fire Brigade 2, 2012	
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	for 2000-2012. If	0	Ministry of Interior 2, 2013; State Fire Brigade 2, 2012	
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	1	Malinski, 2012	
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	-	6	Malinski, 2012	
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?		NA		

3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	1	MON, 2011	
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	NA		
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	1	Trybunal Konstytucyjny, 2009	
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None = 0 Partial (legally defined leeway for operational crisis management) = 1 Extensive (e.g. no civilian jurisdiction over military actors in crisis management) = 2	0		
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	44	Special Eurobarometer 371 (2011)	

3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	56	Special Eurobarometer 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	1	State Fire Brigade 2, 2012; ZOSPRP, ND	
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	NA		
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	17.8	ZOSPRP, ND	Only Voluntary Fire Service is included. It is by large the biggest volunraty organisation.
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4 4.a	Civil security in the EU context How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Scoring instruction Register the number for 2007-2011		http://ec.europa.eu/echo/files/policies/disaster _response/EUCPM_activations_since_01012007	Comments (in case of specific problems with

4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?		29	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?		9	http://ec.europa.eu/echo/policies/prevention p reparedness/preparedness en.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?		1	http://ec.europa.eu/regional_policy/thefunds/d oc/interventions_since_2002.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	105.6	http://ec.europa.eu/regional_policy/thefunds/d oc/interventions_since_2002.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)		40	Special Eurobarometer 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)		84	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in Poland

At the end of April 2009, the chief sanitary inspector announced that despite reports from the world, there was no imminent threat of influenza in Poland, but appropriate protective measures were undertaken. A special hotline providing information on the virus was established. In early May 2009, the first case of H1N1 was detected in Poland which was confirmed by the minister of health at a press conference. On June 11th, 2009 the WHO declared an influenza pandemic in the world. On November 13th, 2009 the first fatal case of the virus in Poland occurred. An increase in cases of influenza occurred in early November but that is two months earlier than in previous years when the outbreaks were caused by seasonal strains. The strain of the virus A (H1N1) v strongly dominated among influenza viruses, displacing almost completely a seasonal strain of A (H1N1), and the dominant strain in the earlier years A (H3N2). Most cases, however, were typical of seasonal influenza: mild, self-limited course. However, as in the case of seasonal influenza, in some patients the disease was severe. On the occurrence of complications in the form of primary viral pneumonia or secondary bacterial pneumonia, especially vulnerable are people with chronic lung disease, cardiovascular, liver, kidneys and immune deficiency diseases. In some cases, as a result of respiratory failure, it was necessary to use mechanical ventilation (respirator) or extracorporeal oxygenation (ECMO). In mid-November 2009, the minister of health summarized the spread of the virus, confirming 344 cases of infection in Poland. At the same time, the minister of health met the ombudsman, and it was decided to postpone the purchase of vaccines against H1N1. In the end, the purchase was not made.

According to the secretary of state in the Ministry of Health in Poland, 182 deaths from the H1N1 virus were recorded. This is confirmed by the Main Sanitary Inspectorate report in 2010. At the end of June 2010, the Parliamentary Assembly of the Council of Europe passed a resolution confirming the validity of the position of the minister of health of not purchasing the vaccine. August 10, 2010, the WHO declared the postpandemic phase.

With information on the occurrence of disease in Mexico, the State Sanitary Inspectorate took steps to delay the occurrence of disease in Poland on a larger scale. Epidemiological surveillance was introduced and promotion of behaviour that would reduce the transmission of the disease between humans (respiratory hygiene and personal care), especially in preschool and school environments that are in the age groups in which the incidence of influenza is highest. At the same time the State Sanitary Inspectorate laboratory performed diagnostic tests on influenza by molecular methods (RT-PCR), which alone made it possible to distinguish between the onset of flu caused by a new virus. New diagnostic methods were used not only for clinical purposes, but also to conduct selective influenza epidemiological surveillance (sentinel), which were implemented by the regional sanitaryepidemiological stations in cooperation with the National Influenza Centre. Limiting the effects of flu occurrence was coordinated under the National Influenza Pandemic Committee, composed of outside staff of the Ministry of Healthy and Chief Sanitary Inspectorate also including representatives other departments. At the same time close cooperation with the WHO, the ECDC, the European Commission and EU member states was maintained. Also a number of activities aimed at increasing involvement in the preparation and response to a pandemic flu by the private sector were undertaken.

Table 1. Main events in the H1N1 epidemic in Poland

Date	Description
26.04.2009	Poland takes initial steps (chief sanitary inspector)
04/2009	Hotline launched providing information about the virus
06.05.2009	first case of A/H1N1 in Poland detected – 58 year old female
11.06.2009	WHO declares flu pandemic
13.11.2009	The first case of death, 37 year-old man
17.11.2009	Meeting of the minister of health with ombudsman - delaying the purchase of vaccines
19.11.2009	Summary of the minister of health - 344 cases of flu in Poland, 4 deaths, 101 people in hospitals, 644 people under the epidemiological supervision
17.02.2010	World Report - in Poland 2,521 cases and 178 deaths
24.06.2010	Resolution of the Parliamentary Assembly of the Council of Europe - confirms the position of the government on the purchase of vaccines
10.08.2010	WHO announces entry into postpandemic phase

The controversial issue was whether H1N1 cases in 2009/10 could be treated as an epidemic. The flu season in Poland is in September-October. From 1 September 2009 to 31 March 2010 there were a total of 750,847 cases of influenza and influenza-like illness with 180 deaths of people with confirmed infection with H1N1 (GIS Report 2009).

The issue of purchase of vaccines was debated. While the Ministry of Health refrained from buying the vaccines, at least partially due to negotiations with producers, the parliamentarian opposition protested, demanding buying vaccines. The ombudsmen firmly demanded purchasing the vaccines, and his position appeared to be dramatic when it revealed he was infected with H1N1.

Annex III: Resources

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Romania

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Executive Summary

Romania is highly affected by natural disasters, of which floods are particularly common in most parts of the country between May to November due to rainfall and/or the melting of snow. Flood management often unites the specialized civilian structures with the military, even though it is considered to be a civilian operation. Besides the public administration, private actors and citizens have obligations within the civil security system in Romania.

A national system for crisis management that covers the entire spectrum of crises in the field of security does not exist in Romania. Instead, there are different systems, such as the National System for the Management of Emergency Situations (NSMES) dealing with civil emergencies. This is central in Romanian civil security along with the National System for Preventing and Combating Terrorism, which deals with terrorism.

The field of civil emergencies is the most regulated. The system is based on the principle that public administration authorities need to have the responsibility and control in emergency situations and is thus organized according to the three administrative levels: national, county and local. Each level has the responsibility to manage its own emergency situations in its territorial area. All components of the NSMES at the different levels are headed by the prime minister, through the minister of interior which has the overall responsibility for civil protection in Romania. Prefects and mayors lead the emergency management at county and local levels, respectively.

Responsibilities of public authorities also cover information and education activities, in which the private sector is involved as well. While public authorities carry out their tasks connected to information dissemination, they are supported by media, schools and NGOs. Furthermore, training programmes for the population in the field are provided by both the public authorities and the private sector. In this sense, cooperation protocols, partnerships and agreements have been signed between the public administration authorities at all three administrative levels and actors within the private sector.

Funds are assigned for disaster prevention and management from the state and local budgets, though they are mainly used in high priority areas such as response and post-disaster reconstruction. Romania has requested assistance through EU's MIC-system on four different occasions in the context of flooding. It has also received major contributions in the form of humanitarian aid or assistance from international NGOs, international organizations and bilateral assistance from other states. Romania's citizens also believe that their country is not doing enough in terms of natural and man-made disasters, fighting organized crime and terrorism. This reinforces the picture of a vulnerable country, highly affected by floods and other natural and climate hazards, with limited capacities.

Key Findings

- The Romanian National System for the Management of Emergency Situations (NSMES) is organized according to the country's three administrative levels: national, county and local. Public administration authorities at each level have the responsibility and control for the emergency situations that occur in their territorial area.
- 2. The NSMES is organized as a network of organizations and bodies. While some structures are permanent, others are temporary and activated in times of emergency. On the one hand, this may be seen as evidence of a lack of an integrated national emergency system. On the other hand, this may make the system flexible and efficient.
- 3. Romanians are hesitant to volunteer for activities for their local community. The general feeling is that authorities should provide for their safety. The motivation to engage and collaborate with the authorities is weak as they often fail to inform citizens on on-going crises and necessary actions to be taken. This negative attitude may also be explained by the fact that 'volunteer work' was imposed on the people during the communist time.
- 4. Insufficient funds are allocated to the field of crisis management in Romania. The budget of the GIES has for example decreased in the past years while the number of crises has increased by about 20% each year. The lack of resources in general has had a negative impact on the response efficiency. The situation is reflected in the attitude of Romanians as well, who believe that their country is not doing enough in terms of natural and man-made disasters.
- 5. Romania has received external help and support (including financial) during crisis several times. The country has activated the Community Mechanism for Civil Protection (MIC), and received assistance because of heavy floods four times since 2005. This makes Romania one of the EU-countries that has activated the MIC most frequently. At the same time, relative to citizens of other member states, Romanians tend to be less aware of EU's civil protection activities.

List of Abbreviations

AVP	Avocatul Poporului (The Romanian Ombudsman)
CCES	The County Committee(s) for Emergency Situations
CNSCBT	Centrul National de Supraveghere si control al bolilor transmisibile (National Centre for Surveillance and Control of Communicable Diseases)
СМ	Crisis Management
DG EAC	Directorate General Education and Culture
ECDC	European Centre for Disease Prevention and Control
Emdat EU SF	Emergency Events Database EU Solidarity Fund
G.D.	Government Decision
GIES	The General Inspectorate for Emergency Situations
H.G.	Hotarire de Guvern (Decision of the Romanian Government)
IGSU	Inspectoratul General pentru Situatii de Urgenta
	(The General Inspectorate for Emergency Situations)
IES	The (county) Inspectorates for Emergency Situations
IRES	Institutul Roman pentru Evaluare si Strategie (The Romanian Institute for evaluation and strategy)
LCES	The Local Committee(s) for Emergency Situations
MIA/MAI	Ministry of Internal Affairs
MMGA	Ministerul Mediului si Gospodaririi Apelor (Ministry of Environment and Water)
MoD	Ministry of Defence
МоН	Ministry of Health
Mol	Ministry of Interior/ of Internal Affairs (previously Ministry of Administration and Interior)
MSB NSMES	Myndigheten for Samhällsskydd och Beredskap (Swedish Civil Contingencies Agency) The National System for the Management of Emergency Situations
Ord.	Order (Order of the Ministry of Interior (and Administration))
OUG	Ordonanta de Urgenta (Emergency Ordinance of the Romanian Government)
SEEDRMAP	South Eastern Europe Disaster Risk Mitigation and Adaptation Programme

- SRI Serviciul Roman de Informatii (The Romanian Intelligence Service)
- UNISDR United Nations International Strategy for Disaster Reduction
- VSES Voluntary Services for Emergency Situations

1. Introduction

Concerning exposure to disasters, sources show that "most of the disasters occurring in Europe are directly linked to weather and climate extremes" (Commission 2012). This is also the case in Romania which is exposed to natural disasters, of which earthquakes and floods have occurred most often and have been the most destructive. Floods are particularly common in most parts of the country between May to November due to rainfall and/or the melting of snow (UNISDR 2009, 129).⁵⁴⁷ Besides floods, earthquakes are also a major threat, the country being "one of the most seismically active countries in Europe" though no recent major earthquake has been recorded the past decade (UNISDR 2009, 127). For a list of the major disasters that occurred in Romania in the last decade please refer to Table 1.1.

			Damage		
Year Mont h	Crisis description	Crisis category	# of persons killed	# of persons injured	# of persons affected
2000	Cyanide spill in the Tisa	Industrial accident			
2000	Flood	Natural disaster			60,431
2004	Flood	Natural disaster			14,128
2004	Mihailesti explosion	Transport accident	18		13
2004	Extreme heat	Natural disaster	27		
2004	Dam failure in the Ocnele Mari	Natural disaster			
2005, 07	Flood	Natural disaster			14,669
2005	Flood	Natural disaster			30,800
09					
2006	Flood	Natural disaster			17,071
2006	Avian flu	Infectious disease			
2006	Extreme cold	Natural disaster	68		

Table 1.1.List of disasters in Romania: 2000-2012

⁵⁴⁷ The 2005, 2006, 2008 and 2010 floods are among the main disasters of the last decade. The types of disasters encountered in Romania are the following: floods, heavy snowfalls, strong storms, earthquakes, landslides, epidemics, nuclear, chemical or biological accidents, infrastructure accidents, hazardous material spills, large fires and water works accidents. (Lege 2004: 481)

2007	Drought and canicular	Natural disaster		
	days			
2008	Flood	Natural disaster		
2009	Swine flu, H1N1	Infectious disease	122	7,008
2010	Flood	Natural disaster		
2010	Extreme temperature	Natural disaster	52	
2012	Extreme temperature	Natural disaster	86	
Total	I	I		

Source: EM-DAT 2012, Commission 2012, RO Natech

Crisis and civil emergency are referred to but not defined, though, in the Romanian Strategy for National Security (Presedintia Romaniei 2007, p.40). Based on the text of the strategy, the term "crisis" is mainly used when referring to threats to national security, e.g. terrorist threats, or in the context of public order. The terms "emergency situation" and "disaster" are used in the context of civil emergencies. An "emergency situation" is defined in the Romanian legislation as "an exceptional event with a non-military character, with an amplitude and intensity that endangers human health, the environment, the material and cultural values of importance" (OUG 2004: 21, §2). A disaster⁵⁴⁸ is defined as an "event that occurs due to the activation of particular types of risks, of natural or man-made causes, that generates human, material losses or environmental changes, and which, through its scale, its intensity and consequences, reaches or exceeds the levels of gravity established in the emergency management" (Lege 2004: 481, §9(1,a)). Finally, the phrase "management of emergency situations" has recently been referred to as "crisis management" (Preventionweb 2011, p.4)⁵⁴⁹, most probably because the common European language in the field is being slowly adopted in Romania as well.

Civil crisis management is considered a civilian operation. Depending on the nature and amplitude of an emergency situation, the authorities responsible for the management of civil emergencies may receive support from the military. Recently, this has mainly been the case during floods, when resources – both in terms of equipment and personnel - were deemed inexistent or insufficient. The Ministry of Defence therefore has a significant role in the management of emergency situations, being one of the ministries that holds "a series of complex support functions, depending on the situation" (MSB 2009).

Romania takes an all hazards approach to crises. The General Inspectorate for Emergency Situations (GIES) is mandated to ensure "unitary coordination of preventive actions and the management of emergency situations, which cover the entire country" (Apahideanu 2007, 65). The Romanian Intelligence Service (SRI) handles terrorist threats.

⁵⁴⁸ According to the Romanian legislation, disasters or risks that may generate disasters are divided in two main categories, namely *natural disasters*- earthquakes, snowfalls, extreme temperatures etc.- and *technological disasters* that result from human (involuntary or deliberate) action (Dec. 2005: 547, Dec. 2004: 2288, 8).

⁵⁴⁹ 'Crisis' and 'crisis management' will thus be used interchangeably with 'emergency situation' and 'management of emergency situations' respectively further on in the present report.

2. Analytical Dimensions

2.1 Cultural and historical aspects

2.1.1 Administrative tradition

Romania is a majoritarian democracy, a unitary state and a semi-presidential republic (Commission 2012).⁵⁵⁰ Romania's Constitution was introduced in 1991 and is based on the Constitution of France's Fifth Republic. The population of Romania includes approximately 21 million inhabitants (Annual Statistics, 2011) and its area amounts to 238,391 square km (Commission 2012). The administrative divisions of Romania cover counties, cities and communes. The territory is divided into 41 counties as well as Romania's capital, Bucharest.⁵⁵¹

Romania has a Strategy for National Security, a fundamental document that sets the objective of strengthening the institutional system ensuring national security in order to deal with a large spectrum of threats and risks (Presedintia Romaniei 2007, pp.13, 37). A national system⁵⁵² for crisis management that covers the entire spectrum of crises in the field of security does not exist in Romania though. Such a system has been proposed along the years and when applicable, would be composed of subsystems (Ibid. 2007, p.41) most probably as the ones already functioning: the National System for the Management of Emergency Situations (NSMES) and the National System for Preventing and Combating terrorism (NSPCT).

The NSMES⁵⁵³ deals with natural and technological risks. The system is based on such principles as shared responsibility, inter-institutional coordination and multidisciplinary approach of the c (HG 2008: 762, VI(4)). It is organized by the authorities of public administration and comprises a network of bodies, institutions and structures set on levels that have the necessary infrastructure and resources in order to carry out their tasks in the field (OUG 2004: 21, §1(2))⁵⁵⁴. At the national level, the NSMES is led by The Prime Minister through the Minister of Interior. The MoI has thus the overall responsibility for CM in Romania while other ministries/public central authorities have the responsibility for specific risks that may generate emergency situations⁵⁵⁵.

At the county level, the counties are each administered by a county council and a prefect. The county council is in charge of local affairs and consists of elected advisors. The prefect is appointed by the Romanian government and 'exercises the authority of the executive body' (MSB 2009, 184), being in charge of national affairs at county level (Commission 2012). Prefects are responsible for emergency prevention and management at county level (Commission 2012). They are responsible for supervising the application of civil protection measures and orders, and the activation or use of intervention forces at the county level (Ord. 2005: 1240, p.9).

⁵⁵⁰ In the sense that executive power is shared between the president and the government.

⁵⁵¹ For practical reasons, they will be referred to as 42 counties further on in the paper.

⁵⁵² With 'system' we understand the totality of forces entrusted with responsibilities in the field of CM.

⁵⁵³ Its components are: Committees for Emergency Situations, the GIES, 42 IES, operative centres for emergency situations and the action commander.

⁵⁵⁴ There are 8 central authorities responsible for risk management in Romania (Preventionweb 2011, p.5).

⁵⁵⁵ E.g. the Ministry of Environment and Climate Change is responsible for floods.

At the local level, each county is further subdivided into 319 cities (urban) and 2686 communes (rural) (Commission 2012). The cities and communes have each an elected mayor and local council. The local councils are the 'executive body of the town hall' (MSB 2009, 184) and the mayors are the head of the local public administration being responsible for managing local issues (MSB 2009, 184). Mayors are in charge of emergency prevention and management at local level (Commission 2012). In this position, mayors are responsible for decision making, informing the population through the mass media on ongoing emergencies and coordinating intervention actions (Ord. 2005: 1240, p.22).

The NSMES is organized as presented in Figure 1.

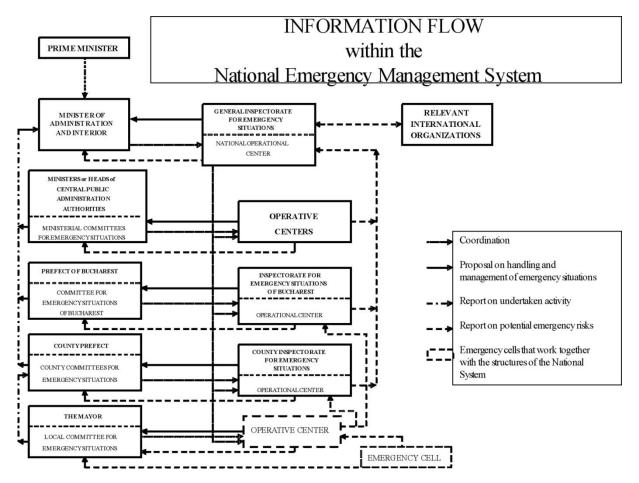


Figure 1. (Commission 2012)

The system is centralized in the sense that the legislation in the field of CM is adopted at the national level. Furthermore, the CM specialized structures at the county level are financed by the Mol. Lastly, in terms of response, the central level holds the responsibility for coordination, control and command for crises that exceed the capacity of the local and/or county level. The system is decentralised⁵⁵⁶ to some extend in the sense that public administration authorities at local and county level have the responsibility and control in crises, being is charge with risk assessment, planning and first response. They furthermore function based on the principles of "decentralization, local autonomy and deconcentration of public services" (Constitutia Romaniei 2003, §120(1)). The

⁵⁵⁶ The limited research on the subject points at the fact that the system is also de-centralised (Zulean and Prelipcean 2012, p.3).

specialized Inspectorates for Emergency Situations (IES) at the county level are such *deconcentrated* public services themselves.

Considering the above, each level is thus responsible for CM in its own territory. Support is demanded from the bottom and up (Chiper 2012, p.3). According to the principle "disasters occur locally and are managed locally" (Ibid.), the Romanian NSMES is activated at the local level, through the Local Committee for Emergency Situations (LCES). When the local level is overwhelmed in terms of resources, the LCES may and should seek support from the County Committee for Emergency Situations (CCES) if the CCES is also overwhelmed, it may require the support of the National Committee for Emergency Situations (NCES). Oftentimes though, the national level may intervene directly through the NCES (Ibid.). The area affected also plays a role, in the sense that the NCES through GIES takes the lead in the intervention when several counties are affected.

2.1.2 Government and social culture

On Geert Hofstede's national culture index Romania proves to be a rather hierarchical society, scoring 90 on this dimension. The high score indicates that Romanians are positive to centralization and that "subordinates expect to be told what to do" (Hofstede n.d.). Romania is categorized as a "relatively feminine society" as it scores 42 on the "masuculinty/feminitity" dimension, meaning that people tend to prefer that solutions to possible conflicts are reached through compromise and negotiation. Romania also scores high on the "uncertainty avoidance" dimension (namely 90), meaning that Romania is very likely to maintain "rigid codes of belief and behavior" and is "intolerant of unorthodox behavior and ideas". Modernization may be opposed in this type of culture (Hofstede n.d.).

Also The World Value Survey results show that Romania is a society with traditional values. The scores suggests that it has become even more traditional over time, as its score has dropped from 0.24 in 1990 to -0.39 in 2009 on the traditional vs. secular-rational dimension. Romania's score has also dropped on the second dimension regarding survival vs. self-expression dimension, from 1.18 in 1990 to -1.55 in 2006. This suggests that Romanians are increasingly concerned over their economic and physical dimensions which could be interpreted such that the Romanian people feel that their living conditions are getting harder. The increased number of serious floods could have influenced the result that Romanians feel more physically insecure (Ingelhart n.d.). As Romania is such a hierarchical society, it would seem that there would be a need for clear rules and a clear division of duties and responsibilities. This would also be relevant for the crisis management system to be working well and effectively.

2.2 Legal and constitutional aspects

2.2.1 Statutory basis

The legal system is rather centralized with the Civil Protection Act (Lege 2004: 481) as the key legal framework governing civil emergencies in Romania. The document sets out measures to protect the population, equipment, cultural values and environment in the event of emergencies, disasters and war. A series of government decisions specifies responsibilities and tasks of key civil protection

actors.⁵⁵⁷ Additional ordinances deal with more specific aspects, e.g. evacuation procedures, training activities, voluntary services, emergency stocks etc. (Commission 2012) Thus, the legal system is rather centralized in this respect.

Major changes in the civil protection system were made already in 2000. The civil protection teams with mixed civilian and military units for emergency intervention were established (OUG 2000: 14, in Apahideanu 2007, p.61) and the military units of the civil protection system were moved from the MoD to the MoI (OUG 2000: 179, in Apahideanu 2007, p.61). In 2001 two new structures were created, namely the public communitarian services for emergency situations and the GIES (2001: 88, in Apahideanu 2007, p.62). Year 2004 marked the adoption of the National Strategy for Civil Protection (Dec. 2004: 92, in Apahideanu 2007, p.64) and the establishment of the NSMES, setting up the institutions with responsibilities in the field. (OUG 2004: 21). Finally, in 2006, the Law on Health Reform (Lege 2006: 26) set up the mobile emergency service for resuscitation and extrication (SMURD) placed within the professional emergency services. A further updating of legislation is deemed necessary (Preventionweb 2011, p.33) as well as a simplification of the legal framework.

2.2.2 Political dimension

In the Romanian civil protection, executive responsibility is held by the prime-minister at the national level, who leads the NSMES through the minister of interior. While the MoI has the overall responsibility for CM in Romania, other ministries have the responsibility for the management of specific risks that may generate emergency situations.⁵⁵⁸ Prefects and mayors have the executive responsibility at county and local levels respectively (MSB 2009, 184); it is first and foremost at these levels that responsibility is assumed (H.G. 2004: 1491; Lege 2001: 215, §36(6), §63(5)) and gradually moves up when the crisis overwhelms these levels, without excluding them though.

At each level there are inter-institutional bodies for decision-making called *committees for emergency situations*. The MoI chairs the national committee (NCES)⁵⁵⁹, ministers/heads of

⁵⁵⁷ The main pieces of legislation concerning civil protection in Romania are: G.D. No. 21/15.4.2004 determines the composition, functioning and main tasks of the National System for the Management of Emergency Situations, the ministries and central public administration institutions with responsibilities in case of emergency situations; G.D. No.2288/2004- On the support tasks of ministries, other central institutions and non-governmental organizations for the prevention and management of emergency situations.; G.D. No. 1489/9.9.2004- Organisation and functioning of the National Committee for Emergency Situations.; G.D. No. 1490/9.9.2004- Regulations for the organisation and functioning of the General Inspectorate for Emergency Situations.; G.D. No. 1491/28.9.2004- Regulations on the organisation, functioning, tasks and endowment of Operative Committees and Centres for Emergency Situations.; G.D. No. 1492/28.9.2004- Organizational principles functioning and tasks of the professional emergency services.; Ord. 88/2001- the establishing, organisation and functioning of Public Communitarian Services for Emergency Situations (County Inspectorates for Emergency Situations). ; Law 307/2006 on fire protection (MSB 2009, 187).

⁵⁵⁸ The MoI: fires, nuclear and/or radiological emergencies, chemical accidents with off-site implications; the Ministry of Transport, Constructions and Tourism: major accidents on national transport ways, earthquakes, landslides, heavy snowfalls, ice; the Ministry of Economy and Trade: accidents, explosions and fires in industry, chemical accidents with on-site implications; the Ministry of Agriculture and Rural Development: forest fires, drought; the Ministry of Environment and Water: hazardous weather (e.g. floods); the Ministry of Health: epidemics (2288/2004, p. 8-9).

⁵⁵⁹ The NCES gathers decision-makers, experts and specialists named by the ministries with responsibilities in the management of emergency situations. Their activity is coordinated by MoI, through GIES.

institutions chair the ministerial/central public institutions committees (MCES)⁵⁶⁰, prefects chair the county committees (CCES)⁵⁶¹ and mayors chair the local committees (LCES)⁵⁶² (see Figure 1). These structures are activated in case an emergency situation occurs⁵⁶³ and comprise decision makers and experts⁵⁶⁴ (OUG 2004: 21, § 8-12) in the field that decide on the measures to be undertaken and organize the interventions.

Terrorism is dealt with by the National System for Preventing and Combating Terrorism (NSPCT), an inter-institutional mechanism which involves a total of 21 institutions. The NSPCT is coordinated by the Supreme Defence Council (SRI 2012(f)) and headed by the Romanian Intelligence Service (SRI). The civil security policy is decided at national level.⁵⁶⁵ The MoI formulates specific normative acts in the field of civil protection (Lege 2004: 481, §24). Each ministry that manages a specific type of risk is furthermore required by law to formulate regulations that set tasks and responsibilities for all levels and the measures to be undertaken before, during and after the disaster (Chiper 2012, p.7-8). Regarding terrorism, it is the Supreme Defence Council⁵⁶⁶ that issues binding decisions for SRI, e.g. measures for the elimination of national security threats, its organisation, missions, etc. (SRI 2012(e))

The possibility of the declaration of a state emergency exists in Romania. Emergency status may be declared in case of a threat to national security or democracy and/or in case of an imminent or unfolding disaster that requires prevention or mitigation activities (UNISDR 2009, p.123). Emergency status is declared by the president (upon Parliamentary approval) and paves the way for exceptional political, economic and public order measures⁵⁶⁷ (Ibid.).

2.2.3 Operational dimension

The MoI, having the overall responsibility for CM in Romania, deploys the forces to be found on the site of a disaster. While the fire brigades and the public ambulance services are the first responders in case of crisis⁵⁶⁸, the police and the gendarmerie are involved in the management of most of the crises as well. The MoD is also participating with military units if necessary. The on-site intervention forces are coordinated by the *action commander*.⁵⁶⁹

⁵⁶⁰ One for each ministry in charge with a specific type of risk

⁵⁶¹ One for each of the 42 counties

⁵⁶² One for each city, municipality or commune

⁵⁶³ The National Committee is activated in case there is a national crisis, the County Committee in case there is a crisis at the county level, etc.

⁵⁶⁴ Managers of companies representing potential risk factors may also participate in the Local and County Committees.

⁵⁶⁵ Policies and strategies in the field are though based on the information communicated by the local authorities, economic agents and research institutes in the country (Stanculeasa and Mosulet 2006, p. 156).

⁵⁶⁶ The Supreme Defence Council is an autonomous administrative authority. Its members are: the Minister of Defence, the Minister of Interior, the Minister of Foreign Affairs, the Minister of Justice, the Minister of Economy and Trade, the director of SRI. (csat.presidency.ro, 2012)

⁵⁶⁷ To date, no state of emergency has been declared in Romania.

⁵⁶⁸ The operational forces are: the Civil Protection Intervention Detachment, the Pyrotechnics Detachment, military firemen units, emergency hospitals, public ambulance services and forensic services, as well as other community services responsible for managing civil emergencies (Steiner 2012, p.15).

⁵⁶⁹ The Action Commander is named by the national, ministerial, county or local committee for emergency situations, depending on the nature and gravity of the situation or the forces engaged (OUG 2004: 21, §16(1)).

Depending on the magnitude of the crisis at hand, different levels and institutions are responsible for CM. The Mol is responsible for coordinating the management of emergency situations through the specialized GIES at the national level and the 42 IES at county level (H.G. 2004: 2288, §4). At the national level, GIES is the national authority in the field and may thus be considered the 'lead' agency⁵⁷⁰. Established in 2004 as a specialized body under the authority of the Mol, GIES coordinates the organizations implied in the management of emergency situations (MSB 2009, p.185) and implements the measures connected to the field at the national level. At the county level, the 42 IES⁵⁷¹ are deconcentrated structures subordinated to the GIES. They coordinate and guide the activities related to the management of emergency situations at the county level (OUG 2004: 21, § 14). Within the 42 IES, there is a special service called SMURD, which is the mobile service for resuscitation and extrication.⁵⁷² Finally, at the local level- towns, municipalities and communes⁵⁷³- voluntary services for emergency situations (VSES) are generally established where professional emergency services do not exist.⁵⁷⁴

The operational and operative centres are in charge of monitoring ongoing emergency situations (OUG 2004: 21, $\S13(3)$ and $\S27(1b)$) and the operational management of emergency. While operational centres are to be found within the GIES and the 42 IES, operative centres are located at the level of ministries, the central public institutions, the local level (H.G. 2004: 1491, $\S1(1)$)) as well as economic agents (Ord. 2005: 1240, p.16) (see Figure 1).⁵⁷⁵

A similar centre, called the Antiterrorist Operative Coordination Centre, is to be found at the level of SRI. SRI is the national authority responsible for preventing and countering terrorism through the National System for Prevention and Combating Terrorism (NSPCT). The centre gathers representatives of the system⁵⁷⁶ and coordinates its activities (Lege 2004: 535, §14, 17). The SRI has 40 county directorates (SRI 2012(g)) that have their own intervention forces. In counter-terrorist intervention, SRI usually cooperates with forces from the MoI or the MoD, two of the ministries having 'support functions' in the field. E.g., the gendarmerie within the MoI is responsible for the protection of state institutions and critical infrastructure and consequently involved in antiterrorist missions on these targets (Lege 2004: 550, §1(1)). Furthermore, involvement of MoI in the management of terrorist attacks is somewhat implicit as it is in charge of public order.

⁵⁷⁵ There are Operative Centres with either permanent or temporary activity.

⁵⁷⁰ To be mentioned that the term 'lead agency' is not used in the Romanian legislation.

⁵⁷¹ One for each county and one in Bucharest. The IES are also called the Professional Public Communitarian Services for Emergency Situations and resulted after the unification of the Fire Services and the Inspectorates for Civil Protection in 2004.

⁵⁷² Established in 2006, its mobile emergency units comprise both medical staff (civilians) and firefighters (military). In this respect, fire-fighters are directly involved in providing on site first aid. Similar models function in other European states as well (e.g. Germany, France, Finland) (Smurd.ro 2012).

 ⁵⁷³ Certain public institutions and economic agents also establish voluntary services for emergency situations (H.G. 2005: 547, p. 15).
 ⁵⁷⁴ These structures were established in 2005 by reorganizing the public services of civilian firemen and by

⁵⁷⁴ These structures were established in 2005 by reorganizing the public services of civilian firemen and by extending their duties to other types of risks other than fires. Their dimension is to be proportionate to the risks identified and the number of households in that particular area. (Ord. 2005: 718). In 2011, the number of VSES nationwide was 3155 (IGSU 2012(a), p.2). This data does however not include volunteers from e.g. associations, foundations, NGOs, their activity being regulated by the Law of Volunteering nr. 195/2001.

⁵⁷⁶ The NSPCT involves a total of 21 institutions.

Planning and risk assessment is conducted by all ministries and subordinate agencies in the country⁵⁷⁷ on the specific risks to which they are assigned (Popa 2012, p.76; Andriciuc 2012, p.131). The data is as a rule centralized by the Mol (H.G. 2004: 2288). Plans for Risks Analysis and Mapping (PAAR) are issued at the local and county level by the LCES and the CCES respectively (Popa 2012, p.72) and include the potential risks identified in the territorial administrative units as well as the measures, actions and resources required for their prevention and for response (Ibid., p.65). National risk assessment has recently started to become a priority. (Preventionweb 2011, p.10) Plans are issued though at the national level on pandemics and cover the measures to be undertaken and the structures involved in the pandemics management at all levels.

Both the central and the local level are responsible for logistics. GIES and the 42 IES possess the most extensive logistics for intervention. Furthermore, each public authority has to ensure it possesses the necessary technique on its specific field of activity⁵⁷⁸ (H.G. 2004: 2288, p.7). Phone lines and radio frequencies are used by the authorities to communicate with each other (H.G. 2005: 547, pp.17-18). Recently, the Management Information System for Emergency Situations (SMISU) has been introduced as the main communication system to be used between the actors involved in CM. Though still in course of implementation, it is a useful tool in the process of information sharing and decision-making in case of disaster (Hotnews.ro 2012).

The handling of the 2010 floods could be illustrative of how the Romanian emergency management system functions. Based on the meteorological and hydrological warnings, the local, county and national committees for emergency situations were activated, reuniting local decision-makers and experts. They established such measures as: evacuating people and domestic animals, raising dams and building dikes in the risk zones and water evacuation. Operational forces from the MAI and the MoD were brought into the area, amounting to more than 4,500 rescuers. The forces comprised the gendarmerie, the police, the Border Police, the Air Force as well as the Voluntary Services for Emergency Situations and the military. (MAI 2010, pp. 5-6)

2.2.4 External cooperation

Romania is engaged in civil security on an international and regional level through EU, OECD, NATO and the UN. The GIES is the point of contact and responsible for bilateral, regional and international assistance offered and received i. e. through the MIC, EADRCC and UN-OCHA.

Romania has signed bilateral agreements on mutual assistance in cases of emergencies with Hungary, Moldova, Bulgaria and Turkey, all of which are neighboring countries, sharing land or marine borders with Romania.⁵⁷⁹ Additionally, Romania has signed bilateral treaties on cooperation in the field of emergency management with Azerbaijan, Czech Republic, Germany, France, Great Britain and the USA (IGSU 2013).⁵⁸⁰ Romania has given international assistance on a bilateral basis to Hungary in 2010 (IGSU 2013 and Commission 2013b).⁵⁸¹

⁵⁸¹ <u>http://ec.europa.eu/echo/files/policies/disaster_response/EUCPM_activations_since_01012007</u>. Based on available information, it can be assumed that since 2007, Romania only this once provided assistance based on

⁵⁷⁷ Only few of them have representatives at the local level (Preventionweb 2011, p.5).

⁵⁷⁸ E.g. the Ministry of Environment and Climate Change needs to have water pumps.

⁵⁷⁹ Romania is also in the process of signing agreements with its neighboring countries Serbia and Ukraine, as well as with its non-neighboring countries Belgium, Belarus, Italy, Jordan and Macedonia.

⁵⁸⁰ The content of the agreements is unknown since they are not available.

Romania is an active player in different regional frameworks and part of several cooperative agreements in the field of civil security, in particular in the Black Sea region. It is a member of the Black Sea Economic Cooperation (BSEC) and the Black Sea Initiative on Civil Military Emergency Preparedness (BSI CMEP). Romania is also part of the regional intergovernmental organization Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE), the Civil Military Emergency Planning Council for South-Eastern Europe (CMEPC SEE) and the South-Eastern Defence Ministerial (SEDM) (IGSU 2013 and Commission 2013). Since Romania is relatively highly affected by the environmental effects of climate change, it is engaged in several environmental initiatives with the primary focus on prevention, e.g. the Commission on the Protection of Black Sea Against Pollution, the SEERISK program on joint disaster and risk management in the Danube region as well as the DKMT Euro-Region (Danube – Cris – Mures – Tisa) (IGSU 2013 and UNISDR 2013).

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

It is mandatory for the citizens to comply with the norms and rules of civil protection and contribute to the enforcement of the measures specified in the civil protection plans and programs (Ibid., § 5(3)). Romanians furthermore have to inform the authorities about the possible occurrence or the actual occurrence of an emergency situation (Lege 2004: 481, §5(3), §20(1c)) as well as take part in training activities. Finally, they need to make sure they have the necessary means to ensure individual protection (e.g. aid kits, food and water reserves, etc) (Ibid., §20(1g)) as well as insure their homes against earthquakes, landslides and floods (Lege 2008: 260).

With regard to citizens-to-state expectations, one of the principles of emergency management in Romania is that priority is given to the protection and rescue of human life (OUG 2004: 21, §5). The state is expected to protect the people and provide for their "safety at home, at work and while travelling around the country" (UNISDR 2009, 122).

Surveys show that 78 percent of Romanians are concerned with natural disasters, 67 percent are concerned with man-made disasters and 47 percent are concerned with terrorist attacks (Eurobarometer 383). Despite these facts, people do not get involved – or to a lesser extent– in disaster prevention and response in Romania. Survey results show that a large percentage of the people are informed about disasters, about the risks and rules of conduct, but they are rather unsupportive of action and common activities and involvement in the destiny of their own community. (Dec. 2008: 548, c.II B)

Romanians have two options if they want to engage in CM. First, they may get involved in the VSES; there were 3154 voluntary services registered in the county in 2012 (IGSU 2012(a), p.2). Second, they may engage in the existing voluntary organisations. Unfortunately, there are no national statistics for

a bilateral agreement on assistance and cooperation in the field of civil security and management. The authors have not been able to locate other information related to the activation of bilateral or regional agreements on civil security cooperation.

the number of volunteers in Romania which makes it impossible to appreciate the number of the volunteers engaged in the CM sector. 582

2.3.2 Information

Access to information of public interest is a constitutional right in Romania (MAI 2004, 14). "Citizens have the right to receive full and timely information about all threats of disaster, as well as all available protection measures and activities" (UNISDR 2009, 122). Citizens have furthermore access to risk maps and emergency situations plans (PreventionWeb 2011).

Specific tasks on informing the population are held by public authorities at all administrative levels through the CES as well as the MAI through the GIES and the 42 IES. According to the legislation in the field, the GIES is the main entity responsible for "the planning, management and coordination of public information" (Information Strategy, 8 and Dec. 2004: 1492, §11(c)) at the national level. Public authorities carry out their tasks with the help of media, schools, NGOs⁵⁸³, etc. (2008: 548, p.8)

Regarding public information on response, the Public Information and Communication Centre subordinated to the Committee for Emergency Situations is activated right after the occurrence of a crisis (2008: 548, p.13). Specific information activities – such as warning and alarming of the population- are also assigned to the authorities of the local or central public administration (Ord. 2006: 1259, §4) and more precisely to the committees for emergency situations. The information systems used in order to alarm the population in case of a major disaster are the state-owned electronic equipment, such as sirens and optical and acoustic signals as well as local and central radio and television (Ord. 2006: 1259, §24).

By means of media, people are informed about potential risk areas and potentially occurring disasters, the effects of actually occurred crises and the measures undertaken to diminish their effects. The most popular channels of information include national and local radio and television. Information on both impending and unfolding emergencies is also disseminated through the Websites of the public authorities at national and county levels. (2008: 548, p.6) This is reflected in the surveys showing that 21 percent of the Romanians feel informed about disaster preparedness and response in Romania. (Eurobarometer 328, p. 24, p.27)

2.3.3 Education

Both state authorities and NGOs edit publications in the field of civil protection. (MAI 2004, 22). The informative materials produced by the government include written materials- available both on-line and in printed form, as for example leaflets, brochures, handbooks, guides and documentary films. Specialized magazines are published by the MAI: the Romanian Firemen (national distribution, edited monthly), Civil Protection (national distribution, edited 6 times/year), the Firefighter's Newsletter (national distribution, edited 2 times/year). (Igsu, 2012(c)) The GIES has furthermore edited "The

⁵⁸² The only source available is the Eurobarometer, according to which there were 14% of the Romanians involved in voluntary activities in general (not specifically in the crisis management field) in 2011 (Eurobarometer 2011, p. 7).

⁵⁸³ E.g. World Vision Romania, AID (Association for the Implementation of Democracy in Romania), the Amurtel Association.

citizens' guide for emergency situations" and runs the websites sanseinplus.ro and informarepreventiva.ro; there all major threats encountered in Romania are presented together with specific measures to be taken by the citizens in case of crisis. (Informarepreventiva, 2012) The SRI also publishes information materials, magazines, brochures, and leaflets providing advice on appropriate behavior in case of suspicion connected to possible threats to national security. (Sri.ro, 2012(a)) The magazine 'Intelligence' is published on a monthly basis, available on the SRI website. (Sri.ro 2012(b))

Preparedness and emergency training of the population in case of natural and technological disasters is the task of GIES at the national level (GIES n.d., 12) and of the 42 IES at county level (Dec. 2004: 1492, § 11(g)). Training programmes are run for the population by the authorities (Dec. 2004: 1492, § 11(g)), by NGOs or other private actors. Emergency training is both a right and a duty for the Romanian citizen (UNISDR 2009, 122). Citizens are obliged to participate in civil defence training at their place of work (Lege 2004: 481, § 20(e)). They are prepared in areas such as warning, evacuation, intervention and first aid. (Nicolae & Haivei, 2012, p.7) The unemployed population may participate in pubic alarm exercises, the professional exercises organized by the IES or the exercises organised by the NGOs. (Nicolae & Haivei, 2012, p.8) Regarding terrorist threats, SRI develops and implements educational campaigns on risks and threats for national security. (SRI, 2012(a))

The law requires school curricula to include disaster-related subjects. Training programmes and special materials on different types of disasters (UNISDR 2009, 136; MAI 2004, 21-23) have been introduced in schools. Moreover, each education unit has to organize training activities regarding the rules of conduct and behaviour in case of e.g. earthquake, flood, explosion, chemical accident, etc. (MAI 2007, §10)

There are institutions in Romania specialized on research in the field of emergency situations. However, no information on the size of the allocated funds by the government was found available.⁵⁸⁴

2.4 The role of the private sector in maintaining civil security

2.4.1 The role of societal, non-profit organizations and NGOs

The private sector is not particularly motivated and encouraged to participate in emergency management. This is mainly because of the Communist heritage that contributed to the present negative connotation that 'partnerships' (and 'volunteering') have today in Romania.⁵⁸⁵ Despite this, cooperation protocols, partnerships and agreements have been signed (Art. 15, 1491/2004) at all

⁵⁸⁴ Specialized universities and research institutes are involved in the editing activity of studies and guides in the field of emergency situations. Specialized research and design institutes include the Geographical Institute of Romanian Academy, the National Institute for Building Research from Bucharest, the National Centre for Seismic Risk Reduction, The national Research and Development for Earth Physics Institute from Bucharest, The Studies and Designing Institute for Land Improvement from Bucharest, The Regional Centre for Prevention and Industrial Accidents Management from Cluj-Napoca, The Environment Research and Engineering Institute (MAI 2004, 13).

⁵⁸⁵ These forms of cooperation were imposed on the people and used as free labour (RG 2008, 90).

administrative levels for raising awareness, training, information and education related activities (Lege 2004: 481, §36(4)) in civil protection. The expertise and databases of the NGOs are considered to be a great resource in such related activities as "community training and mobilization, early warning, risk identification", etc. (PreventionWeb 2011, 6). Regarding terrorist threats, the SRI develops partnerships with the civil society and academia that focus on promoting education, research and safety culture. (Sri.ro 2012(c))

NGOs generally participate in "civil protection exercises and applications, alarming and evacuation exercises, demonstrative intervention activities" (MAI 2004, 12, 13) organized by the public authorities. They furthermore organize exercises on their own to which public authorities are invited. According to the Romanian legislation, participation of the non-profit organisations in interventions at the demand of the public authorities is supported from the local and central budgets. Oftentimes though, the organisations stand for the costs themselves or are financed from abroad (MAI 2004, 13).

Unfortunately, there are no national statistics available on the number of NGOs in Romania. Among the non-profit organisations participating in search-and-rescue and intervention actions in crises are: the mountaineering, mountain rescuers and marine rescuers associations; the radio amateur associations, the dogs associations, medical associations and foundations, the ecological associations, the charity associations and foundations, the Romanian Civil Federation of Fire Fighters (MAI 2004, 13), the 'Foisorul de Foc' Association, the NGO World Vision Romania, as well as Red Cross Romania. The media, the Romanian Orthodox Church and the Romania Catholic Church are also participating.

The National Red Cross Society is the most active NGO in Romania and the only organisation having clearly formulated responsibilities in the Romanian legislation. It has 'support functions'⁵⁸⁶ meaning assistance to the public structures in emergency prevention, operative intervention and mitigation of disaster effects. (Informedprepared, 2012) In cooperation with the public authorities in the field, the Romanian Red Cross takes part in relief operations and tracing activities (Informedprepared.eu 2012). In particular cases, the Romanian Red Cross is able to take a leading role in disaster response operations. It furthermore has the right to require the support of public authorities and they are obliged to provide the required help (Red Cross Romania 2012).⁵⁸⁷ The Romanian Red Cross has 47 offices in the counties and districts of Bucharest, where they can activate over 1,000 specialized volunteers (Ibid.).

2.4.2 The role of profit-orientated organizations

All private actors, whether public or privately owned, have to offer their support to the professional services if required in case of emergency situation. Private actors⁵⁸⁸ representing potential risks that may generate emergency situations are furthermore obliged to establish private services for emergency situations. These services manage the emergency situations occurring on the site where

⁵⁸⁶ The 'support functions' of the Red Cross are mentioned in G.D. no. 2288/2004: evacuation of endangered population, provide emergency medical assistance, prevention of diseases, provide water, food and accommodation to the affected or evacuated population, provide the logistic of the intervention.

⁵⁸⁷ It is active in such emergency situations as floods, earthquakes, landslides, fires, tornados, technological accidents (Red Cross Romania 2012).

⁵⁸⁸ Called economic agents

the specific company operates. If necessary, they request the support of the professional services for emergency situations, the IES. In such cases they are technically and operationally coordinated by the IES.

Cooperation between the private sector and the state is initiated at both central and local levels on the basis of protocols/agreements/partnerships. Protocols are signed in advance between the private services for emergency situations of the public actors and the IES or GIES. Collaborations are also signed with transport companies, companies equipped with heavy machinery (cranes, etc.) at both national and local levels. In case of emergency, the professional public services request the support of one or several of these companies, depending on the nature of the emergency at hand.

The economic agents that have private services for emergency situations are required to organize training activities and exercises (Lege 2004: 481, §28, 1(d)). They generally invite the IES to participate, and the economic agents generally participate in those organised by IES at county level or by GIES at national level. According to the legislation, expenses for civil protection are ensured through the state and local budgets as well as those of the economic agents (art. 69, 481/2004).

An example of collaboration between the state and the private sector is the collaboration with Phoenix Media and Vision Media Plus for promotion via street TV-screens of messages for education, information and awareness regarding possible crises in the communities. Through the same method, pedestrians and drivers are informed in real time about major events in progress so that they avoid the zone or take precautions (Informarepreventiva, 2012) Another example is represented by the two partnerships signed between GIES and E-ON (Supplier of gas and electricity) on the basis of which two major awareness campaigns on TV and radio were arranged in 2012 (Ibid.)

3. Quality Measures

3.1 Effectiveness

3.1.1. Assessments through professional and political inquiries

Romania is highly affected by natural hazards; on average one flood strikes Romania every year and earthquakes occurs approximately every eight years (SEEDRMAP2011). In consequence, this places high demands on crisis management and efficient use of resources in the country. Published evaluations of the efficiency and effectiveness of Romanian civil security system are limited, but there are however a few reports on the major floods available.

Post-disaster, the *committees for emergency situations* establish inter-institutional commissions that issue damage assessments and evaluations in terms of socio-economic and environmental impact. The evaluations cover the causes and circumstances of the occurred event, damages as well as the measures to be undertaken in order to prepare for and reduce the consequences of similar events. The evaluations are then submitted to the MoI and presented to the government and the media and thus made available to the interested public (MAI 2004, p.17).⁵⁸⁹ Local authorities have to fund the

⁵⁸⁹ Whether this is really the case can be questioned since the author has had great difficulties in finding the inquiries, both on-line and in paper form.

assessments/evaluations themselves but because of the financial constraints other aspects (e.g. rehabilitation) are often prioritized instead (Preventionweb 2011, p.29).

As flooding is the main hazard that Romania deals with, reports on floods are most common. Reports have been issued on the 2004, 2005, 2006 and 2010 floods. The few reports available include the reports on the 2005 floods issued by the NCES (MAI 2005) and the report issued by the Ministerial Committee for the Management of Emergency Situations of the Ministry of Environment and Climate Change (MM 2005). The 2005 floods have been considered to have had a negative impact on all 41 counties in the country, with 1,734 cities and villages affected and 76 persons deceased. The reports put great emphasis on the causes, e.g. the excessive amount of precipitation or deforestation. Focus is also on the response, through the activation of the Ministerial Committee for Emergency Situations and a crisis centre working 24 hours a day. Indirectly, several culprits are pointed at such as the citizens that practice deforestation and/or place their houses and households in floodplains. The authorities are also indirectly blamed for their lack of knowledge concerning the responsibilities and the measures to be taken in case of flooding. Future reforms in the field are also mentioned, e.g. the elaboration of The national strategy for the management of flood risk and two guides for the mayor and the prefect (MM 2005; 8-16).

In relation to the heavy floods in Romania in 2010, a similar report, in the form of a presentation, was issued by GIES⁻ (MAI, 2010). The focus of the report was on the response and recommendations for improvement in terms of operations and legislation. The response by the authorities was described as broad and appropriate. The actions of both the local and the national authorities were positively described as able to mobilize and undertake appropriate actions in both the warning and response stage, and especially in the evacuation of people and domestic animals. Recommendations were all directed towards the central authorities and included better financial support to local authorities as well as improving cooperation with neighbouring countries (IGSU 2010; 3-11).

3.1.2 Limits to national capacities

International assistance has been requested in the context of the 2005, 2006, 2008 and 2010 flooding due to insufficient capacities at the national level (IGSU 2013, Commission 2013b). Romania has furthermore received major contributions in the form of humanitarian aid or assistance from international NGOs, international organizations⁵⁹⁰ and bilateral assistance from other states (UNOCHA 2013).

The aid and contributions are directed primarily to the emergencies, in particular to floods and for reconstructions (UNOCHA 2013).⁵⁹¹ According to Financial Tracking Services' available information the amount of foreign assistance to Romania during crisis decreased, and the 2010 evaluation made by GIES shows that Romania are increasingly focusing on preventive measures (Ibid.; IGSU 2010).

⁵⁹⁰ The World Bank supported several programs in disaster risk reduction in Romania, including the Romania Hazard Risk Mitigation and Emergency Preparedness (HRMEP) (UNISDR 2011).

⁵⁹¹ This is based on a review of Financial Tracking Services' (that tracks global humanitarian aid flows) yearly report on the incoming aid flows to Romania between the years of 2000 and 2012. The contributions are particularly common during those years of heavy floods. According to Financial Tracking Service, Romania received 4.768.677 USD, not including all contributions in the form of material supplies or experts. During the 2008 floods Romania received 608.983 USD and in 2010 floods the number went down to 122.084 USD (bilaterally by Austria and the USA) (UNOCHA 2013).

In conclusion, Romania has received extensive international assistance during emergencies from different international actors. It has thus good experience from receiving international assistance and has an organizational infrastructure able to receive and handle foreign assistance. The Romanian case shows that there are many advantages with pulling and sharing of capabilities between countries, however it is also important that individual countries, as Romania, take appropriate preventive measures.

To date, no state of emergency has been declared in Romania (UNISDR 2009).

3.2 Efficiency

Funds are assigned for disaster prevention and management from state and local budgets. (PreventionWeb 2011, pp.6, 15) They may be further complemented with funds from the state budget through the *intervention fund* at the disposal of the government (MAI 2005, pp. 11-12) if necessary. The state and local funds are mainly used in high priority areas such as response and post-disaster reconstruction. (PreventionWeb 2011, p.6) Other domestic or international resources (2004: 21, art. 33) are also used. For example, donations and sponsorships are important resources for acquiring equipment and other types of materials needed for civil protection. (2004: 481, 66) Finally, private actors also need to allocate funds for CM each year.

As there are different structures at different administrative levels that are responsible for the financing of activities related to the CM sector, the overall numbers of the total costs of civil security are difficult to establish. The budget of GIES for 2011 is however available and accordingly amounted to approximately 263,328 euro or 1,132,311 lei. (IGSU 2012)

Criticism on the insufficient budget is to be found in annual reports and reflected in the specialized media as for example in an article in the magazine 'The Firemen'. It is asserted that the low budget approved for 2011 and the lack of financial resources has had a negative result for the past three years (2009, 2010 and 2011). This situation, it is argued, impacts on aspects related to maintenance of skills and equipment. The lack of resources makes further development of the technical and material center impossible. This could result in a risk of compromising the carrying out of missions for intervention and increases the response time in case of an emergency situation (IGSU 2012(b), p. 31). While the budget of GIES is decreasing, the number of emergency situations has increased with about 20 percent every year (IGSU 2012(b), pp. 20-21). Given this background, and the above mentioned threat of future crises, this could be a sign that sufficient funds have not been allocated and thus could be evidence of a lack of efficiency.

Challenges are often met in sustaining commitments at the local level. Annual funds are set aside for emergency management at the local level, but in the absence of an immediate disaster, the funds are often redirected for other purposes by the local authorities. Centrally, Romanian authorities have reported difficulties in assessing emerging risks both in-country and across national boundaries, showing a lack of knowledge and/or resources allocated for this purpose. Romania has also reported on challenges caused by the weak public trust in financial institutions and the lack of financial sector capacity. Because of the economic insecurity, resources are diverted away from investments in

preventive measures as protection against future losses (that may never materialize) to meet more immediate threats (UNISDR 2013).⁵⁹²

Regarding reforms undertaken in the field of crisis management on the basis of financial considerations, in order to meet the budget constraints determined by the economic crisis, measures were taken in 2011 to restructure and streamline all structures of the Ministry of Interior. Privatization of crisis management is not applicable in Romania. Information regarding cost-benefits analysis taking place in investment processes is not available.

3.3 Legitimacy

3.3.1 Political support

There has not been any major crisis leading to the collapse of governments and/or resignation of responsible ministers due to political pressure relating to (mis)management of crises. Major reforms of the crisis management system have however taken place between the years of 2000 and 2012. In 2007, for example, after the elimination of mandatory military recruitment, GIES followed an ample reorganization process, in the sense that it recruited and staffed the institution in three stages of professionalization.

3.3.2 Legal support

Based on available information on the website of the Romanian ombudsman, no complaints or petitions concerning emergency situations were received. No petitions regarding laws on preparedness and response have been filed in 2011 or 2012. (Avp.ro 2012)

Human rights and liberties are guaranteed by the Romanian Constitution. Respecting them is one of the major principles of the management of emergency situations (OUG 2004: 21, § 3(c)). Within GIES and subordinated units in the country a large number of measures have been undertaken in the field of protection and promotion of human rights and liberties. These include increased cooperation with the civil society and NGOs. (Visan 2011, 171-172)

3.3.3 Popular trust and support

A survey called 'The Romanians' trust barometer', conducted prior to the 2010 flooding by IRES shows that state institutions are perceived as sources of problems or as the actors that ought to solve the problems but don't, in which case people tend to distrust state institutions. The analysis made on the subject shows that the low degree of trust in institutions may be evidence that state institutions are losing legitimacy. While people are deeply dissatisfied with the Romanian institutions, they trust the traditional institutions instead, e.g. the Church, the Army or the EU institutions. (IRES 2010(a), 4-5)

⁵⁹² <u>http://www.unisdr.org/files/33275 hfa13web.pdf</u>, Also household budgets can more readily justify expenses for food and shelter rather than insurance premiums. While property owners have a legal requirement to purchase insurance coverage, they often choose not to, in order to save funds.

After the 2010 floods, a survey called 'Public administration and floods' conducted also by IRES shows that the activity of the government regarding the flood response was perceived as positive by 35 percent of the respondents and negative or very negative by 57 percent of those questioned. Regarding the communication of the government with the population during the flood only 28 percent were of a good opinion while 66 percent had a bad or a very bad opinion. (IRES 2010(b), 12-13) The reaction of central authorities was deemed as slow by 76 percent of the respondents and prompt by 16 percent. The reaction of local authorities was deemed as slow by 70 percent of the respondents, in contrast 22 percent considered it prompt. (Ibid., 4-5) Yet, when asked about who should have the responsibility for protection in case of floods 41 percent of the respondents answered that local authorities. (Ibid., 14) The respondents further believed that the floods that occur every year are to be blamed on the government (24 percent), local authorities (21 percent) and God (19 percent). (Ibid., 18)

As noted earlier under section 2.1.3 (Government and social culture), the World Value Survey showed that Romanians do not feel very physically safe. The Eurobarometer on *internal security* from 2011 showed also that Romanians are one of the top three peoples in EU believing that their country is not doing enough to manage natural and man-made disasters, fighting organized crime, fighting terrorism and securing EU borders (Eurobarometer 2011).

As already mentioned under section 2.3.1., citizens may engage as volunteers in CM by volunteering in the existing NGOs in the field or in the voluntary services. Regarding volunteering in the NGOs, there are unfortunately no national records on the number of volunteers in Romania. Studies show that this may be due to the fact that contracts are not signed between volunteers and NGOs, but also because there is no national register centralizing their number (DG EAC 2010, p.2).⁵⁹³ The concepts of 'volunteer' and 'volunteering' also have to be better clarified in the Romanian legislation (Ibid.). As today, paid professionals working in the VSES are named 'volunteers' though the existing law on 'volunteerism' does not apply to them but only to the volunteers in the NGO field (Ibid.).

4. Romanian Civil Security in the EU Context

Romania is one of the countries most affected by floods within the European Union and it has also activated the Community Mechanism for Civil Protection (MIC) most frequently. Because of the severe floods, Romania has activated the MIC and received assistance four times, in 2005, 2006, 2008, and in 2010 (IGSU 2013, Commission 2013a). Romania requested assistance primarily in the form of pumps, inflatable dams and dykes, power generators, geotextile and modular kit houses. It received primarily pumps, geotextile and power generators, yet not in the requested amount (Commission 2013b). Normally, the reoccurrence and frequency of crises of similar sort normally increases countries' capabilities and improves its response to deal with the crisis more efficiently and thus reduces the need of foreign assistance (Hollis 2010). Since heavy floods have been recurring and can be presumed to recur it is crucial that the national capabilities have sufficient resources to deal with these crises. Therefore, focus on implementing preventative measures against the floods should be a priority.

⁵⁹³ The only sources available are the Eurobarometer, according to which there were 14% of the Romanians involved in voluntary activities in general (not specifically in the crisis management field) in 2011 (Eurobarometer 2011, p. 7).

Romania has responded and contributed to six MIC requests between 2007 and 2012. Most of the countries Romania has sent assistance to are in its near neighborhood, including Greece, Georgia, Hungary, Moldova and Turkey. In the cases of Hungary and Moldova, both had floods in July 2010, just as Romania. Interestingly, while Romania itself was highly affected by floods in 2010, it was still able to respond to the requests of Hungary and Moldova and to assist with pumps, boats and sandbags (Commission 2013). This shows that despite being affected itself and requesting assistance, Romania may have had in some cases over capacity and had the capabilities to pool its civil protection resources in favour of other countries. This could be a demonstration of the difficulty of planning for a crisis, and to anticipate the needs ahead but it could also be a sign of a positive attitude from the Romanian side to receive foreign assistance through the MIC system.

Relative to citizens of other member states, Romanian citizens tend to be less aware of the EU civil protection system. Romania scored low in the Eurobarometer survey (Eurobarometer 2012) regarding how well informed Romanians feel about the civil protection activities of the EU; only 16 percent feel that they are well informed while 51 percent believe they are not very well informed. Moreover, only 36 percent of the population is aware that the EU coordinates civil protection both inside and outside the EU.⁵⁹⁴

Relative to citizens of other member states, Romanian citizens tend to be less aware of the EU civil protection system. Romania scored low in the Eurobarometer survey (Eurobarometer 2012), regarding how well informed Romanians feel about the civil protection activities of the EU; only 16 per cent feel that they are well informed while 51 per cent believe they are not very well informed. Moreover, only 36 per cent of the population is aware that EU coordinates civil protection both inside and outside the EU.⁵⁹⁵ Interestingly, in relation to the responses given by the citizens of other member states, Romanians are among the citizens that agree the least with the statement that not all countries have sufficient national means to deal with a major disaster on their own; 9 per cent do not agree at all, while only 44 per cent totally agree (Eurobarameter 2012).

5.Conclusion

Romania has a long experience with natural disasters and in consequence has a well regulated civil protection sector. The National System for the Management of Emergency Situations is a functional system characterized by few principles stated in the National Strategy for the Prevention of Emergency Situations. First, there is the principle of *shared responsibilities* among actors at different levels; though it is mainly public actors having specified responsibilities in the field, private actors and citizens also have established tasks in the current legislation. The NSMES is furthermore based on the principle of *inter-institutional coordination* in the sense that a myriad of bodies and structures collaborate in emergency management; while one central authority has the main responsibility for the management of a specific risk, other authorities have 'support functions'. Finally, the system is built on the principle of a *multi-disciplinary approach* on civil emergencies which is achieved through

⁵⁹⁴ In relation the other member states' citizens, Romanians have less confidence in the efficiency of coordinated EU action in dealing with disasters rather than actions by individual states. However since this number is high all over Europe, also in Romania a safe majority (75%) believe that a coordinated EU action is more efficient than individual actions by states in the case of the case of a disaster (Eurobarameter 2012).

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the work of the *committees for emergency* situations that gather decision-makers and experts on different issues, as well as some private actors in the local and the county committees.

Improvements are however required concerning stronger involvement of the private sector in the Romanian crisis management. While one of the stated principles on which civil protection is based upon is *cooperation* between the authorities and NGOs, neither citizens nor the private sector are particularly motivated or encouraged to participate in crisis management by the legal framework. On the one hand, authorities fail to (or lack the resources to) inform the citizens on the ongoing crises and the necessary action to be undertaken which leaves the citizens out of the system. This may explain the fact that citizens are rather unengaged in common activities and uninvolved in the destiny of their own community. Citizens on the other hand tend to rely too much on the authorities and feel that it is the task of the state to provide for their safety. In this respect, a culture of safety should be promoted so that citizens turn from safety receivers into safety providers as well.

Furthermore, increased involvement of volunteers and generally of the private sector is needed. Their role and their responsibilities in crises have to be more clearly defined. To start with, the concepts of 'volunteer' and 'volunteering' need to be better clarified in the Romanian legislation. The voluntary services for emergency situations should officially be included in the National System for the Management of Emergency Situations as these are the only capabilities for intervention at the local level which is the first level activated in case of crisis. Volunteering from NGOs should also be encouraged and included in the operational forces so that the intervention force acts as one unitary structure. The know-how and resources of NGOs should be used if it could result in making the system more efficient.

Romania has good experience from receiving international assistance and has an organizational infrastructure able to receive and handle foreign assistance. However, it is important that the authorities prioritize and allocate necessary funds to the civil security system in Romania so that Romania and its authorities can handle heavy floods without dependency on foreign aid and assistance. More efforts have to be put into preventative measures, primarily in the rural areas. The importance of such actions is also clear by the fact that Romanians feel relatively physical unsafe and they stand out in the EU as being among the most dissatisfied people, believing their country is not doing enough regarding natural and man-made disasters, fighting organized crime, fighting terrorism and securing EU borders.

Evidence shows that resources allocated to the field the past three years have been insufficient. This may compromise the carrying out of intervention missions and may increases the response time in case of crisis. Furthermore, what can be observed is that while the budget of GIES is decreasing, the number of crises has increased with about 20% every year. In order to make the system more efficient, extended funds need to be allocated to the crisis management sector so that the specialized structures may carry their intervention missions at their best. Investments in preventive measures must also be prioritized. And finally, published evaluations reflecting the effectiveness (or lack thereof) of the Romanian civil security system should be made available to the citizens based on the principle of transparency.

All the above mentioned problems may be solved by updating and simplifying the legislation in the field. Expectations may be also met in a future national system for crisis management that would cover the entire spectrum of crises in the field of security and thus gather all actors and all existing

systems under one roof. This would not only make the CM system more efficient and more effective but also comparable to those of the other EU fellow states.

Annex I: Coded Data

1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
					problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	OUG 2004: 21, §2	There is a definition for 'emergency situation' in the Romanian legislation
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	OUG 2004: 21	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	In exceptional situations = 1	1	http://www.scoa larosu.ro/rom- files/revista/21/2 .html	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly specific threats	1		
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	Commission 2012	
2.1.1.b	system	Parliamentary system = 1 Presidential system = 2	2	Commission 2012	semi-presidential
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	Commission 2012	
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	democracy = 1 Majoritarian democracy = 2	2	2012	
2.1.1.e	Is delegation constructed in a top- down or bottom-up	Top-down = 1 Bottom-up = 2 Both = 3	2	Chiper 2012, p.3	

I	fashion?				
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede		90	http://geert-	
	country national			hofstede.com/co	
	cultural score - DPI			<u>untries.html</u>	
2.1.2.a.i	Geert Hofstede		30	http://geert-	
i	country national			hofstede.com/co	
	cultural score - IDV			<u>untries.html</u>	
2.1.2.a.i	deent nonsteat		42		
ii	country national			hofstede.com/co	
	cultural score - MAS			<u>untries.html</u>	
2.1.2.a.i	deent noisteat		90	http://geert-	
v	country national			hofstede.com/co	
	cultural score - UAI			<u>untries.html</u>	
2.1.2.a.v	Geert Hofstede		NA	http://geert-	
	country national			hofstede.com/co	
	cultural score - LTO			untries.html	
2.1.2.b	World Value		-0.39	http://www.worl	Year 2006
	Survey's national			dvaluessurvey.or	
	score on dimension			g∠	
	1 - traditional vs. secular				
2.1.2.c	World Value		-1.55	http://www.worl	Year 2006
	Survey's national			dvaluessurvey.or	
	score on dimension			<u>s/</u>	
	2 - survival vs. self-				
2.2	expression Legal &				
	constitutional				
	aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is		1		
	the legal framework				
	that regulates civil				
	security centralized versus fragmented?				
	versus nagmenteu?	fragmented (3-5 key			
		laws regulates civil security) = 2			
		Highly fragmented (6			
		or more key laws			
		regulates civil security)		MSB 2009, p.	
		= 3		187	
2.2.1.b	When was the last	Provide the year of the	2004		
	major reform in the			Apahideanu	
	civil security field			2007, p. 64	
	undertaken?				

2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?			MSB 2009, p. 187	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	UNISDR 2009, p.123	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		NA		
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST	1 At the regional level = 2	3	H.G. 2004: 1491, Lege 2001: 215, §36(6), §63(5)	
2.2.2.b	rest? On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	1	1	Lege 2004: 481, §24	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?		1	OUG 2004: 21, § 13(1)	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?		1	OUG 2004: 21, § 14	though they may be considered as subdivisions of the lead agency
2.2.3.c	Is the exercise system formalised by law or executive mandate?	By law = 1	1		
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number	≈15	http://igsu.ro/sit e- vechi/unitati_cn ppmsu.html	3/year

2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008- 2012 External dimension	Register the number	4	http://igsu.ro/sit e- vechi/activitati r elatii_internation ale.html	
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	0	http://www.igsu. ro/activitati rela tii_internationale .html	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	11	http://www.igsu. ro/activitati_rela tii_internationale .html	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	5 + NATO and EU	http://ec.europa. eu/echo/civil_pr otection/civil/va demecum/ro/2- ro-1.html#orga ; http://www.igsu. ro/activitati_rela tii_internationale .html	The agreements have not been available thus it is hard to determine if these agreements are response oriented. Mainly joint training has been conducted through DPPI SEE.
2.2.4.d	Has the country received assistance from partner/neighbourin g country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	1	http://ec.europa. eu/echo/files/pol icies/disaster_res ponse/EUCPM_a ctivations_since_ 01012007.pdf	No available information except through the MIC-documentation.
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	= 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for	2	Lege 2008: 260	

2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?		1	Ord. 2006: 1259, §4	
2.3.2.b	Does the government have a system for radio/TV warnings	Yes, at the	3	Ord. 2006: 1259, §24	
2.3.2.c	Does the government have a central website with updated information on crisis events?	Yes, at the local/regional level = 1	3	http://www.igsu. ro/index.html, http://www.igsu. ro/organizare_u nitati_subordona te.html	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	Yes,atthelocal/regional level = 1Yes,atthenationallevel = 2	2	https://www.fac ebook.com/igsu. situatiideurgenta 4 https://twitter.c om/IGSU_URGE NTE_RO	https://www.facebook.com/igsu.sit uatiideurgenta, https://twitter.com/IGSU_URGENTE <u>RO</u>
2.3.2.e		Yes, at the local/regional level = 1 Yes, at the national	0		
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		1	UNISDR 2009, p. 136; MAI 2004, pp. 21-23	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No=0Tomembers/professional=1Tomembersandlimited public outreach=2To member ands wide-spreadtrainingprogrammesfor	3	http://villamszek ely.hu/?lang=ro	

		general population = 3			
2.3.3.c	issues among the	Yes, moderately (once per year) = 1 Yes, extensively (more	2	http://www.infor marepreventiva.r o/	
2.3.3.d	public? Does the government provide for a budget for sponsoring research/technologi cal developments on civil security/crisis management?		1	MAI 2004, p. 13	Specialized universities and research institutes are involved in the editing activity of studies and guides in the field of emergency situations. However, no information on the size of the allocated funds for research in the field by the government was found available
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	NA		
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non- profit actors play an official/legally mandated role in EXCEPTIONAL crises?		1	H.G. 2004: 2288, Informedprepare d 2012, Red Cross Romania 2012	To be mentioned that the National Red Cross Society is the only organisation having clearly formulated responsibilities in the Romanian legislation
2.4.1.b		emergency medicine)	2	Lege 2004: 481, §36(4)), MAI 2004, pp. 12, 13	
2.4.2	Role of profit- oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?		1	Lege 2004: 481, §28 (1); Ord. 2007: 158, §1	
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in	In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects	1	Lege 2004: 481, §28 (1), Informarepreven tiva, 2012	905

3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?		4	IGSU 2013, Commission 2013b	However, when studying humanitarian aid flows, through the Financial Tracking Service, it is clear that Romania has received assistance or aid every year during this period. The aid is mostly for emergency response.
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	for 2000-2012. If there are no legal provisions for state of emergency/disaster,	0		
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	for 2000-2012. If there are no legal provisions for state of emergency/disaster or	0		
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	4	Apahideanu 2007, pp. 61-64	
3.3.1.b	How many major	Register the number for 2000-2012.	NA		
3.3.1.c	How many formal and politically instituted inquiries/committee s on civil security have been undertaken at the national level?	Register the number for 2000-2012.	3	MAI 2005, MMGA 2005, MAI 2010	3 reports found on-line

3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?		0		
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	0		
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0		
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	leeway for operational	0		Unknown. No judicial oversight over the declaration of state of emergency. See Article 93 of the Constitution, no other information was found available.
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	percentage for "Agree" and "Tend to	27	Special Eurobarometer 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	percentage for	32	Special Eurobarometer 371 (2011)	

3.3.3.c	Do official actors maintain registers for volunteers in crisis management?		0	DG EAC 2010, p. 2	The concepts 'volunteer' and 'volunteering' are not well defined in the Romanian legislation, see section 3.3.3.
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	NA		
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	NA		
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?		To be complete d by UI/IFHS (4 times)	http://ec.europa. eu/echo/files/pol icies/disaster_res ponse/EUCPM_a ctivations_since 01012007.pdf	
4.b	How many times has your country contributed to a MIC request - 2007- 2011?	Register the number for 2007-2011	To be complete d by UI/IFHS (6 times between 2007- 2012)	http://ec.europa. eu/echo/files/pol icies/disaster_res ponse/EUCPM_a ctivations_since_ 01012007.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?		21	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in		5	http://ec.europa. eu/echo/policies /prevention_pre paredness/prepa	

	between 2002-12?			<u>redness_en.htm</u>	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002- Sept. 2012)?		4	http://ec.europa. eu/regional_poli cy/thefunds/doc /interventions_si nce_2002.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002- 2012, Sept.)?	assistance in million euro for 2002-Sept	108	http://ec.europa. eu/regional_poli cy/thefunds/doc /interventions_si nce_2002.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	36	Special Eurobarometer 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	75	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in Romania

The first case of H1N1 in Romania was confirmed on the 27th of May 2009 and the last one on the 8th of April 2010. During this period of time, there were 7,008 cases of H1N1 confirmed in Romania, of which 122 deaths resulted, and thus a fatality rate of 1.7 percent. Case zero of H1N1 flu was confirmed by the Ministry of Health in a 30 year old woman who came by plane on the 23rd of May from New York with a stopover in Paris. In August, in a press release of the Ministry of Health, it was announced that the vaccination campaign would take place in parallel with the production of the vaccine against the H1N1 virus. The Cantacuzino Institute in Bucharest was to produce 5 million doses of vaccines for which the government assigned 21 million lei. On the 10th of September, the Ministry of Health decided that the Public Health Directions should suspend for 7 days the activity in the education facilities where 3 cases of H1N1 were confirmed in three different classes of the same school. (Ghidulbacaului 2012) In the beginning of November, the Committee for Flu Coordination decided that all hospitals should enter quarantine as an additional measure for the prevention of flu spread. (Ibid. 2012) In the end of November, the Ministry of Health announced that the vaccination campaign was starting, and that Cantgrip, a Romanian produced vaccine at Cantacuzino Institute should be used. In December, the Cantgrip vaccine was distributed around the country.⁵⁹⁶

The NCES developed a plan for combating the effects of the pandemic H1N1 there the measures to be undertaken and the structures involved are presented. The CNSCBT had a key role in the management of H1N1 as it established the necessary measures for the epidemiological surveillance and the management of the H1N1 cases. Besides the CNSCBT, the medical transport services, ambulances and SMURD had to provide necessary medical assistence and transport the pacients to the medical facilities (H.G. 2009: 826, §2.3.1). The public Health Directions and Public Health Institutes had to carry out the epidemiological surveillance activities at all levels. They were coordinated at the national level by the CNSCBT in colaboration with the Health Events and Early Wraning Bureau. The two structures had to ensure communication with the WHO and the ECDC as well as inform the MOH about the epidemiological risks identified at the national level. The two structures were furthermore responsible for implementing the public health measures necessary for the prevention and limitiation of the effects of the pandemy (Ibid., §2.3.1.f).

The process of communication was coordinated by the Ministry of Health in the pre-pandemic stage, and by the prefect and local authorities in later stages (826/2009, §2.6.6.). While the health sector was the main responsible in elaborating and implementing the response in the pandemic (Dec. 2009: 826, §3.2.1.), the other components of the NSMES were to participate as well. Thus, the prime minister had to coordinate through the NCES the management of the pandemic at the national level providing and coordinating the communication and public information at the national level

⁵⁹⁶ There is little information in the media regarding the number of acquired doses of vaccine. Some information was however available regarding the unused and later destroyed doses in a few counties one year after the end of the epidemic: Clarasi county: 41,750 doses received, of which 8,600 unused and destroyed (Observator de Calarasi 2010); Timis county: 82,000 received doses of which 15,500 unused and destroyed (Presaonline.com, 2010);Arad county: 40,000 doses received of which 19,300 doses ununsed and destroyed. (Jurnalul 2010)

(826/2009, §3.2.10). It was supported by the NOC (National Operational Centre) within GIES, OCC (Operational Centre for Command) within the Ministry of Interior and the Operativ Centre within the Ministry of Health. (Dec. 2009: 826, §3.2.13) At the county and local levels, prefects and mayors ensured the implementation of the measures provided in the plan (Dec. 2009: 826, §3.3.1.) and played a major role in raising awareness to the population about the pandemic (Dec. 2009: 826, §3.3.2.). Citizen had to become pandemic situation managers as well, more exactly to make sure they had access to accurate information, food, water and medicine (Dec. 2009: 826, §3.3.5.).

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Serbia

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Executive Summary

The current Serbian civil security system was established in June 2010 and still is under construction, as a number of bylaws, directives, guidelines and documents are to be adopted. It is planned that the system will be fully completed in 2016. The general intention was to design a comprehensive decentralised system around the sector of emergency management of the Ministry of Interior as the main pillar and integrator of different actors and link professional agencies and political representatives on all levels of government in emergency management headquarters with precise delineation of mandate and responsibilities. A crisis is prepared for and resolved where it happens, that is primarily at the local level. If it exceeds the capacity of the local community, up scaling occurs on the higher levels of government up to the national level in cases of large scale disasters, including the engagement of the police and army if necessary. However, due to the uneven development of municipalities and cities there are significant differences in the crisis management capacity between local communities as well as in the level of awareness for crisis management among the local political representatives, other actors and citizens. A new risk assessment methodology is to be implemented as the basis for better planning. There is plenty of room for improving cooperation with the private sector and volunteer organizations, as well as for citizens' mobilization. Serbia is engaged in the regional institutional crisis management arrangements and cross border crisis assistance and is harmonizing its system with European standards in the context of EU accession. More time and effort is needed in order to harmonize the new system and to evaluate all its good and bad sides.

Key Findings

Due to the fact that the current Serbian civil security system was legally/normatively established only in June 2010 and still is under normative⁵⁹⁷ and operational construction, it is rather hard to identify its advantages and disadvantages. However, perhaps two solutions in the Serbian civil security system, and one idea/initiative on regional resource sharing might be interesting for other European countries:

1. The national emergency management headquarters as political-operative multisectoral body that includes heads/leaders of different ministries (Interior, Health, Transportation, etc), other agencies and special organizations that, within their respective areas of responsibility, have certain roles in crisis management, as well as the civil society actors (Red Cross, Mountain Rescue Service etc.) actually (and recently formally) is the national platform for disaster risk reduction and so far it is functioning properly. Similar bodies are established on lower levels of political-territorial organization (regional and local) with respective units of the sector for emergency management as their pillar. In this way, in a bottom up manner and in project-like organization all professional crisis management actors are mutually connected both horizontally and vertically and political actors are also involved at all levels of government.

2. The Serbia law on emergency situations defines two categories of companies, other legal persons and entrepreneurs particularly important for crisis management:

- Authorized legal persons companies and other legal entities entrusted to perform the
 activities of special interest for the Republic of Serbia in the field of telecommunications,
 energy and mining, railway transport, meteorology, hydrology, seismology, protection from
 ionizing and nuclear radiation, environmental protection, water management, forestry and
 agriculture, health, care and accommodation and veterinary medicine
- Trained legal persons companies and other legal entities trained and equipped for protection and rescue activities such as: public utility companies, construction companies, water management companies, forest management companies, catering companies, mining companies, transport companies and other legal entities, private security companies and commercial aviation.

On the national and district levels there are no contracts between the state and private or public companies. There are only government decisions which explicitly specify authorised and trained legal persons that have obligations in emergency situations. It includes a total of 108 authorised and trained legal persons on the national and 245 on district level (*Official Gazette*, No 36, May 27,

⁵⁹⁷ A number of bylaws, directives, guidelines and documents are to be adopted

2011).⁵⁹⁸ On the local level there are formal contracts between private companies and local governments that regulate their rights and obligations in emergency situations, while the public enterprises have a legal obligation to participate in crisis management.

3. The Serbian Ministry of Interior with the heads of emergency management services from Albania, Macedonia, Bosnia and Herzegovina, Slovenia, Croatia and Montenegro adopted the conclusions on establishing a network of regional specialized centres for reacting in emergencies in SEE in order to use and develop existing capacities of the states and pooling of their resources. To avoid duplication within the region, a network of different centres of excellence in Southeastern Europe will be established. The main task of these centers will be disaster response training and coordination. There should be one center of excellence situated in each of the states specialized for a certain area of expertise. (floods, forest fire, disaster risk analysis, wildfire, coordination of response, earthquake, cave rescue, etc.).

⁵⁹⁸On the national level the most important among public companies are the Serbian Postal Service, power and electricity production/supply companies, Serbian railways, hospitals and a number of faculties, and among private companies are those engaged in pharmaceutical industry, transportation, construction, commerce, etc.

List of Abbreviations

CBRN	Chemical, biological, radiological, and nuclear
СРА	Criminalistic Police Academy
EMHQ	Emergency Management Headquarters
HFA	Hyogo Framework for Action
HQ	Headquarters
LES	Law on emergency situations
MIC	Monitoring and Information Centre
MOD	Ministry of Defence
MOI	Ministry of Interior
MRS	Mountain Rescue Service
NEMHQ	National Emergency Management Headquarters
NSPRE	National Strategy for Protection and Rescue in Emergencies
PWMC	Public Water Management Company
SEE	South Eastern Europe
SEM	Sector for Emergency Management
SWG	Special Working Group
UNDP	United Nations Development Program

1. Introduction

After almost two decades of rather unregulated responsibilities of particular ministries and bodies and outdated legislation, and lack of political will to regulate this area, the current Serbian civil security system has been established only in December 2009 when the Law on Emergency Situations (LES) was adopted in Parliament. This law is the basis for guiding all disaster management activities in the country. The Sector for Emergency Management (SEM) is recognized as a single body within the Ministry of Interior (MOI) where all emergency services from MOI, Ministry of Defence (MOD) and Ministry of Environment are integrated. Therefore, the crisis management approach is primarily based on civilian operations and bodies, while military capabilities are only being employed upon request of the SEM, when other resources are not sufficient. Serbia takes mainly an all hazards approach with elements of a specific threats approach. The SEM is a coordination body that integrates activities of all agencies.

The conflicts in the 1990s related to dissolution of SFR Yugoslavia, followed by the conflicts in the Serbian southern province of Kosovo and Metohija, as well as the NATO bombing campaign in 1999 were among the greatest crises that Serbia's civil security system had ever faced. Located in a region of intense political change and civil unrest, Serbia also experienced a number of demonstration and citizens protests during the Milosevic regime, several prison riots and the assassination of the prime minister in 2003 as a result of conspiracy. Besides this, Serbia often has to cope with many natural disasters, most notably floods, forest fires, extreme temperatures, heat waves and windstorms, landslides and, from time to time, earthquakes. As a major link between Asia and the rest of Europe, the threats of transportation accidents, terrorism and infectious disease epidemics are substantial. (Waal, Chu and Dimitrijevic 2008:8)

In the period 2000-2012, 18 major natural disasters and infectious diseases, 5 major industrial/transport accidents, and one signature crisis were recorded while there were no serious infrastructures failures and major terrorist incidents.

Table 1: List of Crises (2000-2012)⁵⁹⁹

Year/ month	Crisis Description		Damage			
		Crisis Category	# of persons killed	# of persons injured	# of persons affected	
2000/IV	Flood	Natural disaster			4,000	
2000/ VII	Extreme temperature	Natural disaster	3			
2002/ IV	Earthquake	Natural disaster	1			
2002/VI	Flood	Natural disaster			2,400	
2003/III	Assassination of Prime Minister Djindjic	Signature crisis	1		7,500,000	
2004/IV	transport accident	Industrial/transporta tion accident	12		38	
2005/IV	Flood	Natural disaster	2		3,790	
2006/11	Flood	Natural disaster			1,200	
2006/IV	Flood	Natural disaster			35,000	
2006/X	Explosion at a military depot	Industrial/transporta tion accident		35		
2007/XI	Flood	Natural disaster			12,370	
2008/11	Fire in a night club	Industrial/transporta tion accident	8	2		
2008/IV	Chemical accident	Industrial/transporta tion accident		27		
2009/I	Extreme temperature	Natural disaster			500	
2009/XI	Flood	Natural disaster			3,210	
2009/XI	H1N1 epidemic	Natural disaster	136		750,000 to 2 million	
2010/I	Extreme temperature	Natural disaster	3			
2010/III	Flood	Natural disaster			3,150	

⁵⁹⁹Table is based on EM-DAT: The OFDA/CRED International Disaster data (<u>http://www.emdat.be/database</u>) complemented with data from the Serbian MOI. Four disasters from EM-DAT data base (Flood in December 2000, transport accident in July 2002, miscellaneous accident in December 2003 and extreme temperature in January 2006, are excluded as there are not recorded in Serbian MOI. Crisis in italic letters are added to EM-DAT, and based on MOI records.

2010/V	Flood	Natural disaster	2	
2010/XI	Earthquake	Natural disaster	2	27,030
2010/XII	Extreme temperature	Natural disaster	2	
2010/XII	Flood	Natural disaster		1,750
2012/II	Extreme temperature	Natural disaster	23	34,497
2012/IV	Fire in a night club	Industrial/transporta tion accident	6	

Crisis⁶⁰⁰ is defined in Article 7 of the Law on Emergency Situations (LES) as "a situation when risks and threats or consequences of catastrophes, emergencies and other threats to population, environment and material goods, are of such scale and intensity that their occurrence or consequences cannot be prevented nor eliminated through regular activity of competent agencies and services, and for the mitigation or elimination of which special measures, forces and means at higher operational regime are required."⁶⁰¹ (Law on Emergency Situations, a.7, *Official Gazette* RS, 111/10).

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Frequent disruptions of historical and political continuity in Serbia have been reflected in the organization of the state and security system. The tradition of the Serbian public administration is based on comprehensive legal regulation. Serbia inherited from the periods of socialism (1945-1990) and of the system of personal rule of Slobodan Milošević (1990-2000) authoritative legal models of public administration. One study found that the Serbian public administration has the following characteristics:

- A strong centralization of decision-making authority;
- A rule-oriented, risk-averse administrative culture;
- Weak mechanisms for cross-ministerial coordination;
- Lacks capacity for strategy and policy development;

⁶⁰⁰Generic legal term is *emergency situation*. Besides this more specific terms are natural hazard, technical and technological hazard - accident, disaster and emergency also used and explained in LES.

⁶⁰¹ English version of LES. Translated by MOI

- Widespread problems of motivation;
- Far reaching politicization. (The Serbian Central Government Administration, 2002)

After the regime change in October 2000, the new government adopted a *Public Administration Reform Strategy* (2004), in which it is stated that public administration should not be viewed solely as "an instrument of government", but rather as a system performing public services. A significant problem is replacing the previous spoil system with a system based on merit in public administration, its politicization and state disrespect of the law and court decisions rendered in favour of the citizens. (Milosavljevic, 2011).

Serbia is a parliamentary republic with a multi-party system. The party (or the coalition of parties) which gets a majority of MPs in the unicameral parliament (250 seats) elects the government as an executive state-organ. Executive authority is exercised by the prime minister and cabinet members. The president is the head of state, and is elected by popular vote. Formally, the post of president is largely a traditional role with almost no executive, legislative, or judicial authority. However, due to the president's legitimacy, power of suspensive veto and some other provisions, in Serbian academia there is no consensus whether the Serbian political system is semi-presidential, (Pejković, 2010), while most authors believe that the new Constitution (2006) has brought about a significant rationalization of parliamentarism in favour of the executive branch of government. (Pejić, 2007). Serbia is a unitary centralized state⁶⁰² with a majoritarian democracy, and some elements of consociational democracy as a corrective factor.⁶⁰³

In terms of administrative and territorial division, the Republic of Serbia is divided into

- Autonomous provinces (Vojvodina and Kosovo and Metohija⁶⁰⁴) regional level
- Administrative areas (districts) kind of mediator between local and regional/national level
- The City of Belgrade
- Cities and local level
- Municipalities.⁶⁰⁵

⁶⁰² According to some authors highly-centralized (Pešić, 2007)

⁶⁰³ It is primarily about the representation of national minorities in the government structure.

⁶⁰⁴ The political status of Kosovo is the subject of a long-running political and territorial dispute between the <u>Serbian</u> government and <u>Kosovo</u>'s largely ethnic-Albanian population, stemming from the <u>breakup of</u> <u>Yugoslavia</u> in 1990s, and the ensuing <u>Yugoslav wars</u>. In 1999 the administration of the province was handed on an interim basis to the <u>United Nations</u> under the terms of <u>UNSCR 1244</u> which ended the <u>Kosovo conflict</u> of that year. That resolution reaffirmed the sovereignty of Serbia over Kosovo but required the <u>UN administration</u> to promote the establishment of 'substantial autonomy and self-government' for Kosovo pending a 'final settlement' for negotiation between the parties. The outcome of ongoing talks between Pristina and Belgrade under the auspices of the EU about this problem is still uncertain.

⁶⁰⁵Besides this Serbia has five statistical regions (Belgrade, Vojvodina, Šumadija and Western Serbia, Eastern and Southern Serbia and Kosovo-Metohija). This division is created for the purpose of statistics gathering in accordance with the <u>Nomenclature of Territorial Units for Statistics</u>.

Municipalities and cities are gathered into 29 administrative areas (districts)⁶⁰⁶, which are regional centres of state authority (covering 3-12 municipalities or cities), but have no assemblies of their own. They are administrative-territorial units, a type of administrative-political sub-region with few powers of government, headed by a chief of district who is appointed by the government and accountable to the minister for regional development and local government, in which the state authority relocates some of its inspection and supervision services.

Besides the City of Belgrade, as a separate territorial unit established by the Constitution and law, there are 23 cities, 28 urban municipalities, 150 municipalities, 6,158 villages and 195 urban settlements (Statistical Office of the Republic of Serbia, 2011). The municipality is the basic territorial unit with at least 10,000 inhabitants, in which local self government is realized. The city is the local self government established by law, which is the economic, administrative, geographic and cultural centre of the wider area and has more than 100,000 inhabitants.⁶⁰⁷ A city can have two or more urban municipalities. The mayor (head of city administration) and head of municipality are elected by councillors of the Assembly.

Each administrative level has responsibility both for crisis management preparation and response, within its constitutional/legal mandate and operative capacities.⁶⁰⁸ The local level has more of an operational role; the administrative area level is a kind of mediator⁶⁰⁹ towards provincial/national level of government. The national level is dealing more with strategic matters and overall designing, coordinating, monitoring and correcting the system.

According to LES the Republic of Serbia shall ensure the establishment of an integrated civil security system. The Parliament is responsible for adoption of a National Strategy for Protection and Rescue in Emergencies (NSPRE) while the government is responsible for all system aspects of civil security (adopting plans, risk assessments and other documents, ordering general mobilization of the civil protection units, supervision of crisis preparations etc.).

⁶⁰⁶ Five of them on the territory of Kosovo and Metohija

⁶⁰⁷Law on Territorial Organization and Local Self-Government. Exceptionally, new municipalities can be established with less than 10000, and towns with less than 100,000 inhabitants due to economic, geographic and historical reasons.

⁶⁰⁸For example, when it comes to organizing and implementing protection against floods and overall water management, a municipality is responsible for waters of the second order while the responsibility for the waters of the first order is divided between the Public Water Management Company (PWMC) "SRBIJAVODE, PWMC "VODE VOJVODINE" for the territory of the province of Vojvodina and PWMC "BEOGRAD VODE" for the territory of Belgrade. PWMCs are under the Water Management Directorate of the Ministry of Agriculture, Forestry and Water Management. See more on http://www.srbijavode.rs/eng/index.htm

⁶⁰⁹The role of administrative district in crisis management is not clearly defined in LES.

The SEM, as a specialized organizational unit of MOI, coordinates the activities of all state and civil society institutions involved in emergency and disaster management at all levels of political territorial organization. The organization and main functions of SEM are presented below (Figure 1).

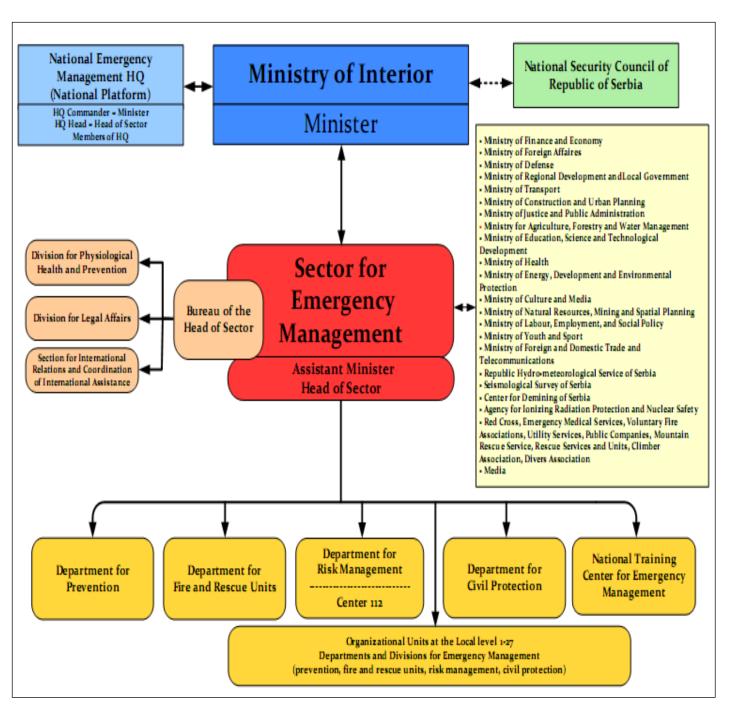


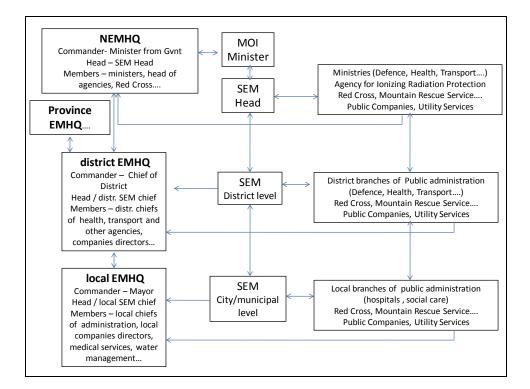
Figure 1: Crisis Management in Serbia (Organisation Chart)

Source: http://prezentacije.mup.gov.rs/svs/HTML/organizacija.html

Besides SEM, different ministries, other agencies and special organizations⁶¹⁰ within their respective areas of responsibility have roles in crisis management and can even be key players in some specific crises (e.g. pandemic or CBRN threats.

Looking top-down, SEM has its organizational units for the territory of the district and city/municipality with a support (service) role in the district/local EMHQ as main operational and expert bodies for coordinating and managing crisis response. They are permanent bodies⁶¹¹ established for the territory of municipality and city by respective assembly, for the territory of administrative district by NEMHQ, and for the territory of autonomous province and republic by respective governments. EMHQ is comprised of: commander, deputy commander in the metropolitan and municipal HQ, head and members. If needed, EMHQ shall establish auxiliary expert and logistic teams to execute specific tasks related to protection and rescue.

Figure 2: EMHQ structure



Source: MOI

⁶¹⁰ Those ministries, agencies and organizations are shown on the organogram to the right of SEM.

⁶¹¹ These are the bodies with permanent members – the heads of relevant institutions are automatically members of the HQs, but in cases of specific crises, besides regular members, the HQs may include other members, managers, experts and so on. This does not mean that they have employees that come to their offices each Monday morning. It is more like project organizations. During the cold phase of the crisis HQ is actually a kind of network with respective organizational unit of SEM as a main pillar.

In the "cold phase" of a crisis, EMHQ is coordinating activities of all actors regarding risk assessment, planning, preparation and preventive measures (risk reduction), while in the "hot" phase, HQ is responsible for response, i.e. implementation of crisis plans and recovery activities.

Following the principle of gradual deployment of forces and resources (LES, a. 5) in protection and rescue activities, forces and resources of the municipality/town shall be deployed first. In cases when, due to the size of a disaster or threat, the forces and resources of local self-governments are not sufficient, the EMHQ shall request deployment of forces and resources from the higher level of government (regional/provincial/national). The police⁶¹² and Serbian Army shall be deployed when the available forces and resources are not sufficient for protection and rescue activities.

Responsibility is delegated to higher levels of government through EMHQ. Upon the request of a commander of a lower HQ, a higher HQ is engaged in crisis management. A decision on declaration of an emergency situation, at the proposal of the relevant EMHQ, shall be passed by the president of the municipality/mayor/executive body of the autonomous province/Serbian government for the respective territory. The procedure is the same for declaring the end of an emergency situation. Exceptionally, it is possible that the NEMHQ, as the highest authority for emergency management, immediately assumes control of an emergency situation if it deems it necessary based on the information and its own assessment, without waiting for the up-scaling procedure.

2.1.2 Government/social culture

According to the Geert-Hofstede survey of government/social culture (Hofstede et al. 2010) Serbia is a society where people accept a hierarchical order without any further justification. Such a society may be labeled as having a large power distance. Serbia is a collectivist country where people tend to view themselves as members of an extended family or organization. They place group interests ahead of individual needs. Also, Serbian society is a society with a high level of uncertainty avoidance. In general, Serbian society feels a greater need for consensus and written rules, and is intolerant of deviations from the norm. The value placed on caring for others and quality-of-life are considered to be highly important. As a result, Serbian society is what is called feminine.⁶¹³ (Lukashenko, Vlajković, Stojanović, 2009) Those findings were confirmed also by Serbian research results that point out deep roots of traditionalism in rural life, value transformation during socialism (collectivism, solidarity, equality), emerging liberal values associated with introducing a market economy (slowed due to "political capitalism" during Milosevic's regime) and a powerful impetus to authoritarianism given by disintegration of the country, economic collapse, civil war and UN sanctions. (Mojić, 2004). Complementary results are in the survey on national-level value scores for

⁶¹² The Serbian police force is a national centralized organization within MOI.

⁶¹³ However, there are no data on other values like negotiation, equality, etc.

2006, where the Serbian score for traditional/secular-rational values is 0.35 and for survival/selfexpression values is 0.62. (World Value Survey, 2012). However, as a multinational and multiconfessional society, Serbia is not homogenous in a cultural sense.

A turbulent transition period of the last decade added a number of uncertainties in public administration. Today's bureaucracy was also shaped under external factors.⁶¹⁴ The unstable "constitution" of the state during these transition years and the frequent changes of government are among the factors that determined the external environment in which today's bureaucracy is operating, and thwarted progress of what is called 'enabling environment for changes'. The fact that the Serbian general public has been more 'pro-state' oriented also resulted in a lack of a high level of pressure for change inside the public administration (Lukashenko, Vlajković, Stojanović, 2009). In terms of the political and strategic culture, Serbia is divided between two opposing discourses: national-liberational and civic-democratic, that construct two different visions of national identity. While the former proscribes the values of national independence, defiance and civilizational ambiguity, the latter favours EU integration, compromise and alliance with the West. (Ejdus, 2007/2008).⁶¹⁵

The evolving civil security system is the result of these conflicting elements and values that characterize the search for national cultural identity, after the discontinuity caused by communist rule and the utopian project of creation of the Yugoslav federation.

2.2 Legal & constitutional aspects

2.2.1 Statutory basis

The general legal framework for the civil security system is shaped by the Constitution of the Republic of Serbia (2006), Law on State Administration (2010), Law on Ministries (2011), Law on Local Self-Government, (2007) Law on Measures in case of State of Emergency (1991), Law on Police (2006), Law on Serbian Army (2007), Law on Defence (2009) and strategic documents: National Security Strategy (2009) and Defence Strategy of the Republic of Serbia (2009).

⁶¹⁴ First of all, socialist countries' doctrine where state administration was placed within the framework of the "class essence of state and law" with specific repressive features (tasks of public administration defined as "tax collection, political repression (banishment and exile, arrest), management and organization of the military, espionage and counterintelligence, protection of the social order and national security, etc." Denisov, 1949: 165) and the "public service model" of administration prevailing in the developed European countries, derived from the concept of the social function of the state and public administration and their role in the achievement of general interest and social welfare (*bono publico*)(Duguit, 1913/1929).

⁶¹⁵ Citizens' support to Serbian EU integration is declining from more than 70 percent in 2003 to 47 percent in December 2012.(BCBP, 2012)

The Serbian civil security system is defined in LES adopted on 29 December 2009,⁶¹⁶ and its implementation began in July 2010. LES defines how emergency situations are declared and managed; systems of protection and rescue of citizens; rights and obligations of citizens, state agencies and other actors; inspection and supervision, international cooperation and other relevant issues. It is oriented towards emergency response also mentioning some elements of prevention. The law was slightly amended in 2011⁶¹⁷ and 2012.⁶¹⁸

The LES has generally regulated the area of crisis management at all administrative levels, so the provincial and municipal regulations only operationalize the provisions of the LES.

Since the LES was adopted as an umbrella law in the field of emergency and disaster management, a number of bylaw acts, which regulate rights and obligations of all stakeholders, have been adopted, and others are currently being prepared, commented on and amended. However the legal framework has not yet been completed because all the bylaws, decisions and directives are not adopted.⁶¹⁹

Beside LES there are a number of complementary laws that are also relevant for the civil security system that regulate different fields like the Law on Fire Protection (2009), Law on Defence (2009), Law on Environment Protection (2009), Law on Water (2010), the Law on Air Navigation, (2011), Law on Protection Against Ion Radiation and Nuclear Safety (2012), Law on Safety and Protection at Work (2005) etc. ⁶²⁰Very important laws in this area that are still not adopted are the Law on Explosive Materials, Law on Flammable Liquids and Gases, Law on Hail Protection and Law on Private Security.

Following the adoption of the LES, the strategic documents that have been adopted include the NSPRE (2011), Fire Protection Strategy 2012-2017 (2012). The drafting of the Action Plan for

⁶¹⁶Besides the knowledge and experience of Serbian experts, the LES included the recommendations of the respective UN offices dealing with disaster risk reduction and disaster management (including UNISDR and UNDP). A number of laws, regulating the field of disaster and emergency management in the EU countries, were studied with the aim of implementing the best practices of other EU countries in this field. Comparatively observed, adopted solutions are most similar to the Czech model

⁶¹⁷These amendments included enlargement of NEMHQ competencies, so it could serve as the National Platform for disaster risk reduction in accordance with the HFA

⁶¹⁸With these amendments the mandatory payments into the budget fund for emergencies are abolished.

⁶¹⁹So far 29 bylaws are adopted and several are still to be adopted. Despite this, some professionals believe that there are reasons for the adoption of an entirely new law on emergency situations (Interview with key respondent in MoI).

⁶²⁰ These laws focus both on prevention and response. They define a hierarchy in a functional domain and interdepartmental relations. They do not overlap with the LES, but they are complementary and compatible with it.

Implementation of NPRRS is in progress,⁶²¹ while the National Risk Assessment and National Emergency Plan should be adopted by the Serbian Government in 2013.

2.2.2 Political dimension

A crisis management policy draft has been conceptualised by MOI (SEM) and later on discussed and harmonized in the NEMHQ, a body comprised of ministers (Defence, Health, Transport etc.), heads of agencies, Red Cross, Mountain Rescue Service (MRS)etc. (See Figure 2)⁶²² and experts.

EMHQs at each level of government have both political and operational responsibility for crisis preparedness and response as they are headed by both political representatives/commanders and professionals/heads.⁶²³ SEM is primarily responsible to the minister of interior. Also, public officials of other ministries/agencies that might be key players in certain types of crisis are primarily responsible to the minister of specific departments (e.g. in case of pandemic to the minister of health), but also to EMHQ. Commanders are accountable to respective political bodies (assemblies and governments) and higher EMHQ. However the NEMHQ commander cannot replace or impose sanctions towards municipal HQ but only initiate this in front of the competent body that elected him/her. The EMHQ head is accountable horizontally to the commander and vertically to his/hers superiors within SEM and to higher EMHQs. However, if the mayor would like to replace the EMHQ head who he holds responsible for failures in coping with the crisis he could not do it directly, but only initiate the process in MOI/SEM to determine his/hers responsibility.

Under certain circumstances, there are specific arrangements for crisis management response that might mean temporary derogation of human rights. The Serbian Constitution and legislation recognize both *state of emergency* and *emergency situation*. An emergency situation refers to natural disasters, technological accidents and other accidents and threats to people, property and the environment with no political dimension in which generally crisis form of government that includes derogation of human rights should not be introduced (Milosavljevic, 2011)⁶²⁴. A state of emergency can be declared by Parliament and generally refers to human causes with political dimension. As in the Law on Defence (art. 4.), it is defined as a state of public emergency which is threatening the viability of the state or its citizens, caused by a military or non-military challenges, as well as security risks and threats in certain circumstances, without prescribing additional conditions under which it could be determined. An emergency situation may grow into a state of emergency, in

⁶²¹It was planned to be adopted in 2012.

⁶²²Members of NEHQ and lower level HQ are pre-defined. On national level they are automatically appointed and NEHQ is formed after the government is formed.

⁶²³Professionals/heads are responsible to the political representatives on respective level of government. Besides this, vertically they are responsible to the head of SEM.

⁶²⁴However, some human rights might be derogated, i.e. temporarily suspended (like in case of evacuation, quarantine etc.

which case Parliament may prescribe measures to derogate constitutionally guaranteed human and minority rights. These derogations are permitted only to the necessary extent; derogated rights have to be enumerated and cannot relate to the absolutely protected rights enumerated in the Constitution such as the right to life, etc.⁶²⁵

At the discretion of the competent EMHQ, an emergency situation can be declared for a municipality/town/city of Belgrade (by president/mayor) and for the territory of Serbia or a part thereof if the threat occurs in a minimum of two municipalities if their capacities do not suffice as a response (by the Serbian government at the proposal of NEMHQ).

2.2.3 Operational dimension

Crisis management policy is formulated by SEM on each level of government and adopted and implemented by EMHQ. The head of SEM and SEM chiefs on lower levels are accountable for performance of SEM. The same refers to executives in other agencies and special organizations. Each agency and organization is hierarchically (vertically) accountable along the levels of government and horizontally to respective political representatives. For example, the head of municipal EMHQ is accountable to the Head of SEM and, in a certain way, to the local president/mayor as a commander of EMHQ (See 2.2.2.)

Planning and Risk Assessment

On the national level there are

- NSPRE (strategic document dealing with overall development of the civil security system), and
- National Plan of Protection and Rescue in Emergency Situations (an operative /annexes document with sub plans for different kind of crisis).⁶²⁶

MoI/SEM prepares drafts of all plans adopted by the NEMHQ and later on by the government while ministries, other agencies and special organizations participate in developing national plan documents and develop and implement the National Plan within their responsibility.

The basis for national plans are plans of protection and rescue on lower levels (companies/municipal/

city/administrative areas/province). Lower level plans are integrated in the national plan. However,

⁶²⁵Secretary general of the UN and of the Council of Europe should be informed on those derogations.

⁶²⁶Besides that, there is an annual work plan and progress report of the National EMHQ.

besides a bottom-up, a top-down approach is also applied. When national plan documents are adopted, lower level plans have to be aligned with the national plan.

However, these plans do not currently exist.⁶²⁷ They will be prepared after conducting the vulnerability/risk assessment in the described bottom-up manner.⁶²⁸ Only in October 2012, guidance on the methodology for the development of vulnerability assessment and plans of protection and rescue has been enacted. Vulnerability assessment will be conducted by certified experts for municipalities and verified by EMHQ. The next phase will be a risk/vulnerability assessment for administrative areas/provinces and finally for Serbia as a whole. It is projected that in mid 2013 the Assessment of Vulnerability of Serbia to natural and other disasters will be finished. The planning process on new grounds will follow after the vulnerability assessment.

Communication:

The Serbian system for emergency communication has two dimensions: crisis communication with citizens (described in the section 2.3.2.) and strategic and operative communication within crisis management actors. Different bodies and agencies on the strategic level communicate using ordinary means of written and electronic communication, and also organize meetings of operative bodies, first of all EMHQs. When it comes to operative communication in crisis situations traditional phone and radio systems are used together with the TETRA system, integrated digital radio networks, and to a certain extent internet-based platforms. The department for telecommunication of MOI is responsible for managing the network. However due to vulnerability of the tetra system, analogue systems have not been abandoned.

In Serbia there is no single number that citizens can call in a case of an emergency. Each emergency service has its own emergency number and a dispatch centre (192 - the police, 193 - fire-fighters, 194 - ambulance), whose coordination is inefficient, the system for callers' identification/location is not functional and the database for tracking all risks, events, emergencies and disasters has not been properly developed. The introduction of a universal system, "number 112 for emergency calls" will provide a coordinated, rapid and efficient intervention and assistance in emergency events in full compliance with the EU standards. ⁶²⁹

Logistics:

⁶²⁷Plans that currently exist are outdated, collecting dust on the shelves. (Interviews with key respondents in MOI)

⁶²⁸Actual vulnerability assessments are provisional, based mainly on statistic data, and rather outdated.

⁶²⁹Paper work (projecting etc.) for 112 is finished but there is no money for its implementation. It is planned that implementation will start in April 2013 and it will last two years.

EMHQs are responsible for coordination and logistics. At each level of government they have an insight into resources of local communities, MOI, Red Cross, Army, public and private companies and they distribute them in accordance with priorities. In this perspective, a special unit of civil protection for logistic is planned. It will have its branches strategically placed around the country, in accordance with the types of risks and dominant threats.

When it comes to distribution of resources it should be noted that due to the years of decline, economic crisis and NATO bombing in 1999, the transport network and infrastructure in Serbia are in poor condition. The transport organization is inadequate (Drobnjak, 2012) so it is impossible to get to some mountain villages, especially in eastern Serbia during winter storms.

Monitoring: EMHQ are responsible for monitoring of unfolding or ongoing crises in specially equipped situational/operational centres that are usually situated in municipalities and/or police, fire and rescue facilities. In the capital, Belgrade, there are two situational centres, one for NEMHQ (international crises and the main contact point for international disaster help) in the government building and the one in the building of city government for local EMHQ. Also, the metropolitan police, the first aid and fire brigade have their own operative centres.

Case study

The most serious challenge for the new Serbian civil security system was the extreme weather conditions (heavy snowfalls and extreme cold) in February 2012. Following the proposal of the NEMHQ on 5 February 2012, the government declared an emergency situation on the whole state territory. All protection and rescue activities, as well as preventive measures were coordinated and managed by the NEMHQ.

In this crisis 23 people died due to extreme cold, whilst 310 were rescued. Approximately 11,122 households and 34,497 people were affected (deprived of electricity, food, water etc.) while 920 households with 2,400 people were completely cut-off in the distant mountain villages. Rescue and evacuation operations were conducted and assistance was provided to people in urgent need of medical assistance, food supplies etc. The most affected population was in the municipalities of Sjenica, Nova Varos, Kraljevo, Novi Pazar, Valjevo, Osecina, Ivanjica, Prokuplje, Kursumlija, Zagubica. Only local and uncategorized roads in 38 municipalities in distant mountain regions were not passable (approximately 4,200 km). Rescuers from the emergency services reached all those in need for medical assistance and supplies, and evacuated the affected populations from remote regions. Local EMHQs coordinated the delivery of medicines, food supplies, warm clothes, blankets etc, and rescue activities of the emergency services, Red Cross centres and centres for social care. Heavy mechanizations from public companies and the Serbian Army were deployed for clearing the roads.

The government has allocated financial assistance from the budget for the affected municipalities, as well as fuel for machines and specialized vehicles. Serbian private companies also donated fuel for the affected municipalities, and citizens put themselves and their equipment at the disposal of the authorities for the rescue operations. At the last session of the NEMHQ on 22 February, the members discussed the efficiency of the actions taken, as well as the report on the current situation regarding the risk of floods due to ice cover formation on the rivers and landslides. Following the decision of the NEMHQ, an operational expert team for flood protection was established. It was proposed to the government that the emergency situation should be revoked. The emergency situation in 23 municipalities remained for a while. The capacities of the Republic of Serbia have been sufficient to deal with the situation and there was no need for international assistance (SEM/MOI Report (2012). This typical, but extreme crisis⁶³⁰ was the first serious test of the new system and the system passed its first exam.

2.2.4 External cooperation

Serbia has signed bilateral agreements on cooperation and understanding with neighbouring Montenegro and Bosnia and Herzegovina; signing of agreements with Romania, Hungary and Croatia is in the final phase, while agreements with Macedonia and Bulgaria are at the beginning. Due to territorial disputes there is no cooperation or even contacts with Kosovo as an entity but only with the northern part populated by ethnic Serbs.⁶³¹

Similar agreements (memorandums) are signed with Denmark, Slovakia, the Russian Federation,⁶³² Ukraine and Azerbaijan, while one with Greece is being prepared and with France and Italy there is a signed letter of intention.

Bilateral agreements are very important as they regulate planning and implementing measures in protection from floods, earthquakes, fires, environmental pollution, waterway traffic incidents, radiological dangers, industrial and other disasters; exchange of information on those disasters and scientific, technical and other data, mutual help in protection, rescue and recovery and training (courses, seminars, joint exercises) and priority border crossing procedures arrangements, including customs and immigration controls, with a view to facilitating intra-regional and international transit for emergency relief/recovery purposes are regulated (Mladjan, Marić and Baras, 2012). These agreements are generally standardized, focused on the response phase of the crisis and mutual

⁶³⁰ Such a winter storm has not been recorded in the last 30 years.

⁶³¹ Relations of ethnic Serbs from Kosovo with Serbia and the issue of "parallel institutions" are subject to ongoing negotiations under the auspices of the EU.

⁶³²Cooperation with Russia attracted special public attention due to some speculations that the Serbian-Russian centre for emergency situations in Niš could become a logistics base for Russian army operations. See more in Abusara and Savković, 2009.

assistance, with rather clear procedures, and floods and fires are main reasons for bilateral cooperation. They have been activated seven times in case of fires. Serbia has up to now granted assistance to Montenegro (3 cases) and Bosnia and Herzegovina (1 case) and received assistance from Russia (4 cases).⁶³³

The Serbian MOI with the heads of emergency management services from Albania, Macedonia, Bosnia and Herzegovina, Slovenia, Croatia and Montenegro adopted the conclusions on establishing a network of regional specialized centres for reacting in emergencies in SEE in order to use and develop existing capacities of the states and pooling of resources. To avoid duplications within the region, a network of different centres of excellence in SEE will be established. The main task of the centers will be disaster response training and coordination. There should be one center of excellence situated in each of the states specialized for a certain area of expertise. (floods, forest fire, disaster risk analysis, wildfire, coordination of response, earthquake, cave rescue, etc.). (Interview Key respondent MOI)

Serbia participates in 10 international multilateral agreements: United Nation's Office for Disaster Risk Reduction (UNISDR), United Nations Office for the Coordination of Humanitarian Affairs (UN-OCHA), United Nations Development Program (UNDP), European and Mediterranean Major Hazards Agreement (EUR-OPA), Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI), Adriatic Ionian Initiative (AII) Black Sea Economic Cooperation (BSEC), the International Commission for the Protection of the Danube River (ICPDR), International Sava River Basin Commission (ICSRB or Sava Commission) and International Civil Defence ICDO (observer status). Multilateral agreements were activated only once when UNDP gave assistance after the Kraljevo earthquake.⁶³⁴

Although Serbia is not an EU member, but only a member candidate from 2012, the country maintains communication with MIC in Brussels and acts as if it is a member state (Interview key respondent in MOI). (See chapter 4.)

2.3 Relations between the state and its citizens

2.3.1 Expectations

According to LES, art. 4., all capable citizens perform physical tasks for the purpose of protection and rescue, undergo training for personal, mutual and collective protection and implement the measures and perform tasks related to civil protection. They have the responsibility to accept the deployment schedule assigned to them upon deployment in the civil protection agencies and units; respond to

⁶³³ The data refer to period 2007-2012. There are no data for the period 2000-2007 when Serbia was in a federal state with Montenegro.

⁶³⁴ It is also worth mentioning that Serbia is member of OSCE and NATO Partnership for Peace.

the summons of a competent civil protection body; submit data relevant to protection and rescue to the competent body without delay; and provide data required for keeping registries relevant to protection and rescue (LES, art. 21). Also, when required for protection and rescue purposes, citizens shall put real estate, vehicles, machinery, equipment, material and technical and other material resources (water, food, medical equipment and medications, clothing, footwear, construction and other materials) at the disposal and use of the competent body for emergency situations (LES, art. 24).

So far there have been no research or opinion polls on citizen perceptions of most probable incidences and their expectation toward government responsibility for civil security and its crisis management capacities. In a survey conducted by CeSID, citizens were not asked if they are concerned with disasters but with other security problems. Results showed that the surveyed citizens are most concerned about corruption and drug addiction.⁶³⁵

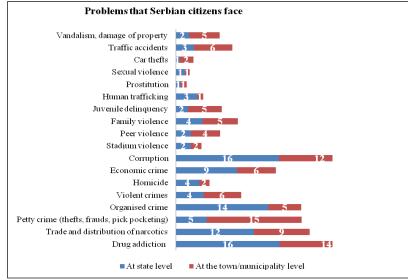


Figure 3: Security problems that Serbian citizens face

Source: CeSID 2011

However, having in mind the still dominant state centric concept of security (Hadžić, 2007), it can be assumed that citizens hold government most, if not solely, responsible for coping in a crisis. There are opinion polls on citizens' attitudes towards MOI, which the SEM is part of. However, those findings cannot be translated on to SEM, as most citizens identify MOI with the police.⁶³⁶

⁶³⁵Actually they were not asked about fear of disasters.

⁶³⁶There are significant differences due to a negative legacy from the period of Milosevic's rule when the police were used against the opposition. Besides that the police are authorized to use force and mediate in different kinds of situations.

There are no research data or official estimations of citizens' willingness to assist in emergencies. There are around 80,140 volunteers in major relief organizations (Red Cross – 60,000, MRS – 140 and voluntary fire brigades around 20,000). In certain cases citizens were absolutely not interested in helping in firefighting,⁶³⁷ while there are also completely different examples.⁶³⁸

2.3.2 Information

According to the principle of transparency in LES, state administration, agencies of autonomous provinces and local self-governments shall ensure for the populations in the areas potentially affected by natural or other disasters, to be informed about the threat thereof. The state informs citizens about impending and unfolding crises using electronic media, first of all the national TV 1 channel and Radio Belgrade 1, as those media reach the whole country, and print media in some crisis situations. In cases of severe crisis there are legal provisions to interrupt programming and give an announcement or warning.⁶³⁹

The Internet is used for the purpose of prevention and raising citizens' awareness, general advice and periodic informing of citizens and journalists and for SEM public relations. It is not used for operative crisis communication and warning due to complicated and time consuming administrative procedures of editing the MOI website⁶⁴⁰ as well as the fact that less than 50 percent of households are connected to the net (Statistical Office of the Republic of Serbia, 2010). On the SEM presentation on the MOI site there are links to Facebook and YouTube that are used by the SEM in order to inform citizens. There is a legal and technical possibility for using SMS warnings via mobile networks, but it has not been used so far. During the NATO campaign in 1999, also sirens, as a part of the national warning system, were widely used, but nowadays they are not in a functional condition, due to the lack of finance, and there is no equipment for their manual activation (http://vesti.krstarica.com/drustvo/sirene-u-losem-stanju/).

 ⁶³⁷In the southern town of Pirot citizens were swimming in the pool, while near them firemen were trying to put the fire under control. (Interview key respondent in MOI)
 ⁶³⁸In a forest fire near the town of Uzice 800 volunteers were fighting fire, and refusing help from neighbouring

⁶³⁸In a forest fire near the town of Uzice 800 volunteers were fighting fire, and refusing help from neighbouring municipalities (Interv. Red Cross)

⁶³⁹At the request of the Logistics Centre 112, the radio and television broadcasting companies with national and local frequencies shall automatically interrupt broadcast of programmes in order to transmit adequate information of interest to protection and rescue. Mobile telephony operators shall provide free transmission of information of interest to protection and rescue to the telephone subscribers at the request of the Logistics Centre 112. (LES, art. 107).

⁶⁴⁰SEM does not have its own website but only a link on MOIs website. Besides this, very useful and accurate information in certain types of crises can be found on the Internet site of the Republic Hydro meteorological Service of Serbia <u>http://www.hidmet.gov.rs/index_eng.php</u> and Agency for Radiation and Nuclear Safety of the Republic of Serbia <u>http://www.srbatom.gov.rs/srbatom/index.htm#</u>

In case of a national crisis, usually the head of SEM is responsible for crisis communication. However, sometimes the MOI might take the lead. It is also possible that the head of SEM delegates the responsibility for crisis communication to his/hers assistant or to a certain expert. However, in case of pandemic, the minister of health is in charge of crisis communication. On the very scene of the crisis operation the commander can give the first statement. EMHQ can also give relevant information. In cases of local crises, heads of local SEM branches or fire brigade commanders are responsible for crisis communication.

In order to raise awareness, campaigns are conducted periodically in the media (fire risk in the hot/dry season, the use of fireworks for the Christmas holidays, preparing for a season of floods, drought, etc.) setting posters in the classroom and so on.

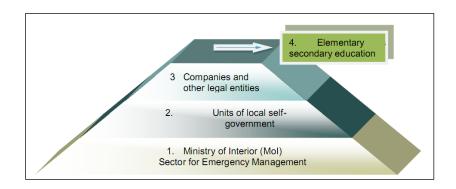
There are no data about information channels citizens prefer and if they feel well informed on crisis preparedness. Also, government agencies usually do not publish inspections and evaluations and use them only for their own internal purposes.

2.3.3 Education

The LES presents a starting document for planning and organizing the education of the population. In article 119 it defines that in order to gain necessary knowledge of personal and mutual protection, citizens are trained and enabled for preventive protection and rescue.

We can conditionally talk of four levels of training and commitment of the civil subjects on that plane. (Babić and Babić, 2012). The highest level of training is organized and conducted by the specialist training department and the civil protection training department of SEM, in charge of basic training and enabling all members of the protection and rescue system (SEM employees, all level EMHQs, specialized units of civil protection, apparatus of the companies, other legal entities important for protection and rescue, citizens) to gain necessary knowledge of personal and collective protection, and also to foreign citizens in accordance with the regulations and bilateral agreements. In 2011-2012, 309 members of EMHQ were trained (in 2011 - 131 commanders and in 2012 - 178 heads on a one/two-day training course).

Figure 4: Levels of training for civil security in Serbia



Source: Babić & Babić, 2012

Local self-governments (municipality/town) organize and conduct training and enabling of the commissioner, the deputy commissioner of civil protection and the units of general purpose for their territory, and training of organizations and citizens in personal and collective protection. On the other hand, so far, no measures have been initiated to start training citizens according to the place of their life and work.⁶⁴¹

The third level of training is conducted with companies and other legal entities that plan and provide the means for organizing, supplying, enabling and training of the units of civil protection (that they form). The Red Cross of Serbia performs the training of citizens and the units of civil protection in giving first aid, in accordance with the public authorization and by established curriculum and criteria. Specialized training is provided by the MRS and voluntary fire associations.

The fourth level of training is conducted in the elementary and secondary schools. Its purpose is gaining knowledge of the dangers from natural and other disasters and how to protect against them, in accordance with a special law and appropriate curriculum.⁶⁴²

SEM also produces awareness raising materials like posters placed in schools or on the Internet and conducts different campaigns.⁶⁴³

In general the way the training is handled now is not satisfying (MOI-SEM/OSCE, 2012). The NSPRE recognized that conducted training sessions are outdated and non-functional and, as such, not in accordance with the needs of an integrated system of crisis management, so they have to be enhanced, modernized and improved through creating appropriate curricula.

⁶⁴¹This is planned for 2013.

⁶⁴²On the basis of the law, the minister of education and science was obliged to prescribe a way of training in the elementary and secondary education, which has not been done yet.

⁶⁴³Like MOI-SEM/OSCE (2012). *Family Guide for Behaviour in Emergencies*, Belgrade. This booklet is also available in print (12,000 copies).

There is an official recognition that to date there has been an inadequate use of knowledge, innovation and education to build a culture of safety and resilience in Serbia (Serbia: National progress report on the implementation of the HFA, 2009). Also the government does not support research and technological development (Int. key respondent in MOI).

2.4 Role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organizations/ NGOs

Non-profit organizations are important actors in the Serbian civil security system. On a general level their role is defined in the LES. The position and responsibility of the Serbian Red Cross as the most important partner is determined in more detail (in even 10 articles of LES), while the role of the MRS refers to first aid and preparation and execution of tasks related to protection and rescue in inaccessible terrain. They are also included in crisis management as members of EMHQ, participating in planning, preparedness, exercises and crisis response. Besides those organisations, additional associations, alliances and societies and clubs related to cynology, diving, nautical science, alpinism, speleology, radio-amateur radio, scouts and other participants are mentioned in LES as relevant to protection and rescue.

So far, the legal status of the Red Cross is rather clear, while the positions of the MRS and voluntary firefighting associations are not defined by the law, nor are their status and relations with the state (performing public powers, usage of radiofrequencies, system of licensing, rights and responsibilities etc.).⁶⁴⁴ The main reasons for this situation are inertia, slow bureaucratic procedures and a lack of financial resources.

The partnership between the government and those agents is not formalized in a contract, memorandum or similar legal act that clearly determines mutual rights and obligations in performing planned assignments (Red Cross interview). The MRS has a good cooperation with SEM based on personal contacts and relations, (MRS interview) while among voluntary firefighting associations and professional firefighters (part of SEM) there is a certain competition, if not even hidden antagonism. (National voluntary firefighting association interview; SEM interview)

Except the Serbian Red Cross, in all non-profit relief organisations tasks are carried out by volunteers and they need to bear the costs of operations themselves. The Red Cross is partly financed by the state (when performing public powers), while the MRS is financed through projects (some of them with SEM), donations, sponsorship and providing certain services (like protection and assistance in skiing resorts). Voluntary firefighting associations provide funds for their own operation through maintenance of fire extinguishers and training programs, local government donations etc. They are

⁶⁴⁴It is planned to regulate the status of volunteer firefighters with a bylaw (Interview key respondent in CPA)

also supposed to be financed partly by the state (through the Republic Fund for Emergency Situations), but, due to the lack of financing it is in practice not functioning.

The Red Cross of Serbia is a humanitarian, independent and voluntary organization that consists of two Provincial Red Cross branches and 183 branches in towns and municipalities. The mission of the National Society is to alleviate human suffering with the task of providing help to the vulnerable at times of armed conflict, natural disasters, ecological disasters and other emergencies, saving vulnerable lives and health of people, disseminating knowledge of international humanitarian law, working on prevention and education of citizens in the health and social welfare sector, promoting the humanitarian values of society and, in the state of need, providing social protection and assistance. The most important public powers conferred by the Red Cross Law are to participate in the protection and evacuation of the population, material and other goods; to collect and distribute humanitarian aid; to participate in the reception and in the provision of accommodation to evacuees, refugees and displaced persons in the event of armed conflict, natural and other disasters in peacetime and wartime; to organize solidarity actions; to train citizens to be members of the civil defence on the territory of the Republic of Serbia to provide first aid, victim registration, family tracing etc.

The program activities are implemented thanks to 60,000 volunteer and professional engagements of 800 employees in the network of the Red Cross of Serbia (Red Cross, n.d.).

2.4.2 Role of profit-oriented organisations

Serbia is a transitional country and its economy is still undergoing the process of privatization. Critical infrastructures are managed by public companies that are not only profit oriented, but have to take care of the public interest. Companies, other legal persons and entrepreneurs are recognized as participants in the civil security system (LES, a. 4). Besides this, the general legal provision of LES defines two categories particularly important for crisis management:

- Authorized legal persons companies and other legal entities entrusted to perform the
 activities of special interest for the Republic of Serbia in the field of telecommunications,
 energy and mining, railway transport, meteorology, hydrology, seismology, protection from
 ionizing and nuclear radiation, environmental protection, water management, forestry and
 agriculture, health care and accommodation and veterinary medicine.
- Trained legal persons companies and other legal entities trained and equipped for protection and rescue activities such as: public utility companies, construction companies, water management companies, forest management companies, catering companies, mining companies, transport companies and other legal entities, private security companies and commercial aviation.

On the national and district levels there are no contracts between state and private or public companies. There are only government decisions which explicitly specify authorised and trained legal persons that have obligations in emergency situations. This includes a total of 108 authorised and trained legal persons on the national and 245 on district level (*Official Gazette*, No. 36, May 27, 2011).⁶⁴⁵ On the local level there are formal contracts between private companies and local governments that regulate their rights and obligations in emergency situations, while the public enterprises have a legal obligation to participate in crisis management.

Concerning the Seveso directive,⁶⁴⁶ the LES envisaged special obligations and responsibilities for informing, planning, environmental protection and crisis response in companies and other legal persons that use one or more hazardous substances and that manage special high risk facilities with potential disaster and terrorist risk for human lives and health.

Companies plan and ensure resources for: organizing, equipping, capacity building and training of civil protection units they establish; organizing and preparation of personal, mutual and collective protection and implementation of measures and tasks of civil protection of their employees, material and other goods; while those from the sectors of health, education, social welfare and other sectors which have protection of a large number of persons within their mandate, shall plan, organize and implement measures and tasks of civil protection also for the persons who are beneficiaries of their services. Companies' plans should be aligned with the plan of protection and rescue in emergency situations of the local self- government unit on the territory on which they are located. The manager of a commercial company or manager of other legal persons is responsible for preparation for protection and rescue from natural and other disasters.

In case of emergency situations, companies and other legal persons,⁶⁴⁷ owners and users, shall put the use of the following at the disposal of the SEM: electronic communication networks and information systems and connections; equipment and material and technical devices together with the necessary human resources; reserves of water, food, medical equipment and medications,

⁶⁴⁵On the national level the most important among public companies are the Serbian Postal Service, power and electricity production/supply companies, Serbian railways, hospitals and a number of faculties, and among private companies are those engaged in the pharmaceutical industry, transportation, construction, commerce, etc.

⁶⁴⁶ Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances (as amended) is a <u>European Union law</u> aimed at improving the safety of sites containing large quantities of dangerous substances

⁶⁴⁷ This also refers to international/multinational companies, like Naftna Industrija Srbije/ Petroleum Industry of Serbia, whose majority owner it the Russian company GAZPROMNEFT. There are ongoing debates on the legality and legitimacy of the purchase provisions.

energy sources, clothing, footwear, construction and other materials required for execution of tasks related to protection and rescue. Real estate owners and users shall enable performance of works ordered by the SEM required for protection and rescue from natural and other disasters and threats, whenever so required on their real estate. On the other hand the state has the obligation to fairly compensate companies, legal entities and citizens.

The activity of private security companies is in practice not regulated by the law, but some of them are responsible for protection of critical infrastructures (like waterworks and electric power facilities) so they might be important also in prevention and reaction in crisis situations (Interview Key respondent private security company).

Public private partnership in Serbia is just at the beginning⁶⁴⁸ so there are no significant indications of possible models of PPP in crisis management activities (Serbian Response to the EU Questionnaire for the Member States on Experiences,2011). However, there are positive examples of companies' engagement in emergencies like in floods in Trgoviste and after the earthquake in Kraljevo in 2010 (Radovic & Andrejevic, 2011).

Faculties and other organizations engaged in science and research have an obligation to inform the SEM about scientific findings relevant to protection and rescue. However, cooperation between scientific-research institutions and direct users of research results such as small and medium enterprises and industry and other institutions of national importance is insufficient (NSPRE).

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessment through professional and political inquiries

Political inquiries

In the period of 2000-2012 there was only one major political inquiry in the aftermath of the assassination of Prime Minister Djindjic. Besides the police and court investigation, a special commission ("Korac's Commission") was formed with the task of examining the system of protection of the prime minister. The commission found a number of failures in the work of the judiciary and serious lapses in personnel, organizational and technical aspects in the system of providing security

⁶⁴⁸Law on PPP and concessions was adopted in November 2011.

to the prime minister and Serbian government building.⁶⁴⁹ Only four lower level professionals in the police and security agencies were on call of duty. Court process against 44 persons charged with the assassination lasted for four years and they were sentenced to a total of 378 years. Investigation of the political background of the assassination is still going on.

Hardly any lessons were learned from this signature crisis. Some improvements have been made in technical equipment for protection and selection, recruitment and training of the staff responsible for the security of high state officials. However, the system is not very clear and precise so the president and/or prime minister are free to choose which civil or military agency will be responsible for their personal protection, on the basis of subjective assessment and their own trust in certain institutions or individuals (Interview with a key respondent from the Commission).

Professional inquiries

In the aftermath of a national crisis, professional inquiries and reports are being made and discussed within MOI/SEM or NEMHQ, and later on submitted to the local/provincial/national government. Usually they are not followed by public or parliamentary debate. Analyses are partial, from a viewpoint of a particular agency, and with no comprehensive synthetic reports. They are usually not publically available, remaining within particular ministries or narrow circles of the professional public. Lessons learned are not easily transferred into rules, procedures and practice. (Interview key respondent from MOI). In general, crisis actors are in a certain way protected from responsibility in the Serbian political context with fragile coalition governments (See 3.3.1.).

If a crisis situation occurs in military facilities, the investigation is conducted by the Army and usually results are not available for non-military actors. They sometimes might be long-lasting and inefficient. (Blic, 2012).

In some crisis situations on the local level there have been professional debates and judiciary processes. The case of fire in the *Contrast* disco club in Novi Sad, in April of 2012 that killed six young people is illustrative. This event triggered a series of public controversies since the facility was inadequate for the purpose and overcrowded. After eight months of prosecutorial investigation, the responsibility of authorities was not addressed, there were no tangible results and it was not determined who was to blame. At the same time bars that have been closed in a campaign manner

⁶⁴⁹The political background of the assassination was not within the mandate of the Commission. The commission for examining of the system of protection of the prime minister of the Serbian government dr Zoran Djidjic (2003).

are working again, the clubs are still burning torches, to make "fire" cocktails and everything is more or less the same as before that tragic event. Additional exits have not been made, the clubs are still overcrowded and it is questionable whether they have got fire equipment. Reporters got no answers on these questions from the SEM. The father of one of the dead girls launched an initiative to amend the three laws concerning the registration of nightclubs and restaurants, as well as the adoption of the rules of fire protection for this kind of facility ("Tamara's Act") to put an end to the bad practice of registering the night clubs before they meet fire protection measures. He said that nothing concrete has been done and that he will continue to struggle because they do not want any more afflicted families. The public prosecutor has launched an investigation against the owner, two tenants and an electrician, and at the request of defence counsel, the trial was postponed before it started. Parents of the victims believe that the responsibility should be looked for also in the relevant inspections - construction and tourism, and the SEM for inadequate inspection and intervention. (Stepanov, 2012).

3.1.2 Limits to national capacities

Serbia formally requested assistance from the Russian Federation in 2007 in the case of a forest fire. Ever since, each summer Russian special airplanes and crews arrive at the centre for emergency situations in Niš as a preventive system back-up support in accordance with the bilateral agreement. This assistance is humanitarian in nature and free of charge. The main reason for such assistance is insufficient capacities, as Serbia does not have this kind of equipment. (Interview key respondent form MOI)

A state of emergency was declared one time in the period of 2000-2012, in 2003 after the assassination of Prime Minister Zoran Djindjic that destabilized the government. As Serbian legislation was too liberal (in terms of police powers, duration of detention etc), the state of emergency was introduced in order to make necessary constitutional changes and amendments to the Criminal Code and the Code of Criminal Prosecutions that would enable the police to effectively prosecute the offenders. The government mounted Operation Saber ("Sablja"), the police action aimed at finding the assassins and striking a serious blow to organized crime. However, a number of political opponents to the Democratic Party and its government were arrested during this action in connection with organized criminal groups. Most were later freed. At the end of the operation, most of the suspects for the assassination were arrested (Vasić, 2005). The state of emergency lasted for 40 days (12.3. – 22.4. 2003) and was revoked by the government after the adoption of necessary legal changes.

Introducing the state of emergency was a signal that the whole criminal justice system was not able to combat organized crime and it significantly contributed to improving the legislation and reform of the security sector.

An emergency situation (described in 2.2.3.) was declared only once in February 2012 due to extreme weather conditions. No significant improvements in coping with extreme weather conditions have been made so far. In a similar situation in December 2012 the actions undertaken by responsible actors were not adequate and in a timely manner.⁶⁵⁰ Due to the collapse in the road transport network that was created in December 2012 by heavy snowfall, the prime minister criticized the minister in charge, while the representatives of the public enterprise "Roads of Serbia" claimed they did their job responsibly and that the blame for the current situation is on unscrupulous drivers of heavy vehicles that are speeding and driving without adequate winter equipment and creating traffic jams. They also criticized the "competent authorities" (not explicitly mentioning Ministry of Transport) for not having prohibited cargo traffic on the most critical sections until crews could clear them up and the weather would allow for cargo traffic to proceed. It was not specified who the "competent authorities "were, nor explained how the cooperation between the Republic Hydro meteorological Service, the enterprise "Roads of Serbia", traffic police and MOI were functioning in practice (Galovic, 2012).

3.2 Efficiency

It is very hard to apply the concept of efficiency to the Serbian civil security system. Before the adoption of LES there was no particular budget for crisis management, and annual expenditures for this purpose, from the budget of MOI, were only around 50,000 euro, while costs of crisis situations were covered from budget reserves on an ad hoc basis. When the national budget is tight and there is extreme pressure for critical resources, expending funds or distribution of funds for contingency requirements is a difficult choice, so providing the funding to respond to a disaster was for decades considered an *ad-hoc* requirement to be dealt with at the time of the emergency. Actually, the only major investment in crisis management before adoption of the e LES was in 2007 when \in 12.8 million from the National Investment Plan was spent on purchase of vehicles for firefighters (Interview key respondent in MOI).

⁶⁵⁰One of the reasons is that the Republic transferred road maintenance responsibility to the municipalities, but failed to carry out the transfer of funds for this purpose. In addition, some municipalities have signed contracts for road maintenance with companies that have gone bankrupt.

LES designated the following funding sources for crisis management:

- Budget (national/provincial/local)
- Fund for emergency situations, and
- Other sources specified in LES and other laws

It is not possible to present total expenditures for crisis management.

The budget of the Republic of Serbia shall provide funds for the permanent budget reserve, which is used to finance expenditures for participation in eliminating the consequences of emergencies.⁶⁵¹ The permanent reserve is up to 0.5 percent of total revenues and income from the sale of non-financial assets for the fiscal year. The government decides on use of the permanent budget reserve, at the proposal of the minister of finance. Besides this, the municipality/province is required to determine its budget funds for maintenance of the system as well as provisions for elimination of consequences of emergencies.⁶⁵²When the municipal/provincial fund is not sufficient for elimination of consequences of emergencies, then, in accordance with the criteria established by a government decree, funds from Republican budget reserves are transferred.

The newly established fund for emergency situations is aimed at the construction and maintenance of the civil security system. In the beginning, the fund will be used for necessary building and equipping of the system in accordance with the planned priorities, while later on all the crisis management actors will apply with their projects for these funds. (Interview key respondent MOI). In 2011, the fund disposed of \notin 5 million, in 2012 - \notin 10 million⁶⁵³, and \notin 15 million are planned for 2013.

Serbia is still considered a country of "nonconsolidated democracy" with a number of political and social tensions (Vujaćič, 2009), so the question of efficiency in disasters is more complicated. Questions of budget on each level of governance are very important. Resources set aside for this purpose were utterly insufficient, so that the Serbian president after the flood in Trgoviste in 2010 said that "funding for emergencies must be provided in the budget." Regardless of official statements, there is no money for this purpose and financing is purely reactive, without investments in prevention and mitigation. (Radovic & Jovanovic, 2011). The efficacy of the Serbian crisis management system will be possible to question only once its funding is stabilized and its most basic needs satisfied, having in mind that for a number of years not even minimum funds were invested in it.

⁶⁵¹For this purpose in 2013 around €14 million is planned.

⁶⁵²In SEM there are no centralized data of the total amount of these funds.

⁶⁵³Serbian budget for 2012 was around €8.5 billion.

3.3 Legitimacy

3.3.1 Political support

The legacy of the authoritarian rule, sanctions and political crisis in the 1990's, as well as the lack of democratic and parliamentary traditions and the basic consensus among the parliamentary parties on key social goals and values and how to solve the major problems of society have resulted in slow progress in building democratic and stable social institutions. Due to the huge program differences among members of the ruling coalitions, there was no stable parliamentary majority and only one government since 2000 that lasted a full mandate which made it difficult to implement social reforms. The greatest responsibility lies on the leadership of political parties whose narrow party, group and personal interests and the struggle for political power and money, are "mirrored" in the lives of all social institutions. So instead of democracy, Serbia has a partocracy, a de facto unconstitutional dominance of political parties over constitutional and governmental agencies and institutions (Vućetić, 2008).

In such a political context it took almost two decades for political actors to understand the importance of crisis management and to reach a basic consensus on the foundation of the current civil security system. The adoption of LES was preceded by several expert discussions, while the enactment in Parliament passed without major controversies. Nowadays there is a general political support of key players for building a new system (Interview key respondent MOI). However, political actors sometimes see crisis as an opportunity for self-promotion and scoring political points,⁶⁵⁴ or denouncing political opponents⁶⁵⁵. Political interests and assessments sometimes have a greater impact on the functioning of local EMHQs than professional considerations. (Interview City of Belgrade EMHQ)⁶⁵⁶

Since the establishment of the new system of civil security there have been no major criticisms and no political consequences for political representatives that relate to crisis management. Just in one

⁶⁵⁴In bitter comments, citizens of mountain villages blocked in a storm in February 2012 accused the minister of interior who visited EMHQ by helicopter that he used the trouble of people in order to gain voters. See http://www.blic.rs/Vesti/Politika/305591/Dacic-danas-u-Sjenici-i-Ivanjici/komentari

⁶⁵⁵After the earthquake in Kraljevo representatives of the city opposition accused the government of irregularities in the allocation of funds for the (re)construction and asked for a detailed report. The mayor said that, "since the special account was opened, daily reports on inflow and expenditure of funds are published on the city's website and urged police and prosecutors to check all the charges, saying that those are irresponsible and baseless accusations in order to collect political points See:

http://www.blic.rs/Vesti/Drustvo/240950/Ukinuta-vanredna-situacija-posle-zemljotresa-u-Kraljevu

⁶⁵⁶ Sometimes, a commander of EMHQ on the local level can be a member of one party, and the minister of interior, to whom the head of SEM is responsible, can be a member of another party. Those political parties can have different interests and perceptions when it comes to the managing of a particular crisis. In this kind of conflict, usually the more powerful political party will determine the course of action.

case, due to the inadequate reaction of the local government in the town of Trgoviste during the floods in May 2010, the entire municipal leadership was forced to resign three months later (Veljković, 2010).⁶⁵⁷ However, the problem related to the decades of neglecting of systematic measures for flood prevention.

In the period of 2010-2012 there were only eight parliamentarian questions related to emergency management. Most of them were about the compensation of damages from natural disasters and none of them was answered by the minister of interior, but by the prime minister or other ministers) or the answer was postponed. (Parliament, 2011) Only one question was about addressing the responsibility for the damage caused by storm and hail and reorganization of hail protection service.

3.3.2 Legal support

There have been several complaints to the Serbian ombudsman related to natural disasters. Despite the fact that the Law on Using Funds for Restoration and Protection from Natural Disasters is in force, people who are affected by natural disasters face many problems. As regards large-scale damages, for which the state and/or local self-government have allocated a certain amount of funds to help the affected citizens, the following problems occur: a lack of regulations setting the terms, procedures and criteria for determining the order for awarding the funds for restoration of damage (ranking); the absence of a body authorised to decide on objections/appeals filed against the decisions of competent authorities; the absence of a body authorised to control the use of funds allocated for the elimination of consequences of natural disasters.

The citizens who have suffered smaller scale damages face different problems. According to the views of the competent judicial and administrative authorities, they usually cannot expect the state to participate in restoring the damage caused by natural disasters.⁶⁵⁸ When they receive a decision from the relevant city or municipal inspection on the prohibition of using a damaged residential building, in practice they are often provided with temporary accommodation for a short period, and

⁶⁵⁷The question of accountability for a crisis in the Serbian context is slightly peculiar, taking into account that after the disintegration of SFRY, followed by three wars and 500,000 refugees and IDPs, economic sanctions and isolation, the highest inflation in the history of mankind, the armed uprising on Kosovo and the NATO bombing, citizens of Serbia have somewhat grown accustomed to crises.

⁶⁵⁸In the procedure of citizen complaints, the Ministry of Environment, Mining and Spatial Planning expressed its view that the mere fact of the damage caused by natural disasters and its assessment by the authorised commission did not produce an obligation of a public authority to compensate for and restore the damage, bearing in mind that the damage had been the result of circumstances that could not be predicted. This attitude was also articulated in the decision of the Supreme Court of Serbia Rev. No.2241/2007 of 11 September 2008, stating that when the damage was caused by the so-called *force majeure*, the effects of which could not be predicted, the rule on exemption from liability was generally applicable. However, when the *force majeure* causes large scale damage affecting more people, then the state intervenes and commits itself and its institutions to secure all or part of the funds for eliminating the harmful consequences according to the principle of solidarity.

then the local self-government informs them that there are no funds in its budget earmarked for repairing the damage or constructing a new residential building, after which they are left on their own.

The situation in this field is additionally complicated by the fact that the government and the competent minister (MOI) were obliged to adopt more detailed regulations for the implementation of the said law within six months of its entry into force, which, according to the available information, has not been done (Protector of Citizens, 2011: 131-135).

LES provides equal protection for all citizens in crisis situations. In addition, NSPRE insists on paying special attention to the training of all agents of crisis management in order to provide appropriate assistance and protection of vulnerable social groups / children, elderly and persons with disabilities in natural and other disasters.

3.3.3 Popular trust and support

In general, the level of trust in institutions in Serbia is low, as presented in the following table

	Don't know	No trust	Neither have nor haven't	Have trust	Total.
Church	4	19	18	59	100
Police/Police officers	2	25	28	45	100
Army/Soldiers	7	21	28	44	100
MOI	2	26	30	42	100
Educational system	4	28	28	40	100
Health system	1	36	26	37	100
MOD	7	28	32	33	100
Local government	4	42	29	25	100
Serbian Government	3	47	30	20	100
Judiciary	4	52	26	18	100
Citizens associations	10	43	29	18	100
Parliament	3	53	28	16	100
Political Parties	4	66	21	9	100

Table 2: Trust in institutions (%)

Source CeSID, 2011

There are no particular surveys on trust in institutions of civil security systems, but the presented data show that trust in the police, MOI and MOD, as important actors of crisis management, is higher than for all other institutions except the Church.

There are no particular data on trust in SEM, and, as said before, data for the MOI cannot be mechanically transferred to SEM. However, some conclusions can be drawn indirectly. People in Serbia usually perceive institutions through their leaders. So the SEM is perceived through its head, Mr. Predrag Maric who is often in the media, trying to raise awareness, explain problems and emphasize the importance of crisis preparedness and sharing responsibility in this area. For his work he got several local (person of the year in capital Belgrade) and international (French medal of knight) awards, so SEM efforts are recognized and appreciated by the community (Interview key respondent MOI).

4. Serbian Civil Security in the EU Context

Serbia is not an EU member but only a member candidate from 2012, hence, it only has a focal point for the exchange of information with the Monitoring and Information Centre (MIC). Currently, after receiving candidate status, Serbia is to enter negotiations with the European Commission by signing a memorandum of understanding which will enable Serbian membership in the Community Civil Protection Mechanism and the Civil Protection Financial Instrument.⁶⁵⁹

The candidate countries and potential candidates for EU membership can co-operate with the EU in specific fields before their full membership. This also includes civil protection with its humanitarian

⁶⁵⁹ In the negotiations with the EU, Chapter (Group) 27 is particularly relevant -. Environment that refers to civil security obligations (Council Directive 88/610/EEC of 24 November 1988 amending Directive 82/501/EEC on the major-accident hazards of certain industrial activities incorporated by 21994A0103(70); Council Resolution of 16 October 1989 on guidelines to reduce technological and natural hazards; Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances; 98/22/EC: Council Decision of 19 December 1997 establishing a Community action programme in the field of civil protection; 98/433/EC: Commission Decision of 26 June 1998 on harmonized criteria for dispensations according to Article 9 of Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances (notified under document number C(1998) 1758) (Text with EEA relevance); 98/685/EC: Council Decision of 23 March 1998 concerning the conclusion of the Convention on the Transboundary Effects of Industrial Accidents; 98/685/EC: Council Decision of 23 March 1998 concerning the conclusion of the Convention on the Transboundary Effects of Industrial Accidents; 1999/314/EC: Commission Decision of 9 April 1999 concerning the questionnaire relating to Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances [notified under document number C(1999) 856] (Text with EEA relevance); 1999/847/EC: Council Decision of 9 December 1999 establishing a Community action programme in the field of civil protection Validity extended by 32005D0012 till 31/12/2006; 2002/605/EC: Commission Decision of 17 July 2002 concerning the guestionnaire relating to Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances (notified under document number C(2002) 2656); 2005/12/EC: Council Decision of 20 December 2004 amending Decision 1999/847/EC as regards the extension of the Community action programme in the field of civil protection; Text with EEA relevance and Commission Regulation (EU) No 1014/2010 of 10 November 2010 on monitoring and reporting of data on the registration of new passenger cars pursuant to Regulation (EC) No 443/2009 of the European Parliament and of the Council Text with EEA relevance Corrected by 32010R1014R(01) and several proposals of Council decisions.

mission, making both regional cooperation and the EU perspective more tangible for the citizens. Significant progress in this cooperation was made in 2008 during the Slovenian presidency of the EU Council. The EU Council conclusions on cooperation with the candidate countries and potential candidates of the Western Balkans in the field of Civil Protection were adopted, serving as a basis for the development of a comprehensive programme by the European Commission in this field (MOD of the Republic of Slovenia- Administration for Civil Protection and Disaster Relief, 2011).

A comprehensive programme on Strengthening Cooperation in the Field of Civil Protection with the Candidate Countries and Potential Candidates of the Western Balkans and Turkey was developed in 2010 by the European Commission program for civil protection cooperation with the candidate countries and potential countries. The program is financed through the EU Instrument for Pre-Accession Assistance (IPA) and the beneficiary countries are Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Kosovo under UNSCR 1244/99, and Turkey. The program has a budget of €4m and a two-year implementation period (ending in May 2013) for financing events on operational and strategic level within the EU Programme on Civil Protection Cooperation. These events are organized in three LOTs with the emphasis on exchange of experts, training programs, exercises (field and table-top), workshops to share experiences, lessons learned and best practices. Training courses have ended (basic training course, operational management course, advanced training course) with 44 people participating in them. There were organized exchanges of experts in different areas (EU Civil Protection Mechanism, CBRN, Host Nation Support, forest fires, IPA, early warning system, 112 system, national training centre). There were also workshops about the exchange of experiences and best practices organized in different areas (EU Civil Protection Mechanism, CBRN, Host Nation Support, lessons learned, forest fires, IPA, early warning system, 112 system). The program is one of the steps to pave the way of the beneficiary countries towards the EU in the field of civil protection, with the overall objective to reduce the vulnerability of those countries to natural and man-made disasters at local, national and regional levels. It encompasses activities aiming at increasing synergies and complementarities among EU instruments, and regional and national efforts that can be mobilized to deal with a variety of disasters in the Western Balkans and Turkey. The program includes courses on procedures for sending and receiving international assistance under the mechanism, regional field exercises aimed at practicing procedures for sending and receiving international assistance, in accordance with existing procedures within the framework of the EU Civil Protection Mechanism and exchange of experts. 660

^{bou} During major disasters the neighbouring countries have been the ones who most often offer assistance. The international assistance provided to the affected state can easily turn into additional problems if the assisted country is not prepared to receive the assistance and does not know how to deal with the incoming international teams/EU civil

5. Conclusion

After two decades of legal vacuum, organizational and institutional confusion resulting from the collapse of the civil security system adapted to the socialist society and the lack of elementary responsibility and vision of political leadership, Serbia in 2010 set up a normative/legal basis for the construction of a new civil security system.

When designing the new system and making the law, comparative experiences, historical background, capabilities and capacities of the country and its prospects of EU integration, as well as the current political constellation were taken into account. The professional community has positively assessed the legal text. Normative regulation of the system is almost completed, but the passage of national laws is not a sufficient response. However it puts the government in a better position in having addressed the problem and laid the foundation for a national response capability. The implementation or enforcement phase is facing a number of problems such as insufficient resources available and problems related to creation of other organizational, personnel and material and technical conditions for its successful implementation.

There is a growing recognition that disaster prevention and emergency response must be one of the government's priorities. Although general political consensus on the importance of the civil security system has been achieved, there remains a reflection of existing political divisions and interests on professional performance, as well as an underlying political calculus in all phases of crisis management, when political actors are more preoccupied with their ratings, than with the wellbeing of the citizens. Relations between the state and civil society actors are not precisely defined, and they are dependant on personal relations among people in institutions. Like in most of the SEE countries there is significant room for national and multilateral initiatives to improve public awareness and involvement in disaster preparedness efforts (DPPI, 2001).

The fact that the system has been in existence for only two and a half years and it is still not working at full capacity, since it is not completed in a normative and institutional sense, makes any attempt of serious analysis and its evaluation difficult and problematic. Nevertheless, some general remarks can

protection team. Most of the neighbouring countries are parts of the EU Mechanism, and the aspiration of Serbia is to become its part as well. Therefore, it is essential that the target region/neighbour countries are well prepared to cooperate and coordinate during emergency response. The timely and adequate request for international assistance through the EU Civil Protection Mechanism is essential for the efficiency and effectiveness of the provided assistance. Also, coordination and host nation support are among the key issues for a timely response, as well as, the acceptance and deployment of international disaster relief efforts and the provided resources.

be made. In NSPRE it is stated that the current level of organization and capability of the system of civil security in Serbia is significantly behind the assessed needs and objective possibilities of the state. There is a need for technical innovation and equipping, as well as for improving and modernisation of infrastructure, of informational-communication systems in accordance with EU standards. The statistical data in Serbia show insufficient capacity of the society to respond to the present challenges, risks and threats in an adequate way, which results in material and non-material damage, both at the level of commercial entities and at the state level (Keković, Marić, and Komazec, 2011). Prevention seems to be the weakest point, together with the fact that in some parts of the Serbian population there are no traces of awareness and responsibility for safety. There are also problems related to the harmonization of different organizational cultures of staff co-opted in SEM and overcoming the divisions between "us "and "them".⁶⁶¹ (Interview key respondent MOI)

The most important gaps outlined in NSPRE relate to *institutional organization* (lack of conditions for the consistent application of regulations, inadequate organization and implementation of preventive measures, lack of specialized cadastres, comprehensive risk maps, methodology for hazardous waste management, 112 system, uneven distribution of capacities of the emergency response services in the RS), *material – technical* (unsatisfactory level of road and other infrastructure, outdated, unreliable equipment, facilities and vehicles of the emergency response services, lack of specialized vehicles and equipment for responding to chemical accidents in road, rail and river transport etc.), *cooperation, coordination and availability of information* (insufficient coordination between protection and rescue system entities in emergency situations, between scientific and research institutions and direct beneficiaries of researches, with NGOs and the private sector and international cooperation), *human resources and capacity building* (inadequate professional qualification and technological discipline of the available human resources, lack of specialized personnel, insufficient training, unpreparedness and a low level of the local self-government capacity and underdeveloped culture of prevention).

The system has been tested in practice in several natural disasters (floods, extreme temperatures and an earthquake) and in one technological disaster. The general assessment is that, given the fact that it is not fully completed, it functioned relatively well.⁶⁶² The system proved relatively successful in a crisis situation caused by a snowstorm in February 2012, but in a similar situation in December 2012, reacted poorly. Recurrence of similar technological accidents (fires in night clubs) indicates the inability of the system to properly determine liability, draw lessons and translate them into standard operating policies and procedures. Procedures for determining the professional and legal

⁶⁶¹ This refers to the employees of the MOD (an institution with military organizational culture) who were incorporated into the MOI.

⁶⁶² It can be stated that it functioned significantly better than in a similar situation before the introduction of the new system

accountability are complicated and take a long time so that sanctions are not effective, while due to the overall constellation of political relations political accountability is minor.

Development and completion of the system will depend on material and technical requirements, support of political actors and enthusiasm of the professionals in SEM and in other institutions responsible for crisis management.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 SERBIA

1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Law on emergency situations	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	Law on emergency situations	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1	Law on emergency situations	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	Law on emergency situations	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)

2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	Serbian Constitution	
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1	Serbian Constitution	
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	2	Serbian Constitution	
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	2	see section 2.1.1	
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down=1Bottom-up=2Both = 3-	2	see section 2.1.1	
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		86	http://geert- hofstede.com/countries.html	-
2.1.2.a.ii	Geert Hofstede country national cultural score - IDV		25	-	-
2.1.2.a.iii	Geert Hofstede country national cultural score - MAS		43	-	-
2.1.2.a.iv	Geert Hofstede country national cultural score - UAI		92	-	-
2.1.2.a.v	Geert Hofstede country national cultural score - LTO		NA	-	-

2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0.35	World Value Survey's website on national level value scores by country	Year 2006
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self-expression		-0.62	World Value Survey's website on national level value scores by country	Year 2006
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	1	see section 2.2.1	
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2009/2010	see section 2.2.1	
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	see section 2.2.1	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?		1	see section 2.2.2	

2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?		0	1	see section 2.2.1	
2.2.2	Political dimension					
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?			3	see section 2.2.2	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level At the regional level At the local level = 3		1	see section 2.2.2	
2.2.3	Operational dimension					
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = Yes = 1	0	1	see section 2.2.3	BBK
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = Yes = 1	0	0	see section 2.2.3	
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = By law = By executive mandate = 2	0 1	0	see section 2.2.3	
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number		56	Interview key informant in SEM	
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number		3	Interview key informant in SEM	

2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	0	Interview key informant in SEM	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	5	Interview key informant in SEM	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	10	Interview key informant in SEM	
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	3	Interview key informant in SEM	
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	see section 2.3.1	
2.3.2	Information				

2.3.2.a	Does the country maintain a siren system?	No Yes = 1	=	0	0	see section 2.3.2	due to lack of finance
2.3.2.b	Does the government have a system for radio/TV warnings	Yes, at the 1 Yes, at th	= e local/regional ne national lev oth local/region vels = 3	el = 2	3	Interview key informant in SEM	
2.3.2.c	Does the government have a central website with updated information on crisis events?	Yes, at the 1 Yes, at th	= e local/regional ne national lev oth local/region vels = 3	el = 2	0	Interview key informant in SEM	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	Yes, at the 1 Yes, at th	e national lev oth local/region	el = 2	2	Interview key informant in SEM	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	Yes, at the 1 Yes, at th	= e local/regional ne national lev oth local/region vels = 3	el = 2	0	Interview key informant in SEM	
2.3.3	Education						

2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1	0	Interview key informant in SEM
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To member ands wide-spread training programmes for general population = 3		see section 2.3.3
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2		Interview key informant in SEM
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		0	Interview key informant in SEM
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number		
2.4	Role of private sector			
2.4.1	Role of societal/ non-profit organisations			
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	see section 2.4.1

2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	2	see section 2.4.1	
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	Interview key informant in SEM	
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	1	Interview key informant in SEM	
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3 3.1	Quality measures Effectiveness	Scoring instruction	Score	Source	specific problems with
		Scoring instruction	Score	Source	specific problems with
3.1	Effectiveness		Score 4	Source Interview key informant in SEM	specific problems with

	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000- 2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA	N/A		
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	1	Interview key informant in SEM	
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?		1	Interview key informant in SEM	
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.	1	Interview key informant in SEM	
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	1-2 instances = 1	0	Interview key informant in SEM	
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	N/A		

3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?		0	see section 3.3.2	
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None=0Partial (legally defined leewayforoperationalforoperationalcrisismanagement)=1Extensive(e.g.nocivilianjurisdictionoverin crisismanagement)=2	0	see section 3.3.2	
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	N/A		
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	N/A		
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	0	see section 3.3.3	
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011		see section 3.3.3	
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	80000	see section 3.3.3	
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)

4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?		N/A	-	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	N/A	-	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	0	Interview key informant in SEM	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009-2010 training cycle			
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002- 2012	0	Interview key informant in SEM	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002- Sept 2012	0	Interview key informant in SEM	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	0	Interview key informant in SEM	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)		N/A		
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)		N/A		

Annex II: H1N1 in Serbia

The first alarm on the new virus in Serbia was the information from the WHO (24.4.2009), while the first laboratory-confirmed case of H1N1 was registered in Belgrade on 24.06.2009. (imported from Argentina) and the first death was reported in October 2009. The epidemic period lasted for 9 weeks. Based on a special epidemiological surveillance, the estimated number of infected was 750,000 to 1,000,000 out of 7,120,666 inhabitants (Census 2011)⁶⁶³, the total number of hospitalized people was 6,021, and 137⁶⁶⁴ died - including 10 pregnant women. The disease frequency was the highest in the age group of 7 to 14 years. Economic effects, without the losses in the economy caused by the fall in production and trade, were between 6.2 to 8.2 billion dinars (64.5 to 85.5 million \notin). Around 1/6 to 1/8 of all costs were the costs of the preventative and anti-epidemic measures. (SWG, 2010)

The main operative and politically responsible actor in the crisis was the Ministry of Health which established a Special Working Group (SWG) as an expert and operative body that coordinated measures with the Institute for public health, the network of public health institutes in the country, other ministries and agencies, local self governments and other subjects.⁶⁶⁵ The private health care system was not particularly engaged in the crisis.

The SWG and the joint body for communication tried to provide updated information on the pandemic, including advice and support for the public on specific questions (travel, social gathering etc.), as well as public support for anti epidemic measures and prompt exchange of information on the course of pandemic between health authorities, ministries, agencies and partners.

Doctors, members of SWG, representatives of the Ministry of Health and the veterinary department of the Ministry of Agriculture, Water and Forestry in 2009 had 3,265 media appearances, 13 press conferences, and one meeting with media representatives. The detailed overview of their media activities is shown in the Table 3.

⁶⁶³⁷⁰⁶ laboratory confirmed

⁶⁶⁴84 laboratory confirmed

⁶⁶⁵The Institute of Public Health of Serbia "Dr Milan Jovanović Batut" was established on the Republic level and represents an expert institution for public health, which provides advice, support and guidance for the Serbian government and all departments for public health and conducts independent research on issues related to public health in Serbia. One of the main tasks of the Institute is control and prevention of infectious and non-infectious diseases, as well as maintaining and improving readiness in emergency cases. http://www.batut.org.rs/index.php?category_id=122.During_this_crisis_the_Institute_had_a_coordinative_and monitoring_role.

Table 3: H1N1 Media related activities

Media/	Flu/pandemy	Vaccinacion	Total
Торіс			
Press	410	500	910
Agencies	338	500	838
Radio	307	350	657/5,500 min
TV	400	460	860/7,000 min
Total	1,455	1,810	3,265

Source: SWG

Those media activities were followed by a video on TV and a radio jingle "Stop pandemics" broadcast on 14 electronic media free of charge.

The first serious preparations for the case of pandemic in Serbia were undertaken during the avian influenza (bird flu) 2006 to 2009. Cooperation was established between health and veterinary services, the training of health workers and the representatives of local government and media was conducted, and guidelines for the functioning of the health system were made.

After the first information from WHO on the emergence and spread of the H1N1 virus, the epidemiological situation was assessed as threatening and the nationally designed professional methodology manual for the control of importation and preventing the spread of new virus in Serbia was implemented through the health care system, so in each suspected case the material was sampled for virological testing and for seven days control measures (monitoring of the patients) were imposed over all persons in contact with infected people.

After the first laboratory-confirmed case the epidemiological situation was assessed as an emergency and recommendations were made for the participants and organizers of mass events. After the first 100 laboratory-confirmed cases, a shift was made from measures aimed on preventing, to measures aimed at control of spreading the virus. In September and October the epidemic has spread to schools across the country and the epidemiological situation was assessed as unfavourable. Therefore, a plan for immunization of priority groups was prepared. After the first reported death the situation was assessed as unfavourable with a tendency towards further deterioration. The minister of health declared an epidemic on 12.11.2009 and ordered measures that include emergency immunization of certain categories of the population (like health care workers, and other first responders, senior population and children) (Interview key respondent Military Medical Academy).

Minister of Health Tomica Milosavljevic stated that the pandemic was developing according to the mildest among three assumed scenarios, while the vaccination was from the beginning subject to negative campaign by some media, politicians and even doctors, and out of the 850,000 doses, which had been delivered and paid for (following the decision of the government and recommendation of local experts and WHO advice), only around 150,000 were used. During the vaccination campaign, a negative campaign started both globally and nationally. The vaccination coverage was 2.5 percent of the population, which is low, but it is up to five times higher than in neighbouring countries. The activities related to combat the pandemic H1N1 were under-valued in public while superficial comments of the health situation in Serbia belittled the victims (NasloviNet, 2010).

According to the analysis done by Professor Dragan Delić, the president of the Health Council of Serbia,⁶⁶⁶ regardless of all quasi medical and daily political influences, the proclamation of epidemic of H1N1 virus infection in Serbia was professionally grounded as well as the emergency measures ordered by the SWG of the Ministry of Health for its containment. He believes that there was, at the very least, the moral responsibility of all public figures (doctors, politicians, journalists etc.) who, mainly due to the political reasons, advocated refusal of vaccination through public media.⁶⁶⁷ The fact that many health care workers did not promote immunization as the most effective, easiest, safest and most economical measure in the prevention and control of infection, but even discouraged citizens by carrying out a negative campaign, requires a special discussion in professional associations. Some media, by publishing the wrong information and giving space to doctors who are not experts in this field of medicine caused particular confusion. The experience from the pandemic indicates that campaigns should not be led by politicians, but health care workers, the health care system and, in particular, the Institute of Public Health of Serbia.

The most important deficiencies were observed in coordinating activities in the work of multisectoral bodies of the health system in the field of promoting immunization and in communication with the public. Nobody even looked at the economic side of the pandemic, which is valid for any rational society. Procurement and purchasing vaccines have nothing to do with health care per se, but are a classic example of possible corruption in the public procurement system involving state officials, and this caused immense damage to the health system of Serbia and the immunization program (Delić,

⁶⁶⁶Health Council of Serbia is a professional advisory body whose members are elected by the Serbian Parliament from among eminent experts in the field of health care, dental care, professional associations of medical doctors and Serbian Academy of Sciences.

⁶⁶⁷ Unfortunately, in Serbia even health-related issues are subject to political calculations and confrontations.

2012).

The pandemic crisis in Serbia was followed by a criminal affair regarding frauds in vaccine procurement. The prosecutor for organized crime of Serbia has filed an indictment against the exdirector of the Republic's Institute for Health Insurance and three of her associates, the ex-director of "Jugohemija", the director of the company "Jugohemija farmacija", and the director of "Detap" company. They are suspected of cheating the state budget out of approximately EUR 1.25 million. This is related to irregularities surrounding the supply of the vaccine for swine flu towards the end of 2009. All of the above stand accused of committing an 'abuse of office', which is a criminal offence and which carries a jail term of between 2 to 12 years. According to the media, the arrested Republic Institute for Health Insurance (RZZO) director, Svetlana Vukajlović, claims that she was the one who initiated termination of the contract and that the former health minister was against it. On the other, hand Minister Milosavljevic said that a decision to terminate the contract had been made at a government telephone session due to a lack of citizens' interest to get vaccinated (b92,2011).

There were also controversies about possible corruption in the vaccination campaign. The Anticorruption Council of the Serbian government found that the Ministry of Health spent around €35,000 on promotion in the media which is the reason that a small number of the media outlets reported objectively about the transaction of the urgent purchase of the vaccine, and questioned the responsibility of the minister of health in this transaction, although it eventually turned out that the purchase was disputable and the quantity of purchased vaccines was excessive and unnecessary.(Anti-corruption Council, 2011:22.)

Annex III: Resources

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Slovakia

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Executive Summary

The current form of Slovak civil security system was set-up in 2002. The most frequent crises that occur in Slovakia are natural disasters - floods, storms and extreme temperatures (both heat waves and frosts). The typical crisis is floods. The most important one which demonstrated the weaknesses of the system was the flood of 2010. Thereafter, the Ministry of Interior (MoI) decided to reform the Integrated Rescue System (IRS).

In Slovakia, the so-called parallel model of public administration exists. Public administration reforms between 1996 and 2004 lead to some confusion in crisis management. The responsibility for civil security rests mostly with the state administration. The main actor is the Mol. In practice, the regional level primarily responds to crises. Here, the prominent position is held by the district offices in the seat of region which are managed by the Mol. The system is based mostly on civilian operations. The military is a secondary body in the IRS serving especially as a provider of equipment in times of crises.

The state is responsible for ensuring warning at the entire permanently inhabited territory by electronic sirens or alternative means. At the regional level, the information on civil security, including an update on the current crisis situation is always a subpart of the official webpages of the region. The education of public administration is organized hierarchically: the leading agency is the Mol.

The expectations of the public towards the government are relatively high. The fire rescue brigades and the army are highly trusted. People are willing to volunteer both spontaneously as well as in an organized way. The most important civic organizations here are the VFB and the SRC. Private (for-profit) companies especially dominate in the field of health provision as the Health System Reform of 2004 included complete privatization of health rescue services.

There are four key acts governing civil security. Legislation is sometimes criticized for lack of clarity. An "emergency situation" can be declared at all levels of administration. It is used mostly by municipalities for small-scale crises. Up-scaling takes place according to the territorial spread of a crisis. So far, the floods have been dealt with at the regional level as the highest level. During the 2010 flood, many regions were calling an "emergency situation". Help with floods was requested and received in 2006 (through NATO EADRCC) and in 2010 (agreement with Poland and the Czech Republic). A "state of emergency" was declared by the government in 2011 when there was an acute shortage of medical doctors. The country requested and received help from the Czech Republic.

Slovakia has established bilateral cooperation with all its neighboring countries and is part to several multilateral agreements. It participates at the EU MIC. The country itself activated the mechanism during severe frosts in 2012 but in the end did not request any help. Since 2004, the country often participates at EU crisis-response exercises.

Civil security does not belong to the list of hotly debated topics in Slovakia. The number of interpellations is quite low and there were no crucial complaints or petitions filed by citizens. None of the crises had an effect on parliamentary election nor did it lead to a political crisis.

Key Findings

- 1. The VFB are an important part of the Slovak civil security system. They have a long tradition and an important operational role in response.
- 2. Lack of clarification regarding the responsibility for crisis management response (as for example during the flood of 2010). This leads to difficulties in coping with disasters. The lack of clarification can be attributed to the changes in administrative organization (several reform steps in public administration reform over the last decade) and to ambiguity of some legal provisions.
- 3. Mayors of municipalities are supposed to take an important role in response, but they are unprepared. Sometimes they are not cooperating so well with the state administration at the level of the district.
- 4. Insufficient resources. Difficulties in coping with disasters are caused by under financing and inadequate technical equipment.

List of Abbreviations

- DO District Office
- EADRCC NATO's Euro-Atlantic Disaster Response Coordination Centre
- IRS Integrated Recue System
- MIC EU's Monitoring and Information Centre
- Mol Ministry of Interior
- PHA Public Health Authority
- SITA Slovak Information and Press Agency
- SRC Slovak Red Cross
- VFB Voluntary Fire Brigades

1. Introduction

The most frequent crises that occur in Slovakia, in the independent history of the country from 1993, are caused by extreme weather conditions. Although industrial and transportation disasters do occur (such as a coal mine explosion in 2009 or explosion at military repair facilities in 2007), they are comparatively less important than natural disasters in terms of the number of people affected (EM-DAT online).

The typical crisis which regularly tests the civil security system preparedness is floods. The most important one which also demonstrated the weaknesses of the system was the flood of 2010. It revealed that the IRS was not sufficiently ready to deal with consequences of a large-scale event at the central level for a long period of time. After this experience, the government approved a new conception of the IRS and its operation in January 2011. (Mol 2011)

Table 1 provides an overview on crises between 2000 and 2012 according to the available data (CRED2013; START 2012; Public Health Authority 12.5.2010; MoD 01.03.2006; Mol online).

Year	Crisis description	Crisis category	Damage		
			# of persons killed	# of persons injured	# of persons affected
2000	Wildfire (in Spišská Nová Ves district)	Natural disaster	7		
2001	Flood (Bodrog, Poprad, Hornád, Ondava, Topľa, Laborec and Torysa rivers)	Natural disaster	1		
2003	Bus crash near Úhorná	Transportation accident	11	24	
2004	Flood (esp. Ondava River)	Natural disaster	1		230
2004	Storm (esp. in Tatra Mountains)	Natural disaster	2	24	10,300
2005	Flood (esp. Ondava, Laborec, Hornád rivers)	Natural disaster	1		
2006	Army plane crash	Transportation accident	42	1	
2006	Flood (esp. south-east of the country)	Natural disaster	1		100

Table 1: List of Crises (2000-2012)

2007	Extreme temperature	Natural disaster	1	89	
2007	Explosion at military repair facilities	Miscellaneous accident	11		
2009	Coal mine explosion in Handlová	Industrial accident	20		
2009	Gas crisis (outage of gas supplies)	Infrastructure failure/ Other			NA
2009/2010	Flu H1N1	Infectious disease	56		1,210
2010	Extreme temperature (heat wave)	Natural disaster	122		
2010	Flood (whole territory)	Natural disaster			850
2011	Medical doctors' shortage	Other			NA
2012	Extreme temperature (extreme frost)	Natural disaster	5		

There are legally defined special *states* which can be declared during a crisis. The least intensive – and the most often declared one – is the extraordinary or "emergency situation"⁶⁶⁸ (*mimoriadna situácia*) in which the IRS is used. The cases for the declaration are: natural disaster, accident, catastrophe, threat to public health of 2nd degree or terrorist attack (Act Nr. 42/1994 Coll. §3). It is typically declared by the state administration (alternatively by self-governing bodies) at local level (Šimák et al. 2005). In 2011, there were 109 emergency situations⁶⁶⁹ registered by the Mol. These were mostly floods, leakages of dangerous substances or large traffic accidents (Mol online). In most cases, these were local emergencies with emergency situations declared at municipal or local (district) level.

The "state of emergency" can be declared by the government (only for the affected area), when lives and health of people are immediately threatened; or when property values are significantly threatened under natural disaster, catastrophe or industrial or other accident (Act Nr. Nr. 227/2002 Coll.; art. 5, sec.1). So far, this has been the case in 2011 when there was an acute shortage of medical doctors.

⁶⁶⁸ Note: the official terminology is not entirely clear. The term extraordinary situation is explicitly <u>not a state</u> of emergency, although it shows signs of it. Some experts therefor argue for a better definition thereof in the legislature (see Šimák et al. 2006; 21-22).

⁶⁶⁹ There were 133 emergency situations in 2010; 111 in 2009 (Mol online).

The "state of exception" has not been used in Slovakia so far. It can be declared by the president (on governmental proposal) in the following cases: terrorist attack, large-scale street unrests involving attacks on public authorities, looting or other mass attacks on property, and other mass violent unlawful action (ibid.; art. 4).

Since 1993 (Slovak independence), civil protection (*civilná ochrana*) has been directed by the Mol. A clear distinction between internal and external security exists. Both of these spheres are ruled by their own legislation and have different leading agencies (Mol responsible for civil security; Ministry of Defence for any deployment of armed forces). The military serves as a secondary body in the IRS, i.e. it does not belong to its basic bodies (Act Nr. 129/2002 Coll.). Usually, the help of the military and its equipment is required when dealing with crisis situations. For example, heavy snowfall in Prešov in February 2013 meant that an "extraordinary situation" was declared. The city asked then the army to provide equipment necessary to clear away the snow (Frank 2013).

The country takes an all-hazards approach, where the IRS is meant to provide help "in distress" (*tieseň*), i.e. whenever lives, health, property or the environment are immediately threatened (Act Nr. 192/2002 Coll.).

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

Slovakia is a unitary state (republic) with a parliamentary system. The Parliament is unicameral, consists of 150 deputies and is called The National Council of the Slovak Republic (*Národná rada Slovenskej republiky*). The political system of the country is based on proportional representation. Since its independence in 1993, Slovakia has had experience with coalitions where one party dominated, as well as with the fragility of large coalitions (Balázs 2012). Institutional elements were taken from the German/Austrian neo-corporatist model. Therefore, the system can rather be described as consociational. However, it is often pointed out that the Slovak reality is largely distant from the ideal model of consociational democracy (Drgonec, Kvasničková 2000; Marušiak 2012).

In 1996 a new system of the regional and district division was introduced. In 1999, the government initiated a new round of reforms of public administration. In 2000, a Conception on Decentralization and Modernization of Public Administration was approved. The aim was to decentralize competencies to the self-governmental bodies, to de-concentrate competencies from central administrative bodies to local state specialized administration and to decentralize finances. In 2002, a new regional self-government system was created (consisting of eight self-governing regions).

Currently, the country is divided into eight regions⁶⁷⁰ (Banskobystrický, Bratislavský, Košický, Nitranský, Prešovský, Trenčianský, Trnavský, Žilinský – all of them have between 500,000 and 800,000 inhabitants) and 79 districts⁶⁷¹. There are 2,890 municipalities out of which 138 have the statute of a town. (Slovak Statistical Office online)

In another round of reforms starting in 2004, regional offices of the state administration were abolished and new district offices of state administration were introduced and specialized state administration at the regional level strengthened. Starting from January 2013, the specialized state administration bodies at the regional level (such as Office for the Environment or for Road Traffic and Communications) were abolished and their agenda integrated in district offices (a part of the state administration). (Reasoning Report 2012; Slavík, undated)

In Slovakia, currently the so-called parallel model of public administration exists, i.e. the state administration is completely separated from self-government. District offices and district offices in the seat of regions (*Obvodný úrad v sidle kraja*) are now bodies of state administration, budgetary bound to the MoI. They are active also in the field of civil protection (MoI online). The responsibility for civil security and crisis management rests mostly with the state administration. The legislative and main administrative competences rest on the national level with respective ministries, especially the MoI.

Despite the deconcentration and decentralization in public administration, the civil security system is rather centralized, although municipalities (bodies of self-governance) have an important place in the system of crisis management: they are the final link of public administration and the first one in contact with citizens. They can also declare an "extraordinary situation", which has been the case with many local floods and heavy snowfalls. Principles of subsidiarity and the related up-scaling take place according to the territorial spread of a crisis event (Šimák 2004).

In case of a crisis, the government establishes a central crisis staff (the head thereof is the minister of interior) which coordinates activities of state administration bodies and self-governing bodies (Act Nr. 387/2002 Coll.). The ministries are responsible for civil security planning and decide about measures to deal with crisis situations. These measures are executed by the district offices in the seat of region⁶⁷² which in turn coordinate activities of district offices⁶⁷³ and municipalities⁶⁷⁴ (ibid.). The district offices then execute measures to deal with the crisis situation and coordinate activities of

⁶⁷⁰ NUTS 3 category in geographic division

⁶⁷¹ LAU 1 category in geographic division

⁶⁷² State administration bodies at regional level

⁶⁷³ State administration bodies at lower (district) level

⁶⁷⁴ Self-governing bodies

municipalities. At the lowest level, municipalities execute measures to deal with the crisis situation and they demand assistance from the district office (DO) (ibid.).

Administrative level	Crisis management authority	Consultative and advisory body, participates at crisis management	Crisis Management Centre			
Centre	Government, the prime minister	National Security Council (esp. Committee for Civil Emergency Planning)	Central crisis staff (head is the minister of interior)			
Ministries and other central administration bodies; Slovak National Bank	Minister, head of the central administration body	-	Departmental crisis staffs			
Region	Chief of the DO in the seat of region (Prednosta Obvodného úradu v sidle kraja) State administration	Security Council (Headed by the chief of DO; members include a police, fire-fighter and army representative)	Crisis staff of the DO in the seat of region			
District	Head of the DO (<i>Prednosta</i>) State administration	Security Council	Crisis staff of the DO			
Municipality	Mayor (<i>starosta</i>) Self-governing body	-	Crisis staff of the Municipality			
Source: Mol online; Act Nr. 387/2002 Coll.						

Table 2: Crisis Management structure

2.1.2 Government/societal culture

According to the Geert Hofstede's grid-group country score (Hofstede, undated), Slovakia shows very high scores of *masculinity/femininity* and of *power distance* with organizations being mostly hierarchical. The most important implication for crisis management is the hierarchical structure, according to which the civil security system is organized. Also during humanitarian catastrophes,

there are typically men rather than women engaged in volunteering with women being active in other sectors, such as health care (Brozmanová Gregorová 2012; 47).

The long term orientation is, on the other hand, relatively low (ibid.). Short term goals are commonly given priority. Slovakia is a somewhat individualistic society where people are expected to take care of themselves. Security and stability can be seen as an important element in individual motivation (ibid.).

According to the World Value Survey, Slovakia scores relatively high on "self-expression values". This seems to correspond with the individualism as noted in the previous paragraph. The country has remained traditional (as opposed to secular values) since the 1990s. On the other hand, the survival versus self-expression scale depicts a shift from -0.82 in 1990 to -0.43 in 2000 with the importance of survival values decreasing, yet still important (World Value Survey online; Inglehart, Welzel 2010).

Overall, the willingness of the population to engage collectively is rather modest. A study conducted in 2004 (STEM 2004) pointed to a drop in the number of people who were interested in some forms of civic participation in public life (such as to cooperate with interest groups and organizations) when compared with 1990s. Only some 22 percent of people declared having participated in the activities of an interest group or organization (ibid.).

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The most current legal framework governing the civil security system was established in 2002. Since then, however, the respective acts have been subject to many changes. Competencies and responsibilities in the field of civil security are all legally institutionalized. The statutory basis of civil security in Slovakia does not rest upon a single law or provision. The key functions of the civil security system are embedded in the following acts:

The main act regulating security is the Constitutional Act⁶⁷⁵ on National Security of the State in War, the State of War, State of Exception and State of Emergency (Act Nr. 227/2002 Coll.). The country adopted this legislation for the first time in 2002. Since then, this act has been changed three times. The last change took place in 2006 (agreed upon in November 2005) and introduced a new threat to the list of threats, namely a pandemic – especially a flu pandemic but also any other pandemic caused e.g. by a terrorist attack with biological weapons (Explanatory Memorandum 2005). The previous two changes were reacting to the reform of public administration and to the reform of

⁶⁷⁵ Note: This Constitutional Act is not a Constitution! It is an act of the highest legal force, always adopted by a qualified (i.e. approved by 3/5 of all deputies and 3/5 of present senators) majority.

Slovak military forces, respectively.

Another crucial regulation is the Act on Management of State in Crisis Situations Other Than War and State of War (Act Nr. 387/2002 Coll.), specifying the authority of different bodies of public administration when dealing with crisis situations. Prior to the adoption of this act in 2002, no complex regulation existed. Competencies of public administration bodies, municipalities, as well as of private and legal persons in case of crises had been always stipulated only by a particular provision concerning a particular type of crisis (e.g. Act on Protection against Fires or Act on Civil Protection). (Explanatory Memorandum 2002)

The Act on Civil Protection of Population (Nr. 42/1994 Coll.) is somewhat older from 1994. Among other things, this regulation states tasks and authority lines of public administration bodies, as well as rights and obligations of natural and legal persons while ensuring civil protection. Also, the principles of warning and their specification are provided by this act. Since 1994, this regulation has been subject to a change fourteen times, the last taking place in 2012. From the point of view of civil security, the last interesting change to this act occurred in 2011, when the authority of the Mol was broadened so as to include professional education on civil protection. Also, the competencies of self-governing regions were broadened regarding the establishment of a crisis fund from which reparation costs after an extraordinary event can be covered (Explanatory Memorandum 2011). In the same year, by another change, the "threat to public health of a second degree" was introduced to the list of extraordinary events. (Act Nr. 172/2011)

The next important regulation is the Act on IRS (Nr. 129/2002 Coll.). This reacted to the need to coordinate various rescue services as the number of incidents was growing, where not only one but more different rescue agencies were needed simultaneously. The inspiration for such a system and for its coordination centers was taken from Austria, Germany and the Czech Republic. (Explanatory Memorandum 2002) Also this act has been subject to change eight times so far, mostly due to changes in other related legislation. In 2011, the government approved a new Conception of the Operation of IRS. The Conception envisages a new delimitation of competencies and organizational changes at all levels of management (Conception 2011) and thus also further changes in the respective legislation might be expected.

2.2.2 Political dimension

For the formulation in the area of civil security, the Mol is responsible. The bodies responsible for crisis management, according to the current legislation, are the government of the Slovak Republic, ministries, National Bank, district offices at the seat of region⁶⁷⁶, district offices⁶⁷⁷ and

⁶⁷⁶ State administration body at regional level

municipalities⁶⁷⁸. The government commands and controls the ministries in terms of crisis management and decides about both asking for and providing foreign assistance (Act Nr. 387/2002 Coll.). In practice, the level which is meant primarily to respond to crises is the regional level. Here, the prominent position is held by the district offices in the seat of region which are managed/ led by the Mol. The role of the state administration in this field remains crucial (Buzalka et. al. 2011; 9-12).

With respect to civil protection, the most important body is the Mol. It approves the composition and size of expenses of the district offices for civil protection (which is financed through the Mol budget). At lower level, the role of the district offices in the seat of region is important as these bodies declare the "emergency situation" at the level of region and they lead rescue works in such case. At an even lower level, the district offices are tasked with leading the rescue works if these are not in competency of any other body (e.g. when an emergency situation is declared at a higher level) (Act Nr. 42/1994).

In the field of civil protection – unlike in the case of crisis management – some more space is given to the self-governing regions. These can e.g. establish a crisis fund to finance a potential damage. Yet, the obligation to do so does not exist. The regions cooperate with state administration bodies in civil protection. They do not have any special or individual tasks to perform on their own (ibid.). Municipalities are more involved in both crisis management and civil protection. Municipalities can and do declare emergency situations. They also create civil protection units from the citizens of the municipality (ibid.).

Criticism exists that the legislation does not respect the experience of lower administrative bodies (both state and self-governing ones), most importantly their responsibility to the citizens. Also, the responsibilities of the fire rescue brigades are not entirely clear while leading rescue works before the lead is taken over by a state administration body (Hoško undated, 2). Responsibility is stated by the legislation only implicitly. The public administration reform⁶⁷⁹ did not improve the crisis management capabilities. Especially the replacement of regional crisis management bodies by strengthening of district offices in the seat of region is criticized as not conceptual. Moreover, the legal principles of functioning of the crisis staffs at the municipal, district and regional level remain unclear. The competencies and crisis management tasks of state administration and self-governing bodies are overlapping in large cities (Šimák, Míka 2009).

⁶⁷⁷ State administration body at lower (district) level

⁶⁷⁸ Self-governing bodies

⁶⁷⁹ See section 2.1.1

2.2.3 Operational dimension

Since 2002, the civil security system has been practically provided by the so-called IRS. This is an operating platform to respond to crises within which operate: the MoI, Health Ministry, district offices in the seat of region and rescue bodies. The main leading and coordinating role is endowed to the MoI. Expenditures on the IRS are financed from the state budget through the budget of the MoI (Act Nr. 129/2002).

The rescue bodies of the IRS are divided into three parts: basic rescue services, other rescue services and the police corps. The basic rescue services are: fire rescue brigades, health emergency services, inspecting chemical laboratories, Mountain Rescue Service, and Mining Rescue Service. Among the Other rescue services belong e.g. army, municipal fire brigades, municipal police, civil protection units, Slovak Red Cross (SRC) and others (ibid.).

The main level of operation of the IRS is the regional level: The district offices in the seat of region establish a so-called Coordinating Centre (in place since 2003). Its operators are representatives of regional state administration, of Ministry of Health and of the Fire Rescue Brigade. The Centre ensures warning of the population. It also coordinates the actions of the rescue services within the IRS and gives orders to the respective (basic or other) service of the IRS to intervene. When the forces of the rescue services at the regional level are not sufficient to handle a crisis, the Coordinating Centre asks assistance from other regions through the Mol.

So far, floods have been dealt with at the regional level as the highest level. During the 2010 flood, many regions called an "emergency situation" (e.g. the chief of the DO in the seat of Košice Region in eastern Slovakia declared an "emergency situation" for the whole region during the 1st of June to the 25th of June because the forces and means of the state administration did not suffice any more for providing rescue and protection at the municipal and district level).

The floods of 2010 have shown that the IRS is not sufficiently ready to deal with a crisis in the whole country for a longer period of time. In reaction hitherto, the government approved of a new conception of the IRS in 2011 (Mol 2011). The Mol also pointed to the malfunctioning of some technical components of the IRS and to the absence of emergency plans (Mol 9.2.2011). Also the cooperation among and operation of some bodies was problematic. For example the Fire Rescue Brigade was performing its professional duties but it was leaving broader civil security tasks to the civil protection bodies. Generally, the professional fire rescue brigades (due to their capacities) did not represent a decisive force in the rescue actions (Hoško undated; 1).

During the 2010 floods, municipalities remained "alone" for some time. The district offices' (DO) staff and the IRS were not able to be everywhere and priorities had to be set. The forces and facilities of professional rescue bodies were not sufficient; the armed forces were not able to be in every village (ibid.; 4-5). The staffing of civil protection and crisis management units of the DO proved to be insufficient. Also there were problems in the coordination of humanitarian help. The cooperation on the side of the municipalities was problematic: these did not observe the obligation to update the higher levels of administration about the current situation. Also this case was said to show-case the inadequacy of legislation in the field of crisis management and civil protection: the position and competencies of leading agencies and bodies were not clear. Finally, when reviewing the situation, much blame was put on the lack of financial resources (Forrai, undated).

2.2.4 External dimension

Slovakia has established bilateral cooperation with all its neighboring countries (the Czech Republic, Poland, Hungary, Austria and Ukraine). Other countries with which Slovakia has bilateral agreements for so-called extraordinary situations are: Croatia, Russia, Slovenia and Montenegro (Mol online). Multilateral agreements on cooperation in the cases of crises include the Central European Initiative (SEI) – an agreement on cooperation in anticipating, preventing and mitigating natural and technological disasters between the governments of Austria, Croatia, Hungary, Italy, the Republic of Slovenia (signed 1997; effective since 2000), and the UN / DHA project on the use of military and civil defense capacities in rescue operations (ibid.).

Slovakia has also signed regional and multilateral provisions. It is a member of the Council of Europe, EU, NATO, OSCE and the UN. In terms of civil security, under the Visegrad Group (V4) take place regular meetings of the directors general for civil protection and disaster management. Also within the Salzburg Forum (a Central European governmental initiative on internal security) the establishment of a National Logistic Centre for humanitarian aid in Bratislava was discussed in February 2012. This could be used for providing help abroad as well as when national need arises (Mol 24.02.2012). There is regional cooperation with Poland (Operation Program Poland – Slovakia), developing a common system of civil protection against natural disasters (Mol online).

After the storm damaging large forest areas in the High Tatra, the deputy prime minister of Slovakia requested financial help from the EU's Solidarity Fund to finance part of the damage removal activities (Kollárová 2005). During heavy floods in April 2006, Slovakia urgently requested 150,000 sand-bags from NATO's Euro-Atlantic Disaster Response Coordination Centre. Within this mechanism, Austria, Croatia, Germany and Poland delivered the requested sand-bags. In the case of Poland, this help was provided through the EU-MIC mechanism (NATO 2006).

In 2010, when floods hit all of central Europe, the ministers of Slovakia, Poland and the Czech Republic agreed to cooperate (ČTK 17.5.2010). The Czech rescue workers (members of the firefighting brigade of the Moravskoslezský Region and of the rescue corps of the firefighting brigade) were sent to Slovakia upon request of the Slovak government. The aim was to conduct a rescue operation in the district of Trebišov in eastern Slovakia (USAR 2010).

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

The crisis legislature and particularly the Act on Civil Protection stipulate the rights and obligations of the population in the state of a crisis. An individual has the right to warning, evacuation, sheltering, relevant information on civil protection, and to immediate help when his/her life is threatened, as well as his/ her health and property. Individuals also have the right to education in civil protection with the aim of self-help learning and the ability to help others in need (Act Nr. 42/1994 Coll.).

As for legal obligations, individuals are required to participate in the tasks of civil protection. When there is an emergency situation, people are legally required to follow the instructions of local offices, municipalities, and other legal entities as defined by law. Citizens are also legally obliged to carry out measures to protect food, water, animals, and feed which are in their possession or were entrusted to them. Natural persons are obliged to fulfill duties in civil protection units and to be prepared for these duties in advance. People also can be asked to participate in (time-limited) works which aim at the protection of life, health and property. An obligation also exists for natural persons to provide material means which are in their possession (after the crisis, these are returned or refunded) and to provide room for emergency accommodation for the people affected by an emergency situation or to people conducing the rescue works (ibid.).

Legal persons are legally obliged to cooperate with district offices and municipalities in civil protection. They also can –based on their own judgment – establish civil protection units. Legal persons are further obliged to provide warning for their employees and to provide material means which are in their possession to the state administrative bodies or to municipalities for the preparedness for civil protection and during emergency situations (ibid.).

The expectations of the public towards the government are relatively high. The fire rescue brigades – a leading operative body in the IRS – are by far the most trusted institution (91 percent). In contrast, the MoI is trusted by only 53 $percent^{680}$ of the population (MoD 2007). According to the

⁶⁸⁰ Note: the level of trust may not be directly associated with its performance in the field of civil security and crisis management.

Eurobarometer survey (Special Eurobarometer 2012), people feel rather concerned about a wide range of threats, although natural disasters receive the most attention (45 percent of the respondents concerned). Despite the relatively recent experience with an explosion in a repair facility in 2007, man-made disasters are of a relatively lower concern to the Slovak respondents (37 percent very concerned). Respondents were less concerned about terrorist attacks (25 percent). Yet, a high proportion of respondents did not feel very well informed (ibid.).

People are generally willing to help and to volunteer. There is a long tradition of the Voluntary Fire Brigades (VFB) with some 90,000 members (see section 2.4.1. on societal sector). Typically, floods also create waves of spontaneous solidarity with people helping in the affected areas. These are usually activities organized by the local or regional administrative bodies and involve tasks such as cleaning the roads, helping affected citizens with cleaning their homes and gardens, etc.

2.3.2 Information

The primary method of informing the public about an immediate crisis is through the use of sirens. Two different tones are distinguished: the "general threat" (*všeobecné ohrozenie*) and the "water threat" (*ohrozenie vodou*). The end of the threat or the end of the emergency is announced by a special signal "the end of threat" (*koniec ohrozenia*). Warning signals as well as the ending signal are further enhanced by information through the mass media. There is a special tone for the test of the sirens and the public is informed about the test through the media. The tests are coordinated by the MoI and are conducted four times a year, always in an exactly stipulated date and time (Act Nr. 42/1994 Coll.). In Slovakia, a notification network of civil protection exists. This is amended by an independent system of warning and notification which is provided by legal persons (e.g. chemical plants) who might endanger life, health or property of people through their activities.

Starting from February 2013, a new governmental decree on warning entered into force. In reaction to advances in telecommunication, the state is now responsible to ensure warning of the entire permanently inhabited territory (earlier, 80 percent was the compulsory coverage area) by electronic sirens or other means. On the entire territory of Slovakia, thus, public telecommunication networks, mass-media, local wireless radio and electronic services of mobile providers can also be used for warning (Mol 1.2.2012).

An "emergency situation" is called on and called off through the mass media. The natural and legal persons who operate radio and TV broadcasting are legally obliged to publish information on a crisis and on the measures related to the provision of help. They are obliged to do so free of charge, upon

request of the Coordination Centre (Act Nr. 129/2002).

So far, the use of Internet for the informing of the public has not been large. Similarly, the use of social media has not been extensive. The government's office as well as the Mol Facebook pages have been established only recently (e.g. the Facebook page of the Mol was set up on November 7, 2011) and have not served as a means of updating the public on crisis so far (the Facebook page of the Mol contains only one entry about an emergency situation: in Košice from 24.5.2012. In April 2013, this page was "liked" by 895 Facebook users).

At the regional level, information on civil security, including updates on a current crisis situation is always a subpart of the official webpages of the region (see e.g. the webpages of the Košice Region at http://web.vucke.sk/sk/).

2.3.3 Education

Ministries are responsible for the provision of education in the field of civil protection and training at all types of schools in the country. Civil preparedness is then realized at lower levels and also funded and organized by the self-governing regions. These cooperate with regional media which publish or air especially useful articles, footage of model exercises, etc. (Mol 13.1.2011). A legal obligation is given to the district offices to exercise (and if needed, to change) the plan of civil protection. This has to be done at least once every three years (Act Nr. 42/ 1994 Coll.).

The education in the Slovak public administration is organized hierarchically: Mol coordinates education and preparedness of the crisis staffs of Slovak ministries and of crisis staffs of the district offices in the seat of region. The latter ones, in turn, organize professional preparedness (education) of the crisis staffs of district offices. These organize the education of crisis staffs of municipalities (ibid.).

The ministry also performs educational and editorial tasks. Such courses are provided by the Educational and Technical Institute of Crisis Management and Civil Protection in Slovenská Ľupča under Mol. The main tasks of the institute are: educating employees⁶⁸¹ who perform civil security tasks as well as tasks of crisis management and planning, critical infrastructure protection or are engaged in the IRS (Education and Technical Institute online).

The current system of education on civil protection and crisis management is sometimes criticized as being fragmented (Šimák, Míka 2009). Moreover, the education of crisis staffs is usually focused on the explanation of legislation, decrees or obligations of the crisis staffs. Alternatively, a presentation

⁶⁸¹ No statistics on the number are available.

by representatives of districts which have had an experience with floods is given. Practical focus on the decision-making process is missing as well as the methods and ways of conducting rescue operations (Hoško undated; 3).

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organizations/NGOs

An official agreement between the MoI of the Slovak Republic and the SRC on cooperation and assistance was signed on 22 November 2010 (MoI 2010). The SRC is a non-state organization which is exclusively accepted as a helping organization of the Military Medical Service. It is active in the field of civil protection and provides help during catastrophes, natural disasters, etc. It also organizes and mediates aid during catastrophes both within and outside of the Slovak territory. SRC is a part of the IRS and a member of the Central Crisis staffs at both central and local levels (Návrh Koncepcie, undated).

The number of SRC members (74,906) is relatively high. Basic organizational units of the SRC are local societies (1160), which join in larger territorial units (38 in total). The number of local societies is very high (e.g. 53 in the city of Košice; 44 in Nitra) (SRC 2011). At the top of the organization is the Central Secretariat of the SRC. A specific organization is the Water Rescue Service of the SRC (SRC 2009). The overall number of SRC volunteers was 18,699 in 2011, out of which 2,255 were ready in crisis situations (SRC 2011). In 2010 (the year of large floods), there were 26,606 registered SRC volunteers (2,306 ready in crisis situations) (SRC 2010).

Other NGOs do not enjoy such a privileged position as the SRC does. These organizations are e.g. the Samaritan Association of the Slovak Republic (founded in 2005; currently having approx. 100 voluntary members); the Tatra Mountain Service (specialized at rescue and preventive-educational activities in the High Tatra mountains territory); the Mountain Service in Slovakia⁶⁸² (search and rescue works); and the Mountain Service of Pieniny National Park (rescue and preventive-educational activities on the territory of Pieniny Naitonal Park). Due to their specialization and territorial location, these mountain services were not much involved during the 2010 flood. The Samaritan Association helped e.g. in the Kežmarok District providing logistics of supplies and medicine to people on territories made inaccessible by torn-down bridges (Hužiková, undated).

Over the last years, also the organization Modrý anjel (*Blue Angel*) has gained in importance. It specializes in crisis intervention (i.e. in dealing with crises in their acute state). It started its operation under a European Social Fund project aimed at providing psycho-traumatic first aid with the medical

⁶⁸² Note: Not to be confused with Slovak Mountain Rescue Service – a state body lead by the Mol.

rescue services. Currently, the organization has 53 members. It has assisted in most of the large-scale crisis events (e.g. after the explosion in a military repair facility in 2007; during the 2010 floods). It was directly activated by the MoI after the coal mine explosion in 2009 (Modrý anjel online).

A very important voluntary organization is the VFB (established in 1922), whose main tasks include (besides regular fire-fighting) civil protection and education of voluntary fire-fighters. Currently, there are 2,478 VFB in Slovakia, consisting of some 90,000 members⁶⁸³. These organizations form district and territorial boards of voluntary fire protection based on the territorial principle. There are also eight regional boards based on a principle of delegation (Dobrovoľná požiarna ochrana SR online).

The VFB are often the first to arrive and to respond to a crisis. However, their equipment is not always sufficient to substitute for professional brigades. In this regard, often the lack of finances – and especially of state support – is noted. Most of the money for these voluntary organizations comes from municipalities and sponsors. During the 2010 floods, however, their help proved important, especially while helping with the consequences of the floods and rescuing peoples' property (Rusňáková 2011).

Other voluntary organization specializing in civil security are the T.O.R.RESCUE from the town of Prešov (its main tasks being search and rescue actions during natural disasters) and the Dog Rescue Slovakia (established in 2000, specialized in search works). Beside this, a number of organizations and charities are partially involved in the civil security system too – by establishing money collection in the aftermath of crises. For example ADRA Slovakia organized such a collection after the 2010 flood and provided alimentation for 300 evacuated people (ADRA online).

2.4.2 Role of profit-oriented organizations

Although the state plays a dominant role, also some private bodies regularly participate in the provision of civil security. Private (for-profit) companies especially dominate in the field of health provision. The Health System Reform (agreed by the government in 2004) included complete privatization of health rescue services. The aim was to introduce market principles into the public health provision and to decentralize management and ownership of the health services. The role of the Ministry of Health was weakened. The main driver of this reform was economization of activities (Dragula 2007).

Currently, the providers of medical and health emergency services are linked together in the Association of Rescue Health Service Providers (*Asociácia poskytovateľov záchrannej zdravotnej*

⁶⁸³ incl. 8,000 children under 15 years of age

služby SR) and the Association of Rescue Health Services (*Asociácia záchrannej zdravotnej služby*), with 17 and 11 members (respectively). Also the formerly state-owned Medical Emergency Services has been transformed into for-profit companies. The Air Health Rescue Service operates on the same basis – the company Air Transport Europe operates seven centers.

Enterprises can establish their own fire-fighting and civil protection units. The Flack Fire Services company provides (since 2007) firefighting company brigades to large industrial enterprises (such as chemical plants or car factories). It also organizes and mediates educational and training programs in the field of fire protection for Slovak and Czech enterprises (Flack Fire Services online).

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

From the point of view of technical disasters, the explosion at Military Repair Facilities in 2007 can be regarded as the most important one. The explosion was in its strength similar to an earthquake. It disrupted the structural stability of buildings in the range of several kilometers. Property damage reached more than two million euro. An analysis made by the ministries of defense, interior and health in 2010 confirmed that the company did not have, at the time of explosion, any emergency plans prepared (Pravda 2012). The police charged five people in the aftermath of the disaster. According to the investigator, four members of the management and one safety technician neglected their duties. Robert Fico's government decided to compensate the families of the victims with the payment of nine million Slovak crowns. The then defense minister, František Kašický, dismissed the CEO of the company in Nováky where the accident happened. Kašický himself, in response to the tragedy, in March 2007 offered his resignation. Prime Minister Robert Fico and President Ivan Gasparovic rejected the offer (ibid.).

During the floods of 2010, the analyses of operation were usually conducted at the regional level. The Košice region can serve as an example- one of the most severely affected by the crisis. Already during the flooding event, the causes of the critical developments were analyzed and evaluated. The activities of the crisis management bodies were subject to analysis at three levels: crisis staff, selfgovernment of Košice and the EVA commission. The analyses showed that there were not enough persons to fulfill the tasks of civil protection and crisis management at the DO. Insufficiencies also appeared in the technical material and in the evacuation of ill and immobile persons (Forrai, undated). Generally, most of the results of the analyses stressed either a lack of financial resources or imprecision in the relevant legislation (see above section 2.2.1.), rather than to point to a personal responsibility. These analyses led to changes on the local level, e.g. the crisis management unit at the DO level was strengthened (ibid.). At the central level, after the 2010 floods and after a temporary fall-out of emergency lines in January 2011, the decision to reform the IRS was made. Although there was consensus about the need of this reform (to be finished in 2015), some disagreement exists between the current minister of interior and his predecessor on which bodies should be the leading ones⁶⁸⁴ (Valovič, 21.01.2011).

No analyses have been conducted in the case municipalities in particular and self-governing bodies in general. So far, no objective and comprehensive evaluation of the conduct of self-governing bodies during rescue works has been conducted following any floods in the country's history. The mayors of municipalities are often seen as the weakest link by some practitioners in dealing with crisis (Hoško undated; 4).

3.1.2 Limits to national capacities

Although floods have so far been the major disasters in Slovakia, they have never led to a declaration of an "emergency situation" or "state of emergency" at the central level. However, help from abroad was requested (and received) through NATO's Euro-Atlantic Disaster Response Coordination Centre after floods in 2006 (sand-bags) and through bi- or tri- lateral cooperation within central Europe in 2010 (Czech firefighters helping to deal with floods)⁶⁸⁵.

So far, a state of emergency has been declared once, when medical doctors were massively leaving to the Czech Republic in 2011: From the 29th of November to the 8th of December, 2011, a state of emergency was declared. The reason was that approximately 1,200 Slovak medical doctors left their jobs in a joint protest organized by the medical unions on the 1st of December, 2011. In summary, a state of emergency was declared for 13 districts and 15 hospitals were affected. Under the state of emergency, it was possible to order the doctors to be on so-called 'labor duty'. However, even these measures were not entirely sufficient to provide full medical care in Slovakia. The government of the Czech Republic was asked by the Slovak government to send in help in the form of 30 military doctors. Help was also offered from the Austrian Ministry of Health which offered to accept patients from Slovakia in emergency cases in Austrian hospitals (Czech Press Agency 2011). In the end, the Slovak medical unions and the Slovak government reached an agreement and signed a common memorandum which put an end to the crisis.

⁶⁸⁴ Nominated civil protection units versus professional firefighters

⁶⁸⁵ See section 2.2.4 for details

A large crisis dealt with at the central level also occurred in January 2009. A "state of emergency in gas industry"⁶⁸⁶ was declared when there was a 70 percent reduction (later on growing to 100 percent) in deliveries of Russian gas due to a Russian-Ukrainian dispute. A crisis staff at the level of the Ministry of Economy was established relatively early to deal with the situation. The reserves previously thought to be fully sufficient but proved to be inadequate (ETREND 14.1.2009). The Slovak population was not directly affected, yet the government decided to reduce gas supplies to some one thousand selected enterprises (ETREND 6.1.2009). The Slovak prime minister asked his Czech counterpart for help. Some 6.3 million cubic meters of gas were then provided to Slovakia daily until the crisis was over (Zvolánek, 17.1.2009).

3.2 Efficiency

As follows from the above sections – despite the activities of the societal and private sector – the crucial provider of civil security is the state administration. Thus, most of the resources for the provision of civil security and for dealing with crises come from the state budget (more specifically, from the budget of the Mol).

According to the functional classification, the overall state expenses in the field of security (excluding defense) and public order were 1,268,758 thousand EUR in 2011. In 2010, this was 1,331,530 thousand and in 2009 also similarly 1,313,903 thousand EUR. This sum included financing the police, judicial courts, prisons and protection against fires, and including financing of the bodies which provide these services. In 2011, these expenses represented 8.3 percent of overall budgetary expenses (Ministry of Finance 2012).

A more precise picture can be drawn from the spending of the MoI and its programs as summarized⁶⁸⁷ in Table 3. The second largest amount from the Ministry's budget typically goes to rescue services (99,514 thousand EUR in 2011). On the other hand, an item with relatively little resources was *civil emergency planning*. Newly in 2011, resources started to be drawn to finance the protection of critical infrastructure. Prior to that year, this area was not included. The same holds for *chemical protection* which was budgeted only in 2009 over the last five years (Ministry of Finance, online).

⁶⁸⁶ State declared by gas transmission system operator. Not to be confused with "state of emergency" declared by the government.

⁶⁸⁷ Years 2008 and further are not included in the table as the currency used in the budget was then different (Slovak crowns, prior to the accession to the eurozone).

Table 3: Overv Programs in 20	iew of Spendings of the State Budget for the In 011-2009	nplementation of		
Chapter of the State Budget	Program Name	Real Budgetary Spending in 2011 (in thousand EUR)	Real Budgetary Spending in 2010 (in thousand EUR)	Real Budgetary Spending in 2009 (in thousand EUR)
	Civil Emergency Planning in the Slovak Republic	9	19	13
	Rescue Services	99,514	134,068	154,111
	Official Humanitarian Aid	65	106	254
	Economic Mobilization	52	58	124
	Protection of Public Order and Security	733,317	775,626	766,773
Mol	Public Administration	90,898	102,452	92,223
	Contributions to International Organizations	233	221	434
	Inter-departmental Program OP Informatization of Society	40,957	17,871	-
	Protection of Critical Infrastructure in the Slovak Republic	10	-	-
	Support of Defense	-	-	102
	Further Development of Civil Protection Against Chemical Weapons	-	-	66
	Source: Final State Account of th	ne Slovak Republic fo	or the years 202	11, 2010, 2009

Yet another picture is provided by the category *civil protection* according to the functional budgetary classification. Quite interestingly, *civil protection* is a sub-section of *defense* in this categorization which could possibly be seen as a remnant of the historical "civil defense" category which was used until 1994. The expenditures in 2011 for civil protection were 2,948 thousand EUR. This meant a significant decrease (by some 7 million EUR) compared to the year 2010, when the expenses on civil protection were 10,024 thousand EUR. In 2009, then these expenses were 8,381 thousand EUR. The largest difference between the years 2010 and 2011 was made by capital expenditures in the field of civil protection (6,630 thousand EUR in 2010 compared to 16 thousand EUR in 2011) (ibid.). Thus, while the budget for common expenses on civil security shrank only by something more than four hundred thousand EUR, the expenses for investment were cut dramatically.

In 2011, the National Security Council checked the area of economic mobilization and fulfillment of crisis management duties by the local administration. The results pointed to problems with efficiency (with respect to the state budget) when fulfilling economic mobilization tasks. The central administration then took measures⁶⁸⁸ to improve this state (Mol 2012; 7).

⁶⁸⁸ Unspecified in the document

3.3 Legitimacy

3.3.1 Political support

Civil security does not belong to the list of hotly debated topics in Slovakia. The main political controversy was possibly the privatization of the medical rescue services. Here, however, the controversy was rather linked to the overall quality of health care provision in the country and to the price thereof. The main field within which this reform was discussed thus was economy and health provision in general. A direct link to the civil security or rescue system was not made (Dragula 2007).

Such as civil security has not been a priority of any government, also the number of interpellations is rather low. e.g. in 2008 three interpellations were made by the deputies, concerning public safety on roads and highways. (NSR online) Also the aforementioned reforms did not cause any significant debate. e.g. during voting about the Act on crisis management (Nr. 387/2002) which was a new and important act regarding civil security, 94 out of 95 present deputies were for adopting the act and one abstained (Digital Repository, 21.6.2002).

3.3.2 Legal support

In Slovakia, people can file petitions and complaints to the local authorities of state administration, to the ministries or to the government. Generally, most of these petitions and complaints are addressed to the ministries (89 percent). In 2010, the governmental office received in total 928 submissions, out of which 15 were petitions (i.e. 1 percent of total) and 241 complaints (i.e. 17 percent of total). The number of petitions was stably low also in other years (Governmental Office 2011).

Of the petitions, four were related to flood protection. The following matters were addressed: enlarging protective barrier of the Torysa River; adoption of flood protection measures along the Hornád River; adoption of measures in connection with the construction of railway bridges across the Klanečnica River; and publication of a name list of citizens of Veľké Trakany who were compensated for damage caused by floods. From the complaints addressed to the governmental office, none was concerning civil security (ibid.).

The MoI was an addressee of the highest number of complaints (3,464). The petitions, in turn, were not many (6 petitions in 2010). From these petitions, only one was related to civil security – particularly to floods. This was the same as addressed to the governmental office concerning the list of compensation recipients. The complaints were mostly addressing the regular work of the police. The only possibly relevant complaint concerned inadequate evaluation of a reported event by

emergency lines operators⁶⁸⁹. With the Ministry of Environment one petition was filed concerning fulfilling of obligations of the watercourse administrator (ibid.).

At the regional level, the district offices in the regions received altogether three petitions (two in Prešov and one in Žilina) and 196 complaints (most of them – 44 – in Košice). All these regions were affected by floods. None of the petitions, however, was concerning civil security⁶⁹⁰. The complaints then were covering a large array of different areas. Out of nine such areas, one was connected with floods. This complaint was on a procedure of an employee of the Civil Protection and Crisis Management Department (ibid.).

In crises other than floods, legal prosecution is in place, although not necessarily initiated by the citizens. After a brief collapse of emergency lines in January 2011, legal prosecution started for public threats (SITA 2011). Within one year, one person (a technical worker from a private company providing technical maintenance) was accused by the police of negligence. The Health Care Surveillance Authority also investigated this case as the rescue workers might have broken the law. They could not operate because they were unable to contact the operation center which – according to the law – is the only place to authorize a rescue operation. During this investigation, a deficit in legislation to regulate procedures in case of emergency telephone line collapse was pointed to as a problem area (Kleinová 2011).

3.3.3 Popular trust and support

Natural disasters are perceived to be a relatively large threat by the people in Slovakia. Despite the wide range of perceived threats, the popular trust in the civil security system remains quite high (see section 2.3.1). Especially firefighters and rescue workers are perceived very positively by the public (Pravda, 3.7.2006).

People find fire brigades (one of the core operational bodies of the IRS) highly trustworthy. According to a survey conducted in 2008, firefighters were the most trusted (with 91 percent). Interestingly, 72 percent trusted soldiers, while only 54 percent expressed trust in medical doctors (Gogola 2008). This might be explained by the relative frequent provision of military equipment to municipalities when dealing with emergency situations (such as heavy snowfalls or floods) which could put the army into a good light. At the same, the relatively low trust in medical doctors could be influenced by the debates in the country on the quality of the provision of health services and by the privatization of

⁶⁸⁹ Note: unfortunately, more detailed information on the cases is not publicly available. Thus, this might be related to a crisis situation as well as to a common one.

⁶⁹⁰ E.g. one of them demanded creation of new car parking places.

these (see section 2.4.2). Similarly with other countries in the region, the police scored very low in terms of popular trust (trusted by 29 percent) (ibid.).

With respect to political representation, floods had no major effect on the parliamentary election. Since 2006, the overwhelmingly winning party in elections has been the social-democratic SMER Party. In 2010, the election took place in June, practically amid the flooding. The result for the party was better than during the previous election (50 mandates in 2006, 62 mandates in 2010). In 2012 it scored even better, gaining 83 mandates (Slovak Statistical Office online).

4. Slovak Civil Security in the EU Context

Slovakia participates in the EU MIC. Through this mechanism, assistance was granted to Montenegro after floods in 2010. The country itself requested assistance through the MIC during severe frosts in February 2012. The mechanism was activated on February 4 and closed three days later on February 7. In the end, no particular assistance was asked for nor was it offered or received (European Community Civil Protection Mechanism, undated). The country also actively operates within the Salzburg Forum in the provision of humanitarian assistance (see section 2.2.4).

The UN-OCHA is perhaps more important, where Slovakia participates in a project named DPR 213/3 MCDA which is linked to the security and defense policy of the EU. The aim is to provide resources for rescue actions home and abroad. A rescue module was created by the MoI for the provision of rescue assistance abroad during emergency situations. For this module, fire rescue brigades from Malacky, Žilina and Humenné are assigned. The module was sent to Turkey after an earthquake and to the Iranian town of Bam after an earthquake in 2003. It was also used on the territory of Slovakia in 2007 when it helped after the explosion at the Military Repair Facilities site in Nováky (Gašparík 2008).

The country also participates in the provision of aid under the EU Humanitarian Aid and Civil Protection Directorate General (ECHO). Some of this help is directly linked to civil security. An example of help to Hungary in 2010 can be given. After an ecological disaster in Hungary, the Slovak Ministry of Foreign Affairs provided financial help of 10,000 EUR. In the same year, Slovakia sent help to Haiti after the earthquake. This help consisted of financial aid of 50,000 EUR by the Ministry of Foreign Affairs and of in-kind help consisting of tents, field beds, blankets, sleeping bags and a field hospital (18-member team) by the Mol. Disaster-related help was also sent to Bulgaria (esp. water pumps and electricity generators) and Romania (esp. medicine and electricity generators) after floods in 2005; and to Romania again in 2008. In 2009, financial aid (20,000 EUR) was sent to the former Yugoslav Republic of Macedonia to help the country fight with the epidemic of mumps (EDRIS online).

Since 2004, the country often participates in EU crisis-response exercises. These have included EUDREX (October 2004), EUPOLEX (June/July 2005), EU-TACOM-SEE (July 2006), HUROMEX (September 2008), HUNEX (May 2009) and EU CARPATHEX (September 2011). The range of these exercises varies from floods and earthquakes to chemical, biological, radiological and nuclear threats (European Civil Protection online). Slovakia also actively participates in the EU Exchange of Experts in Civil Protection program, although it has never been an organizing/ hosting country (EU Exchange of Experts in Civil Protection 2009).

People in Slovakia seem to be rather unaware of EU co-ordination of civil protection both inside and outside the EU. Only 27 percent claim to be aware of this co-ordination – the fourth lowest number among the EU countries. 57 percent then agree that the EU needs a common civil protection policy (the third lowest number among the countries surveyed). The proportion of people saying they are not at all well informed about EU activities in civil security (40 percent) is the second highest in the EU. Slovaks would especially appreciate gaining this information via TV or also through Internet and online social networks (20 percent) (Special Eurobarometer 2012).

In contrast, 91 percent of Slovaks agree that EU Member States should be obliged by law to prepare and publish disaster management plans, the highest number in the EU. 39 percent also agreed that a coordinated EU action in dealing with disasters is more effective (further 47 percent then tend to agree). A relatively large percentage of Slovaks (40 percent) agreed that pooling civil protection resources could be more cost-effective (ibid.).

5. Conclusion

The Slovak civil security system is still in development. The 2010 flooding pointed to several malfunctioning aspects of the system: mal-staffing of crisis management departments of some district offices; communication problems; or imperfect legislation. Some problems complicating crisis management were also brought about by the reform of public administration of 2004.

Historically, civil security has been only a marginal issue. Firstly (during Czechoslovak times) it rested with the Ministry of Defense. Since 1993 (Slovak independence) this has been shifted to the MoI. The area of civil protection (under the MoI) can be seen as a slight remnant of the previous period.

In 2002, an all-hazards encompassing civil security system was created (no particular crisis led to the creation thereof), defining crisis management actors and tasks. Also, the IRS was created as an operational platform for dealing with crises. Culturally, the crisis management system tends to be organized hierarchically. In 2011, the reform of the IRS was announced by the MoI in reaction to the 2010 floods.

The current legal framework for civil security was established in 2002. The statutory basis of civil security rests upon four key legal acts. Competencies and responsibilities are all legally institutionalized. However, as the 2010 flood showed, legal principles of functioning of the crisis staffs at the municipal, district and regional levels remain unclear. The competencies and crisis management tasks of state administration and self-governing bodies are overlapping in large cities.

The expectations of the public towards the government are relatively high. The operative bodies are highly trusted, especially the Fire Rescue Brigades. The army is also trusted quite highly due to its help during natural disasters. People are willing to help and to volunteer. This usually involves tasks such as cleaning the roads or helping affected citizens with cleaning their homes. There is a long tradition of VFB. An official agreement between the MoI and the SRC was signed in November 2010. The organization is an official part of the IRS.

The state has started to be responsible for ensuring warning across the entire permanently inhabited territory of Slovakia by electronic sirens or alternative means. Regarding education, instructive information for the public is provided through regional media which publish or air informational articles, footage of model exercises, etc. The education of the public administration is organized hierarchically. This system of education on civil protection and crisis management issues is sometimes criticized as fragmented.

Private actors dominate in the field of health provision. The Health System Reform (agreed by the government in 2004) included complete privatization of health rescue services. The aim was to introduce market principles into the public health provision. The main driver of this reform was economization of activities. The impact on the provision of security during a crisis is, however, is hard to judge as of yet.

The main problems were unclear legislation; a measure of confusion brought about by the state administration reform; and at some points also a lack of finances and capacities. As an EU added value, a compulsory preparation and publication of disaster management plans, in the private as well as public sector, could be considered. Lack of these was stated as a problem after the 2010 flooding. 91 percent of Slovaks, too, agree that the preparation of these plans should be mandatory by law (Eurobarometer 2012).

Annex 1: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 SLOVAKIA

1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Act No. 42/1994 Coll. on Civil Protection of the Population	
1. b	Is the crisis management approach primarily based on military or civilian operations?		2	Act No. 387/2002 Coll. on Crisis Management	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?		2	Act No. 387/2002 Coll. on Crisis Management	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	-	1	Act No. 387/2002 Coll. on Crisis Management; Act No. 129/2002 Coll. on IRS	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				

2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = Federal = 2	1 1	Constitution (Act Nr. 460/1992 Coll.)	
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = Presidential system = 2	1 1	Constitution (Act Nr. 460/1992 Coll.)	
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = Republic = 2	2	Constitution (Act Nr. 460/1992 Coll.)	
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	2	Drgonec, J., Kvasničková, J. (2000): Mutácie ústavnosti. Vybrané ústavné inštitúty na Slovensku a vo svete. Bratislava: IVO.	
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?		1 1 1	Ladislav Šimák: Krízový manažment vo verejnej správe : Žilina, FŠI ŽU, 2004 http://fsi.uniza.sk/kkm/files/publikaci e/simak_km.html	
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		104	http://geert- hofstede.com/countries.html	
2.1.2.a.ii	Geert Hofstede country national cultural score - IDV		52	http://geert- hofstede.com/countries.html	
2.1.2.a.iii	Geert Hofstede country national cultural score - MAS		110	http://geert- hofstede.com/countries.html	

2.1.2.a.iv	Geert Hofstede country national cultural score - UAI		51	http://geert- hofstede.com/countries.html	
2.1.2.a.v	Geert Hofstede country national cultural score - LTO		38	http://geert- hofstede.com/countries.html	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0.67	http://www.worldvaluessurvey.org/	Year 2000
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self- expression		-0.43	http://www.worldvaluessurvey.org/	Year 2000
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	2	Act No. 42/1994 Coll. on Civil Protection of the Population; Act No. 129/2002 Coll. on Integrated Rescue Systém; Act No. 387/2002 on the Management of State in Crisis Situations Other than Time of War and State of War	
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2011		

2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	 1	Act No. 42/1994 Coll. on Civil Protection of the Population; Act No. 129/2002 Coll. on IRS; Act No. 387/2002 on the Management of State in Crisis Situations Other than Time of War and State of War	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	1	Act Nr. 227/2002 Coll. On State Security in the Time of War, State of Emergency, and State of Crisis	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	1	Act Nr. 227/2002 Coll. On State Security in the Time of War, State of Emergency, and State of Crisis	
2.2.2	Political dimension			
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	1	Buzalka, J., Keleman, M., Blažek, V. (2011): Štúdia vybraných aspektov ochrany obyvatelstva. Košická bezpečnostní revue. Vol. 1, Nr. 2, pp. 3-26.	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	2	Buzalka, J., Keleman, M., Blažek, V. (2011): Štúdia vybraných aspektov ochrany obyvatelstva. Košická bezpečnostní revue. Vol. 1, Nr. 2, pp. 3-26.	
2.2.3	Operational dimension			

2.2.3.a 2.2.3.b	Is there a specialised agency for crisis response at the national level? Are there specialised agencies for crisis	Yes = 1 No =	0 0 0	Act Nr. 129/2002 Coll. Act Nr. 129/2002 Coll.	There is the IRS operational at both central and regional/local level. This is an OPERATIONAL PLATFORM, not an actual body. 5 core agencies of the IRS.
2.2.3.c	response at the regional level? Is the exercise system formalised by law or executive mandate?	Yes = 1 No = By law = By executive mandate = 2	0 1 2	http://ocokrse.webnode.sk/news/cvic	2011 ordering the minister
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	1	Website of the Mol at http://www.minv.sk/?tlacove-spravy- 4&sprava=ohlasy-odbornikov-na- cvicenie-simulovanej-havarie- jadrovej-elektrarne-jaslovske- bohunice-su-pozitivne-havran-2012 (accessed 1.6.2013)	Exercises are commonly organized at regional level. No comprehensive statistic exists. Rough estimate is 7 important exercises in different regions in 2008- 2012. There are numerous tactical exercises at the regional level, too.
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	1	Website of the Mol at http://www.minv.sk/?tlacove-spravy- 4&text=medzin%E1rodn%E9+cvi%E8e nie (accessed 2.6.2013)	AnothermajorinternationalexerciseorganizedinApril2013.Smallercross-borderexercisesaremoreoften,takingplaceapprox.once

					year.
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?		1	List of current bilateral agreements available at http://www.minv.sk/?zmluvy-a- dohody	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	9	List of current bilateral agreements available at http://www.minv.sk/?zmluvy-a- dohody	
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	5	List of current agreements available at http://www.minv.sk/?medzinarodna-spolupraca	Note: includes EU and NATO
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"		3	,	Floods 2002 and 2010. Help from the Czech Rep. after 2011 emergency with shortage of medical doctors and 2009 gas crisis.
2.3	State-citizens relations				
2.3.1	Expectations				

2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).		1	Act Nr. 42/1994 Coll.	
2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	Act Nr. 42/1994 Coll.	
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	3	Act Nr. 42/1994 Coll.	Level depends on the level of crisis. Radio and TV operators are legally obliged to publish information on the crisis and on the measures related to the provision of help.
2.3.2.c	Does the government have a central website with updated information on crisis events?		0	Website of the government and of regional governments.	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?		2	Facebook pages of the Mol	Note: Facebook pages of the Mol started updating on crises. Starting only very recently (2012).

2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?		NA		
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0Yes = 1	1	Koncepcia organizácie a rozvoja civilnej ochrany do roku 2015. Conception of civil protection (2008). Available at: http://www.minv.sk/?civilna- ochrana&subor=11064 (accessed 3.5.2013)	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No=0Tomembers/professional=1Tomembersandlimitedpublicoutreach=22Tomemberandswide-spreadtrainingprogrammesforgeneralpopulation=3	0		SRC providing First Aid trainings for the public.
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?		0	Mol, 13.1.2011	Campaigns organized at the regional level by the self- governing regions. The number differs across the regions.

2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		1	Within the 7th Framework of the European Commission: http://www.minv.sk/?programy- europskej-komisie	
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	NA	Within the 7th Framework of the European Commission: http://www.minv.sk/?programy- europskej-komisie	WithinEuropeanCommissionProgramme:139.4mil.EUR139.4forprevention,preparedness and responseto terrorism;189.8 mil.to terrorism;189.8 mil.EURin2007-2013forCivilProtectionEUREUR
2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?		1	Act Nr. 129/2002 Coll.	
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	1	Act Nr. 129/2002 Coll.	
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?		1	Act Nr. 129/2002 Coll.	Health emergency services were all privatized.

2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?		1	Act Nr. 579/2004 Coll.	
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	4	NATO EADRCC online; Zvolánek (17.1.2009); Czech Press Agency 2011	floods 2006, 2010; medical staff-shortage crisis 2011; gas crisis 2009
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA	1	Mol online	
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA	NA		No comprehensive statistic available.
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	2	Major reform in 2002, decision of the Mol to reform the IRS in 2011.	

3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	-	0	Online archives of the Slovak Parliament.	Civil security has never been a hot political topic in Slovakia.
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?		0	Online archives of the Slovak Parliament, of the MoI and of the government	
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	1-2 instances = 1	0	Website of the Parliament and the government.	
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	0	Website of the ombudsman at http://www.vop.gov.sk/	
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0	Petitions addressed to the Government authorities - both at central and regional levels	
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?		0	Act Nr. 129/2002; Nr. 387/2002 Coll.	
3.3.3	Popular trust and support				

3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?		32	Special Eurobarometer 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?		51	Special Eurobarometer 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0Yes= 1	0	Website of the Mol. Act nr. 406/2011 Coll. on Voluntary Service	
3.3.3.d	If yes to above, list number if accessible	Register the number per 1,000 capita for 2011	NA		
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?		30,5	Website of the SRC and the VFB. Smaller NGOs do not list the number of their members.	
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be completed by UI/IFHS	http://ec.europa.eu/echo/files/policie s/disaster response/EUCPM activatio ns since 01012007.pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be completed by UI/IFHS	http://ec.europa.eu/echo/files/policie s/disaster response/EUCPM activatio ns since 01012007.pdf	

4.c	Does your country participate in the EU civil protection mechanism's training programme?		1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	-	19	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	7	http://ec.europa.eu/echo/policies/pr evention_preparedness/preparedness en.htm	6 according to the quoted website
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?		2	http://ec.europa.eu/regional_policy/t hefunds/doc/interventions_since_200 2.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	26,1	http://ec.europa.eu/regional_policy/t hefunds/doc/interventions_since_200 2.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	27	Special Eurobarometer 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	86	Special Eurobarometer 383 (2012)	

Annex II: H1N1 in Slovakia

Prior to H1N1, the avian flu (H5N1) in 2005 was important for the Slovak civil security system. The government was considering declaring a state of emergency. Although this state was not declared in the end, the event had an effect: the case of pandemic was added into the legislation as one of the explicit reasons for proclaiming a state of emergency (Pravda 2005).

Date	Description
24.04.2009	First recommendations published by the Chief Sanitary Inspectorate
30.04.2009	Call-centre established by the Ministry of Health, operating 24/7
28.05.2009	First case of infection confirmed (38 year-old male)
11.06.2009	WHO declares pandemic
2.10.2009	138 cases of infection confirmed to this date
3.11.2009	Strengthening security at the Slovak-Ukrainian border to prevent migration of infected people
5.11.2009	First case of death (48 year-old female)
8.11.2009	Slovakia closes its border with Ukraine
12/ 2009	First vaccines imported to Slovakia and started to be distributed to selected groups
31.12.2009	32 cases of death confirmed to this date
02/2010	Last delivery of vaccines arrives to Slovakia
10.08.2010	WHO announces entry into post-pandemic phase
1.10.2010	Pandemic called off in Slovakia by the Pandemic Commission of the government
14.10.2010	57 cases of death confirmed to this date in Slovakia (final count)
14.10.2010	1,210 cases of infection confirmed to this date in Slovakia (final count)
14.10.2010	Public Health Authority presents Evaluation of flu pandemic in Slovakia

Table 4: Main events in the H1N1 epidemic in Slovakia

First information about the influenza and recommendations were published by the head of the Chief

Sanitary Inspectorate (Ivan Rovný) on April 24, 2009. The first confirmed case of infection was in May in the Bratislava region – a 38 year old male returning from the USA (SITA 14.10.2010). The Bratislava (capital) region was hit the most by the flu compared to other regions.

The body deciding about the number of vaccines was the Pandemic Commission of the government based on the recommendations from the Public Health Authority (PHA). The decision was made to order one million vaccines (i.e. for 20 percent of the population). The decision was said not to be an easy one, with people first complaining about the lack of vaccines; the number ordered seemed to be low (SITA 14.10.2010). In the media, the number of vaccines was portrayed as low. The situation was compared with the neighboring Czech Republic (buying vaccines for 40 percent of the population) and with Israel (for 100 percent) (Pertinačová 14.10.2010).

The purchase was negotiated by the State Material Reserves Administration which postponed the signing of the contract for several months. Finally, vaccines were bought from a French pharmaceutical company, Sanofi Pasteur, for 7.6 million EUR (Ďurišová 25.1.2010). In the end, however, the number of people getting vaccinated was very low (1.4 percent of the population). It was not compulsory but recommended to get vaccinated. At first, the vaccines were meant for selected groups only. In the end the vaccination was offered to all (Mikas 14.10.2010). The vaccination was complicated by information which appeared in the media about dangerousness of the vaccines. Although these were approved by the EU, the public did not trust the vaccines (Pertinačová 14.10.2010).

During the pandemic, seminars and lectures were organized by the PHA for first contact medical doctors (more than 500 doctors in the Bratislava region were informed in this way). At the beginning of October 2009, seminars were also organized for all school directors. Also the general public was informed by the PHA about the flu and respective preventive measures. A non-stop operating call-center for the public was established at the end of April 2009 (ibid.).

When the first delivery of vaccines arrived in December 2009, the Pandemic Commission of the Slovak government decided about so-called priority groups to be vaccinated. These were: medical staff; pregnant women; persons with high risk of complications or death; persons important for the economy and public life (ibid.). To the police and fire rescue brigades, protective means against the flu were distributed and a possibility to get vaccinated was for them ensured (Mol online).

In the territory of Slovakia, the pandemic was called off by the Pandemic Commission of the government on 1 October 2010. In October 2010, the PHA presented an evaluation of the flu pandemic in Slovakia. The pandemic was overall evaluated as a light one. No inquiries were

undertaken. No political crisis resulted from the H1N1 in Slovakia, nor did any significant changes to policy or institutions.

Annex III: Resources

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Sweden

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Executive Summary

Over the past three decades, Sweden has experienced a number of major crises – including the assassinations of two prominent politicians, one of the most deadly maritime disasters in recent history and some of the worst building fires in peacetime Europe. Moreover, Sweden was among the countries in Europe with the highest death toll relative to population size in the wake of the 2004 South Asia tsunami.

The Swedish civil security system can be characterised as highly decentralised. Depending on the characteristics of the crisis at hand, this system invests crisis management responsibilities at different levels and with multiple actors which in turn requires effective horizontal and vertical coordination to maximize operational effectiveness when a disaster hits the country. Given the fragmented nature of crisis management capabilities – spread out across local, regional and national levels as well as political, public, private and civil society sectors and down to each and every citizen – the ensuring of effective information sharing and communication as well as collaboration and coordination between the different parts of the system comprise a major challenge for the system today.

The above-mentioned principles and the resulting decentralized system complicate any analysis of value-for-money aspects. As budgets and expenditures for crisis management purposes are localized for each actor involved, with no central authority to provide an overall cost picture, it is nearly impossible to draw any conclusions as to whether today's system is cost-efficient or not. While fiscal fragmentation has led to calls for reform, the situation continues and makes it difficult to assess whether goals have been met.

The Swedish civil security system enjoys considerable confidence among politicians and citizens at large. Civil security remains a relatively undisputed area measured by the nature of political debates, questions and complaints. The handling of the 2004 tsunami, which represented the most deadly crisis event during the past decade, is a case in point. Although the event led to a crushing critique of the government, and in particular the prime minister and the minister of foreign affairs, the government did not resign (although, 15 months later, the minister of foreign affairs left the post but only partly due to this incident) and the opposition was either unwilling to or incapable of filing a motion of no confidence in Parliament.

Bilateral, regional and international cooperation are considered vital to tackle future incidents. It is hardly surprising therefore that Sweden plays an active role in and sees itself as a promoter of joint civil protection initiatives, particularly in the Nordic region and within the EU system.

Key Findings

- 1. The Swedish civil security system is characterised by a high degree of decentralization which, coupled with the key principles of responsibility, similarity and proximity (see Introduction) means that CM responsibilities are located at many levels and across different types of actors. In turn, this creates a complex web of interactions that requires considerable coordination and information sharing. Coordination (*samverkan*) remains a key challenge to successful crisis management in the country. Decentralisation is also reflected in CM economy where the fragmented nature of civil security budgets across levels, actors and sectors turns any analysis of the value-for-money issue as a whole merely impossible. Whilst cost-benefit considerations are taken into account when decisions are made, assessments have not been capable of establishing that such goals have been achieved.
- 2. The 2004 Southeast Asia tsunami in the Indian Ocean was followed by intense political debate and eventually contributed to a revision of the civil security system and stands out in importance for the 2000-2012 period. The commissioned report that followed criticized the government for not being capable of understanding the situation and its grave implications for Swedish citizens located in the crisis area. Partly due to the crushing report, the minister of foreign affairs left her post four months after it was released. A prominent Swedish auditor expressed that "...in any other country in Europe, the government would have resigned after such a crushing critique of an independent inquiry". Two institutional setups followed in the wake of the tsunami report. Most directly linked to the report was the establishment in 2008 of the Crisis Management Coordination Secretariat under the Prime Minister's Office. In addition, the report contributed to the merging of three different CM-related agencies into one in 2009, today known as the Swedish Civil Contingencies Agency.
- 3. Swedish citizens have extraordinary expectations of the state: 96 percent of the Swedish citizens believe it is reasonable to expect the state to assist or rescue Swedish citizens when affected by a crisis and as much as 8 percent believe that this responsibility also applies when Swedes encounter a crisis when travelling abroad. At the same time, citizens' perceptions of state capacities are rather low: less than 50 percent believe that the state is sufficiently prepared to respond and deal with long-term IT/telecom/power disruptions, oil disasters in the Baltic Sea, terrorist attacks and radioactive emissions. Thus there seems to be a gap between citizens' expectations and perceptions of state capacities in the CM field.
- 4. Multiple challenges related to the engagement of the private sector are emerging. First, there is a lack of structured and effective involvement of the non-profit sector in civil security. For example, only half of all municipalities have established formal partnerships with voluntary resource groups that were foreseen as the key partner for such relationships at local levels. Second, there is an emerging confusion related to public-private relations and outsourcing of CM tasks in terms of how authorities will be able to find necessary resources when a disaster hits the ground.

List of Abbreviations

CBRN Chemical, biological, radiological, and nuclear CM Crisis management EUCP EU Civilian Protection FOI Totalförsvarets forskningsinstitut (Swedish Defence Research Agency) JO Justitieombudsmannen (Justice ombudsman) KBM Krisberedskapsmyndigheten (Crisis Management Agency) KU (Riksdagens) Konstitutionsutskott (the Parliamentary Committee on the Constitution) MFA Ministry of Foreign Affairs Myndigheten for Samhällsskydd och Beredskap (Swedish Civil Contingencies Agency) MSB NBHW National Board of Health and Welfare (Socialstyrelsen) NordBer Den nordiska el-sektorens forum för beredskap (Nordic power sector's forum for emergency matters) NordHels Det nordiska hälsoberedskapssamarbetet (The Nordic Health Preparedness Cooperation) NORDRED Agreement on Rescue Services between the Nordic Countries MIC Monitoring and Information Centre (EU) Ministry of Defence MoD ΡM Prime minister RCS **Red Cross Sweden** RFR Rapport från Riksdagen (Report from the Parliament) RiR Riksrevisjonens rapport (Swedish National Audit Office Report) SNAO Swedish National Audit Office (Riksrevisjonen) SOU Statens offentliga utredningar (Government public assessments) SPF Styrelsen för psykologiskt försvar (Board for Psychological Defense)

- SRV Statens Redningsverk (State Rescue Services)
- TAST Technical Assistance Support Team (EU)
- TE-SAT Terrorism Situation and Trend Report (EU)

UNDAC UN Disaster Assessment and Coordination (UN)

VMA Varning-och Informationssystemet (Warning and Information System)

1. Introduction

Sweden is viewed as a small but well-governed and prosperous country which has escaped some of the more devastating crises to have hit the rest of the world. Nevertheless, Sweden's non-aligned role in the Cold War led to the development of a significant defence apparatus and civil security system that has been transformed to address some of today's complex crises. Indeed, Sweden has experienced numerous major crises in the past years that put its civil security system – and its focus on "societal security" – to the test. First and foremost, the assassinations of two prominent political figures, Prime Minister Olof Palme in 1986 and Minister of Foreign Affairs Anna Lindh in 2003, have a special place in Swedish crisis history. The former in particular stands out "as a national shock that in many senses awakened the Swedish society from its – in some eyes – naive view of how open a modern society in reality can be" (Carlsen 2008). In terms of lives lost in single incidences, the 1994 MS Estonia ferry accident and the 2004 tsunami in south-east Asia both resulted in more than 500 Swedish citizens killed. On Swedish soil, the 1998 Gothenburg discothèque fire killed 63 youngsters and injured another 200 persons. Whilst not having caused any deaths, the 2010 Stockholm bombing and the 2011 terror plot in Gothenburg have put international terrorism on the Swedish crisis map.⁶⁹¹

Extreme weather represents the most typical crisis in Sweden. The powerful storm *Gudrun* (2005) killed a total of 18 persons – seven as a direct result of the storm and eleven during the clean-up -- and is thus one of the major natural disasters in the country in recent times. Two years later, the storm *Per* killed another three persons. Both storms caused severe damages on infrastructure and electricity affecting thousands of persons.

Table 1 provides a list of Swedish crises covering the period 2000-2012 alongside the following crisis categories: i) natural disasters and infectious diseases, ii) industrial/transportation accidents, iii) infrastructure failures, iv) terrorism, and v) other.

			Damage			
Year/	Crisis description	Crisis	# of	# of	# of	
month		category	persons	persons	persons	
monun			killed	injured	affected	
2001	The Gothenburg riots	V		143		
2003	The murder of the Minister of Foreign Affairs	V	1			
2004	Tsunami in South-East Asia	I	543	1,500		
2005	The "Gudrun" storm	I	18			
	related electricity breakdown				730,000	
	related phone line breakdown				250,000	
2007	The "Per" storm	I	3	?		
2009	The H1N1 pandemic	I	31			
2010	The Stockholm suicide attacks	IV	1	2		

Table 9: Major crises in Sweden, 2000-2012

⁶⁹¹ Whilst major terrorist attacks on Swedish soil did not cause major damage during this period, the 2010 Stockholm bombing (where a suicide bomber killed himself and injured two persons during the hectic hours of Christmas shopping) and the 2011 Gothenburg terror plot (where the police arrested four suspects of preparation of terrorist crime and evacuated a gallery during the opening party of the Gothenburg's International Biennial for Contemporary Art) should be mentioned.

Source: The International Disaster Database/Emdat (<u>www.emdat.be</u>); Global Terrorism Database/GTD (<u>www.start.umd.edu/gtd/</u>); TE-SAT/Europol 2012 (<u>www.europol.europa.eu/sites/default/files/publications/europoltsat.pdf</u>); <u>www.krisinformation.se</u>; <u>www.msb.se</u>; SOU 2002:122, p.664.

Note: A number of incidents reported in Emdat, GTD and TE-SAT/Europol 2012 are not listed above because they generally do not require specific response effort from the civil security system.

Definitions are provided in government documents and laws. A *crisis* is defined as "an incident that affects many people and much of society and that threatens fundamental values and functions. A crisis is a condition that cannot be handled with normal resources and organization. A crisis is unexpected, out of the ordinary and mundane and to resolve the crisis concerted action is required by multiple players" [authors' translation](Prop. 2007/08:92, p. 77). An *extraordinary incident* refers to "an event that deviates from the norm, is a serious disorder or imminent risk of a serious disturbance in important social functions and requires urgent action of a municipality or county council" [authors' translation] (Lag 2006:544, chap. 1 §4). The Swedish Civil Contingencies Agency (*Myndigheten för Samhällsskydd och Beredskap*, MSB) applies these definitions in their work (see e.g. MSB 2010 for the use and application of definitions).

The dominant civil security approach – usually referred to as the "societal security approach" by Swedish officials – builds on a holistic cross-sectoral and all-hazard approach (MSB 2009, p. 220). This is indeed reflected in the mandate of the MSB, i.e. to deal with the entire spectrum that ranges from threats to risks and from everyday accidents to major crisis and disasters as well as civil defence (Förordning 2008:1002, §1).

The system is entrenched in the civilian sphere. The civil security system was an integral part of the total defence system that during the Cold War era focused on protecting Swedish territory against armed attack. Over the two decades following the end of the Cold War, the total defence system remained intact but dormant. Recently the system has been revitalized – now with a stronger focus also on global peace and security as well as the strengthening of society during major peacetime crises – through the national defence planning process within which civil security agencies play a central role. Notably, the Swedish Armed Forces (SAF) collaborate with and contribute considerably to civil security through for example the provision of logistics and human resources support during peacetime emergencies (see Section 2.2.3).

Finally, the Swedish approach is based on a set of key fundamental principles and responsibility areas that impact on every aspect of the civil security system and thus form the back bone of the Swedish civil security system (Prop. 2005/06:133). The principles and responsibility are set out in Table 2.

	The responsibility principle	The authority who is responsible for an activity under normal conditions should also be responsible for such operations in an emergency.
Principles	The similarity principle	To the extent possible, operations should be organised in the same way during emergencies as under normal conditions
	The proximity principle	Emergencies should be handled at the lowest possible level in society.

Table 10: Fundamental principles and responsibility areas in the Swedish civil security system

Responsibility Areas	The geographic area of responsibility	There is a central body responsible for direction, prioritization and co-operation among different actors and across sectors before, during and after crises at each geographic-administrative level, i.e. at national, regional and local levels.		
	The sector area of responsibility	All agencies and organisations belonging to a specific sector or domain are also responsible for this specific sector or domain during a crisis		

Source: SOU 2007:31; Vademecum – County Profile Sweden (2012); Krisinformation.se (www.krisinformation.se)

More recently, the solidarity principle is from time to time added to the list (see e.g. SOU 2012:29, p. 63), based on the obligations for providing assistance in the context of Article 222 of the Treaty of the Functioning of the European Union – the so-called "solidarity clause" (see i.e. Myrdal and Rhinard 2010) – as well as the Nordic Declaration on Solidarity of 2011. Based on this, Sweden is committed to provide (and receive) assistance to (and from) any EU member state or Nordic country in case of natural- and man-made disasters, terrorist and, in the case of the latter agreement, cyber attacks.

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

2.1.1 Administrative tradition

At national level, Sweden is a constitutional monarchy where the king or queen is the head of state but where royal powers are limited to official and ceremonial functions (Regeringsformen 1974:152, Chapter 1). The Swedish Parliament (*Riksdagen*) is elected on a four-year basis and tasked with lawmaking, budgeting and government oversight (Regeringsformen 1974:152, Chapters 3-4). The government emanates from and is responsible to the Parliament. It takes care of the day-to-day governing of the country with the assistance of the government offices and central government agencies and administrations (Regeringsformen 1974:152, Chapters 6-7).

The government is responsible for crisis management at the national level, albeit mainly from a strategic perspective. The government ministries are responsible for crisis management (CM) within their respective sectors or domains. With the overall objective of ensuring effective cross-ministerial coordination within the government, the Crisis Management Coordination Secretariat under the Prime Minister's (PM) Office was established in 2008 (Statsrådsberedningen 2007). The secretariat monitors domestic and international events, threats and risks on a continuous basis, provides support to the government ministries in crisis planning and communication and organises training sessions and exercises. In the event of a crisis, the secretariat supports the ministries with CM implementation, raises alarm, gathers information and provides comprehensive analysis of the crisis landscape and its societal impact. Outside the government offices, the MSB functions as the main driving and coordinating agency at the national level and constitutes a CM hub for the public sector and society as a whole.

At the regional level Sweden is divided into 20 counties (län and regions). Political decisions are made by the county council (*landstingsfullmäktige*) which is directly elected and represents the highest governing body at this level. It appoints the county executive board (*landstingsstyrelsen*) which leads the work of the county council. Operational responsibilities at this level primarily relate to healthcare and regional development. The county administration board (*länsstyrelsen*), on the other hand, is the government's representative in the counties. Its main task is to ensure that national policies formed by the government and the Parliament are implemented at the regional levels.

The county administrative boards are responsible for regional CM coordination. The boards develop and exercise crisis plans, engage in risk and vulnerability analysis, and act as a clearing-house between public and private actors. During a crisis, they coordinate the relevant measures with relevant actors and serve as a focal point vis-à-vis the mass media.⁶⁹² The county councils, on the other hand, are responsible for developing situation reports and information to the county administrative boards as well as the National Board of Health and Welfare (NBHW). The county councils are required to have a CM committee (*krisledningsnämnd*) in place for assuming tasks and responsibilities to ensure the upholding of vital functions during crisis (Lag 2006:544).

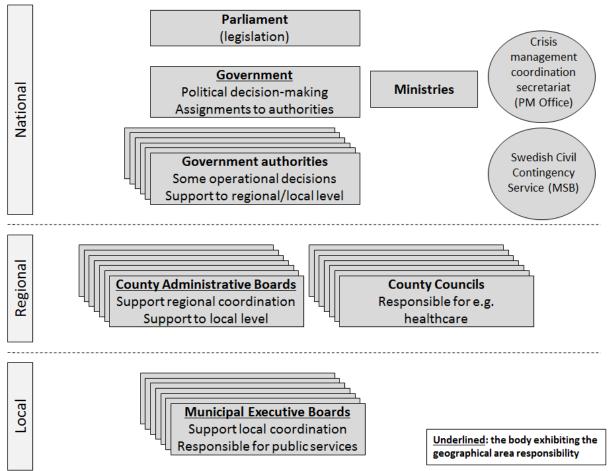
At the local level Sweden has 290 municipalities (*kommuner*). Each municipality has an elected assembly, the municipal council, which takes decisions on municipal matters. The municipal council appoints the municipal executive board (*kommunalstyrelsen*), which leads work carried out at this level. The municipalities are responsible for a large share of public services including education, elderly care, municipal management and development issues.

The local level plays a key role and has considerable autonomy in the Swedish civil security system. Local authorities are heavily engaged in all phases of the CM cycle, including preparation (risk-and vulnerability assessments, crisis management plans and training of personnel) and response (the maintenance of vital societal functions and infrastructures, reporting, crisis coordination and information to the public). During a crisis, the CM committee has the authority to assume responsibility of other committees as it deems necessary to ensure that vital functions in the municipality are maintained.⁶⁹³ Finally, local authorities are in charge of rescue services (Lag 2006:544).

⁶⁹² <u>https://www.msb.se/en/About-MSB/Crisis-Management-in-Sweden</u>, see also Vademecum (<u>http://ec.europa.eu/echo/civil_protection/civil/vademecum/se</u> (both accessed 18 August 2012)

⁶⁹³ In the event of a crisis and upon the discretion of its chairperson, the CM committee comes together. When circumstances allow, responsibilities go back to the regular committees as per the decision of the municipality executive board.

Figure 10: Organisational chart



Source: Vademecum – County Profile Sweden (2012)

In line with the Swedish local self-government administrative model, the civil security system is marked by a high degree of decentralization (Lundgren 2010). Based on the principles of responsibility, similarity and proximity, a myriad of actors at local and regional levels play key roles in the operational CM dimension. Notably, the central level agencies have specific responsibilities under certain conditions.⁶⁹⁴

This rather fluid system makes the system for up-scaling and downscaling of CM authority in Sweden rather complex.⁶⁹⁵ As there is no lead CM authority on each level, there is no general rule for when the "ownership" of a crisis as a whole is moving from one level to another. Each actor has their role

⁶⁹⁴ National agencies may be given tasks to ensure all-sector coordination responsibilities during a national crisis (i.e. the National Board of Health and Welfare during an epidemic) or on a more continuous basis (i.e. whilst operating at different levels, the police sector is located under the Ministry of Justice). Also, special rescue services are located at the central level (see section 2.2.3). When it comes to operations targeting Swedish citizens hit by a disaster in foreign countries, the Ministry of Foreign Affairs supported by the Crisis Management Coordination Secretariat under the PM Office have special responsibilities, as do the National Board of Health and Welfare and six county councils in the particular area of disaster medicine abroad (Law 2008:552).

⁶⁹⁵ Email correspondence with Swedish Defence Research Agency (FOI), 7th January 2013.

to play: the municipalities are responsible for information in their geographical area; regional authorities for health care aspects; private companies for upholding critical infrastructure functions such as power supply and telecommunication; the (security) police for policing and/or intelligence activities etc. Thus, whilst assistance in terms of cooperation and coordination support can be provided by a "higher" level, the operational responsibility for CM operations does not necessarily move upwards as a whole. Some exceptions exist. First, specific rules apply when it comes to CM that targets Swedish citizens abroad. In such cases, the Ministry of Foreign Affairs supported by the Crisis Management Coordination Secretariat under the PM Office is responsible for taking charge (Lag 2010:813). Second, coordination of disaster medical operations abroad has been assigned to the National Board of Health whereas the county councils in six counties are required by law to maintain a state of preparedness to engage in such operations (Lag 2008:552).

2.1.2 Government/social culture

Swedish culture may be defined as "socially oriented individualism": whilst being fundamentally individualistic on the one hand, Swedes are considered as having great concern for fairness and the general well-being of others (Hetzler 2010, p. 3). Equality and moderation are praised principles, and Swedes generally have strong feelings of right and wrong. Political life is geared towards collective decision-making and pragmatism which amongst others and coupled with the above resulted in the development of the comprehensive welfare state in the 1930s, popularly known as The Peoples' Home (*Folkhemmet*).

Geert Hofsetede's national culture analysis highlights power decentralization (hence the importance of equality and fairness) and individualism as central themes of Swedish culture (The Hofstede Center 2010). Strong focus on inclusiveness where "everybody has enough and nobody goes without" is reflected in the Swedish welfare state model as well as in the consensus-building political culture of the country ("the Swedish middle way"). The low score on Hofstede's masculinity/femininity dimension, amongst the lowest of all countries analysed, demonstrates an emphasis on modesty, cooperation and focus on quality of life. Similar to most Western European countries, Sweden scores low on long-term orientation dimension thus reflecting their concerns on absolute truths and stability as well as preference for immediate results.

The World Value Survey results position Sweden among the countries that score highest both on the traditional vs. secular as well as the survival vs. self-expression values (Ingelhart n.d.). Over the past 30 years, Sweden's score on the former dimension has steadily increased from a score of 1.20 to 1.86, currently only second to Japan, which indicates a reduced emphasis on religion, traditional family values and authority. The increase has been more dramatic on the self-expression dimension, which has gone from 0.85 to 2.35 and represents the highest score of all countries surveyed, suggesting that a shift has taken place from concerns over economic and physical security towards environmental protection, tolerance for foreigners, gender equality and increased desire for more participation in decision-making processes. This also testifies to the post-materialism tendencies in the country, and in particular the high importance they attach to environmental issues as demonstrated in other studies (see i.e. Eurobarometer 2008).

The above-mentioned cultural traits have influenced the civil security system in various ways. The decentralization of powers is reflected in the responsibility and proximity principles whereby CM is

dealt with at the lowest possible level. The score on Hofstede's masculinity/femininity dimension can be linked to the way in which the system values solidarity that is amongst others visible in Swedish CM engagement abroad. Indeed, the solidarity argument was used as a key argument to convince people to comply with the government's decision for mass vaccination during the outbreak of the H1N1 in October 2009 (Svenska Dagbladet, 12 February 2012). The fact that survival is taken for granted may have contributed to a situation where, as we demonstrate below, it has been difficult to effectively incorporate volunteerism in a systematic fashion.

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

Two key laws regulate the civil security system in Sweden. The 2006 Act on Municipal and County Council Measures Prior to and During Extra-Ordinary Events in Peacetime and During Periods of Heightened Alert (Lag 2006:544) regulates the mandate and responsibility of local and regional councils when it comes to emergency preparedness and response. The Emergency Management and Heightened Alert Ordinance (Förordning 2006:942) regulates the CM responsibilities of government authorities at national and regional levels (i.e. the county administrative boards).

Other relevant laws and regulations include the Civil Protection Act (2003:778), Local Government Act (1991:900), the Police Act (1984:387), Infectious Diseases Act (2004:168), Disaster Medicine Act (2008:553), Social Service Act (2001:453), Health Act (1982:763) as well as a series of government ordinances containing Instructions for the Swedish Civil Contingencies Agency (2008:1002); Swedish Armed Forces (2007:1266); government offices (1996:1515); and county administrative boards (2002:864). With two key laws and a myriad of additional acts and ordinances dealing with specific CM aspects, the legal framework is neither centralized nor fragmented but situated somewhere in the middle of the spectrum.

The Swedish civil crisis management system is characterized by a fairly high degree of institutionalisation (Lundgren 2010, p. 24). The legal framework, including the geographic area responsibility principle, set out a clear division of roles and responsibilities among the different actors operating at local and regional levels. At the national level the CM system appears more ad hoc. Notably, there is no law or regulation that specifies the precise role of the government; the current legal framework allows room for interpretation regarding the authorities' responsibilities ahead of and during a crisis. That said, the establishment of the Crisis Management Coordination Secretariat has created clearer procedures within the government offices and, moreover, national level routines for specific sectors (e.g. diseases and nuclear energy preparedness) are well-developed.

Two major reforms have taken place during the period examined for this study. In 2002, the Swedish Agency for Civil Emergency Planning (*Överstyrelsen för Civil Beredskap*, ÖCB) was replaced by the Swedish Emergency Management Agency (*Krisberedskapsmyndigheten*, KBM). In 2009, MSB was created as an amalgamation of KBM, the State Rescue Services (*Statens Redningsverk*, SRV) and the Board for Psychological Defense (*Styrelsen för Psykologiskt Försvar*, SPF). Further major reform of the civil security system is not currently on the agenda.

2.2.2 Political dimension

Executive responsibility for crisis preparedness and response rests on local authorities and, more specifically, on the municipal councils. In line with the proximity principle, and provided that a crisis becomes too large to be tackled within the local area, certain functions (e.g. coordination) may be transferred to state authorities at the regional level, that is to the county administration boards. The sector responsibility principle establishes particular responsibilities for agencies in their respective areas, such as the National Board of Health and Welfare (NBHW) when it comes to diseases, the Radiation Safety Authority when it comes to nuclear accidents, the Transport Agency when it comes to major accidents and disasters in the transport sector, etc.

That said, the government has an overall executive responsibility for major crises, including over what various authorities do (or do not do) during a disaster, and is ultimately responsible vis-à-vis the Parliament (RiR 2008:9, p. 22). The responsibility structures at the national level are complex. As head of the government, the PM has the overall responsibility for major crises. Within the government, the Ministry of Defence (MoD) is central since it "owns" the defence and societal security work stream and budget.⁶⁹⁶ Other ministries are responsible for civil security measures within their sectors (i.e. Ministry of Health and Social Affairs for disease) and the work that is carried out by the relevant agencies (i.e. the related National Board of Health and Welfare; the Institute for Communicable Disease Control etc.).

Policy formulation is primarily at the hands of the MoD whereas other ministries are responsible for development of crisis-related policies within their sector area of responsibility. The Parliament adopts and amends civil security policy.

Sweden does not have special rules or procedures that would extend the authorities' room of manoeuvre to make extraordinary decisions during peacetime crises. This means that such crises need to be handled within the existing regulations and decision-making structures. The Constitution offers a basis for timely and necessary actions, however, when such are required (Deschamps-Berger 2011, p. 22).⁶⁹⁷

2.2.3 **Operational dimension**

In line with the principles of responsibility and proximity, implementation actors are divided across administrative levels and operational authorities and agencies. It means that the level and institution responsible for CM preparation and response depends on the nature of the crisis at hand.

The majority of crisis responsibilities and operations lie with the municipal level, which operates fire brigades and rescue services. This level is thus responsible for a wide variety of operations, including fire, major traffic accidents, underwater diving, large-scale oil fire, forest fire, chemical accidents as well as marine rescue related to ports, channels and shorelines. The national level is responsible for six specific types of rescue operations: mountain rescue (the police), air-and maritime rescue (Swedish Maritime Administration), other types of missing-persons rescue operations (the police),

⁶⁹⁶ Financial allocations to the MSB are channelled through the MoD budget and MSB is thus ultimately responsible to the MoD.

⁶⁹⁷ The Constitution establishes that there is always a Parliament that it can be convened on short notice between sessions and outside of the capital if such is deemed necessary (SOU 2008:61, p. 64),

environmental rescue at sea (Coast Guard), emergency services related to the release of radioactive materials (County Administration Boards).

Central authorities whose responsibilities are affected by a crisis are required to take necessary measures to address its consequences and to cooperate and support each other during such situations (Förordning 2006:942, §5). Certain authorities have particular responsibilities in terms of coordination and interaction, monitoring of developments (i.e. research and operational developments as well as international collaboration) and reporting to the government (Förordning 2006: 942, §\$11 and 14). This work is organised into six coordination areas: i) technical infrastructure, ii) transportation, iii) dangerous substances, iv) economic security, v) geographical responsibility areas, and vi) protection, rescue and care. Authorities working in the different coordination areas meet regularly to identify risks and threats, and agree on what measures should be implemented to strengthen crisis preparedness (Krisinformation.se 2012a).

The Swedish Civil Contingency Agency (MSB) is responsible for issues concerning protection against accidents, crisis and civil defence whenever no other authority is responsible (Förordning 2008:1002, §1). It could be considered the "lead agency" in the Swedish CM system, although one must keep in mind the complex net of responsibilities that rest with various actors in line with the responsibility principle.⁶⁹⁸ MSB's work is organised in four areas: prevention, preparation, response and learning (MSB, 2012a). In close cooperation and interaction with key actors at local and regional levels, MSB is tasked to promote prevention and preparation with a particular focus on identifying serious vulnerabilities, threats and risks as well as for organizing training sessions and exercises and to support the government offices in additional educational activities in the CM field (Förordning 2008:1002, §§2 and 5). In the response area, MSB provides resources and supports coordination functions. Finally, it monitors and assesses the CM system and measures the degree to which actions have desired effects (Förordning 2008:1002, §§7 and 10). The Government Instruction (Instruktionen) clarifies MSB's tasks and responsibilities and the government's annual Regulation Letter (Regleringsbrevet) lays out the objectives, reporting requirements and administrative and operational resource allocations. MSB employs 850 persons and is organised in five departments dealing with i) risk & vulnerability reduction; ii) training, exercise & emergency preparedness; iii) coordination & operations; iv) evaluation & monitoring; and v) administration.

Other agencies and institutions have more specialized portfolios. The National Board for Health and Welfare (Socialstyrelsen, NBHW) is responsible for areas concerning health care, social services, health protection and disease control. The NBHW's role during a crisis is primarily to support the counties with expertise and equipment. Expert groups include the nuclear, biological, chemical, and radioactive areas, as well as psychosocial support (Krisinformation.se 2012b). The National Police Board (Rikspolisstyrelsen) is a supervising central administration for the Swedish Police and responsible for coordination of emergency-related police operations and also assumes operational responsibility under specific circumstances (Polisen 2012). However, it is the regional police authorities that usually take charge even during extraordinary incidences. The services provided by the police during crises include the sealing of accident areas, identification of killed persons and notification of relatives, related criminal investigations, event assessments etc. The Swedish Armed Forces (Försvarsmakten, SAF), in addition to their military obligations, are also responsible for

⁶⁹⁸ Notably, the term "lead agency" is not used in the Swedish civil security system.

providing support during peacetime crisis, unless there is a risk that they might use force or violence against civilians (Förordning 2007:1266, §2, Förordning 2002:375, §§4&7). Upon request from another authority or the county/municipal administration, the SAF support rescue service operations for example through the provision of transport, such as helicopters and human resources through the mobilization of the Home Guard. Upon a request from the National Police Board, SAF support the police in counter-terrorism, in which case the military personnel stand under the command of the police, and assume the authorities of policemen, which has implications on their abilities to use force against civilians (Lag 2006:343, §§ 3&5).⁶⁹⁹ This has so far never been invoked. Intelligence is carried out by the Swedish Security Services (*Säkerhetspolisen*) and the National Defence Radio Establishment (*Försvarets Radioanstalt*) as well as units within the National Police Authorities⁷⁰⁰ and the SAF.⁷⁰¹ Other relevant agencies include the Board of Agriculture, the National Food Agency, National Post and Telecom Agency, Swedish Institute for Communicable Disease Control, the National Board of Health and Welfare, National Veterinary Institute, the Radiation Safety Authority, the National Grid, the Transport Administration and the Transport Agency (Krisinformation.se, 2012a).

Planning and risk assessment form an integral part of the responsibility principle. To uphold critical functions during crisis, agencies, institutions and organizations are required to plan their activities in case of an emergency. At local and regional levels, municipal and county councils are legally obliged to conduct risk and vulnerability analyses and to establish CM plans within their geographical area of responsibility (Lag 2006:544, Chap. 2, §1). At the national level, authorities are responsible for analysis and planning – taking into account potential unexpected situations likely to demand comprehensive management capabilities to handle such extraordinary events – in their sector (Förordning 2006:942, §9).⁷⁰²

The national communication system has two key components. *Rakel* is a nationwide radiocommunication system for protection and security.⁷⁰³ *WIS* is a Web-based information system developed to facilitate sharing of information between CM actors.⁷⁰⁴ Rakel and WIS are both managed by MSB. Beyond high-tech systems, regional "coordination conferences" serve as a forum for face-to-face interaction between key actors across municipality borders and have proven important when it comes to knowing "who to call" when a crisis hits.

In line with the proximity principle and sector responsibility, local authorities and agencies operating vital functions are also responsible for logistics – including transportation, materials and human

⁶⁹⁹ Such support is provided only in very specific situations where i) assistance is needed to prevent or intervene in an act that constitutes an offense under Act 2003:148 on penalties for terrorist offences; ii) the intervention requires resources that the police do not have access to; and iii) a Government consent applies (Law 2006:343, §1).

⁷⁰⁰ Criminal Intelligence Service (*Kriminalunderrättelsetjänsten*, KUT)

⁷⁰¹ Swedish Military Intelligence and Security Service (Militära underrättelse- och säkerhetstjänsten, MUST) - <u>http://www.forsvarsmakten.se/hkv/Must/</u>

⁷⁰² The MSB provides advisory support to government agencies, municipalities, organizations and companies to facilitate planning processes, develops action plans and reports to the government (Förordning 2008:1002, §2).

⁷⁰³ The Rakel system has over 40,000 subscribers, and consists of about 1,700 base stations located across Sweden. The system covers 99.84 per cent of Sweden's population and 95 per cent of the country's area (MSB 2012a, p. 20).

⁷⁰⁴ WIS provides actors with an overall picture of the crisis situation, thereby creating the conditions for comprehensive and integrated operations.

resources – during a crisis. Resources may be held within a county or pooled across county borders if required. MSB and SAF possess additional resources that can be requested.⁷⁰⁵

Multiple actors perform monitoring tasks. In the context of its wider coordination and support mandate, MSB monitors crises when they occur and develops information and situation reports to facilitate the work of local, regional and central authorities (Förordning 2008:1002, §7). The Crisis Management Coordination Secretariat under the prime minister monitors CM related events worldwide and reports directly to the government.⁷⁰⁶

Below we provide an example/illustration of how the Swedish civil security system typically works in practice.

Example: Swedish civil security system and operations under a storm⁷⁰⁷

Extreme weather situations represent the most frequent type of crisis in Sweden. Under a severe storm, a warning is issued by the Swedish Meteorological and Hydrological Institute (SMHI) which leads to a heightened alert situation among local and regional councils, county executive boards and the government. Rescue services and relevant agencies and companies mobilise additional resources to uphold critical functions.

As the storm hits, municipal councils are responsible for initiating coordination among actors involved (e.g. rescue services, police, transport agencies, health and elderly care institutions, companies responsible for electricity and telecommunication etc. and NGOs). The municipal councils report to county councils and county executive boards and continuously inform the public. Local rescue services are in charge of the rescue operations whereas agencies and companies responsible for specific sectors are in charge of maintaining related vital functions. SAF and/or MSB may be called upon for logistical, human resources and materials support.

At the regional level, the county council boards monitor the situation and communicate with and report to the municipalities within their geographical area of responsibility and to the government. At the national level, the relevant ministries (such as the Ministry of IT & Energy, Infrastructure, Defence, Rural Affairs etc.) follow the developments in their sector areas. The PM Office supports and ensures coordination and alignment between the ministries involved and may, if necessary, establish a cross-ministerial strategic coordination group.

2.2.4 External dimension

Sweden has bilateral cooperation agreements with six countries, namely Armenia, Estonia, Latvia, Lithuania, Russia and Ukraine (SOU 2012:29, MSB 2013a).⁷⁰⁸ All agreements feature prevention,

⁷⁰⁵ When regional resources become insufficient, MSB possesses reinforcing resources particularly in areas concerning oil spill, wildfires, and hazardous substances and flooding. MSB may provide expert assistance and is also responsible for the Swedish National Air Medevac. As mentioned, the Swedish Armed Forces may provide human resources and logistical (i.e. transportation) and material (i.e. aggregators) assistance.

⁷⁰⁶ The division of labor between MSB and the Crisis Management Coordination Secretariat under the PM Office is somewhat unclear and overlapping when it comes to monitoring and reporting to the government (interview with FOI, January 2013).

⁷⁰⁷ The illustration has been developed based on the above description as well as on information provided at <u>www.msb.no</u> and <u>www.krisinformation.se</u>.

⁷⁰⁸ Memorandum on crisis prevention and crisis management between the MSB and the Armenian Ministry of Emergency Situations; Operational agreement between the Swedish Rescue Services Agency and the Estonian Rescue Board; Agreement between the Government of the Kingdom of Sweden and the Government of the

preparedness and response collaboration. MSB coordinates the work that is carried out in relation to these agreements. A bilateral agreement also exists with the US in the field of security research (MSB 2013a).

Sweden takes part in numerous multilateral cooperation arrangements in the civil security field.⁷⁰⁹ Nordic cooperation is a prioritized area for the Swedish government across multiple sectors, civil security included. In 1989, the Agreement on Rescue Services between the Nordic Countries (NORDRED) was established to facilitate cooperation between relevant authorities in Norway, Denmark, Sweden, Finland and Iceland during peacetime emergencies (NORDRED nd).⁷¹⁰ The agreement obliges participating states to provide support (NORDRED Agreement, Art. 2) and includes provisions related to operational leadership, elimination of import/export barriers, permission to use emergency equipment etc. (Art. 3). Building on this, the Haga Declaration was signed by the Nordic ministers in charge of civil security in 2009 (MSB nd). It entails cooperation in a wide range of areas, including rescue services, protection of critical infrastructure, CBRN preparedness, preparedness at major summits, crisis communication, radio communication systems, fire prevention, use of volunteers, training, exercises and research & development.⁷¹¹ NordHels (2002) and NordBer (2006) aims to promote CM cooperation related to the health and energy sectors, respectively. Finally, security services and police cooperation is well-established and joint operations have been undertaken in terms of reconnaissance, threats of major riots and cross-border crackdowns (Sundelius and Wiklund 2012, p. 23). Nordic civil security cooperation is considered central due to geographical, cultural and linguistic proximity and shared values as well as common interests and similar-threats – all of which are seen as representing an advantaged basis for cooperation (SOU 2012:29, p. 80; Stoltenberg 2009; Sundelius and Wiklund 2012).

Sweden is significantly engaged in cooperation in the field of environmental rescue at sea with the Nordic countries (*Copenhagen Agreement*),⁷¹² the Baltic countries (*Helsinki Commission*)⁷¹³ and the North Sea countries (*Bonn Agreement*).⁷¹⁴ In the context of these agreements, Sweden is involved in regular meetings and exercises and cooperates in oil spill clean-up operations. The *Barents*

Republic of Latvia on Collaboration in the Field of Emergency Prevention, Preparedness and Response; and Operational agreement between the State Fire and Rescue Service of the Republic of Latvia and the Swedish Rescue Services Agency; Cooperation agreement between the Lithuanian Fire and Rescue Department under the Ministry of the Interior and the Swedish Rescue Services Agency; and Agreement between the Government of the Kingdom of Sweden and the Government of the Republic of Lithuania on collaboration in the field of Emergency Prevention, Preparedness and Response; Memorandum between the Government of the Russian Federation and the Government of Sweden in the field of Emergency Prevention, Preparedness and Response; Memorandum between the Government of the Russian Federation and the Government of Understanding between the Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters and the Swedish Rescue Services Agency; Memorandum of cooperation between the Swedish Rescue Services Agency and the Ministry of Ukraine of Emergencies in the field of Emergencies Prevention and Response.

⁷⁰⁹ The overview of multilateral agreements to which Sweden is participating is primarily based on the SOU 2012:29.

710 http://www.nordred.org/

⁷¹¹ Based on the Haga Declaration, a Nordic development project in the field of rescue services entitled Crossborder was implemented in the period 2010-2011. Its primary goal was to further develop cooperation as well as to examine the necessary conditions for cooperation from rescue cooperation to the much broader area of social protection and crisis preparedness (SOU 2012:29, p. 81).

⁷¹² https://www.copenhagenagreement.org

⁷¹³ http://www.helcom.fi

⁷¹⁴ http://www.bonnagreement.org/

Agreement was signed by the governments of Sweden, Norway, Finland and Russia in 2008 to promote the pooling of resources in a sparsely populated area (MSB 2009c).⁷¹⁵ Sweden is an active member of the civil protection network of Council of Baltic Sea States (CBSS)⁷¹⁶. Sweden takes part in numerous agreements and activities in the civil protection field in the context of the country's UN and NATO membership as well as through the EU (see Section 4).⁷¹⁷

When it comes to the Swedish civil security system capacity to accommodate support from the outside, a recent report concluded that it is considered "well organised to receive international assistance in the event of emergencies and other serious peacetime incidents" (SOU 2012:29, p. 27). Whilst some legal barriers were identified, the report found that these did not necessarily translate into genuine obstacles on the ground.⁷¹⁸

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

From a state-to-citizens perspective, the legal framework establishes individuals' responsibilities to protect their own lives and property (Lag 2003:778). Citizens' basic responsibilities include i) to be aware and prepare for accidents and emergencies; ii) to be aware that resources during severe incidents first are allocated to aid specific groups, such as elderly, children and handicapped persons; iii) to actively gather information on CM efforts and to follow instructions and advice from the authorities; and iv) to be able to meet basic needs such as access to water, food and warmth, especially during the beginning of a crisis (Dinsäkerhet.se 2012). Also, persons between 18 and 65 years are obliged to participate in emergency services upon request (Lag 2003:778, Chap 6, §1). When confronted with a crisis scenario, 71 percent say that they are positive towards getting involved whereas only 3 percent explicitly reject contributing in such ways (MSB 2012b, p. 34).

The citizens-to-state expectations, i.e. individuals' anticipation of government assistance in the face of a crisis are high. 96 percent of Swedish citizens believe it is reasonable to expect the state to assist or rescue Swedish citizens when affected by a crisis and 89 percent believe that this responsibility also applies when Swedes encounter a crisis when travelling abroad (MSB 2012b, p. 32). Notably, the Swedish civil security system enjoys substantial confidence among the public with more than 65

⁷¹⁵ Key to the agreement is the clause stating that a party may use another state's resources if these are located closer to the emergency area. In addition to operational efforts, the agreement also includes provisions for training and exercises (including the Barents Rescue exercises) to promote the actors' capacities to provide effective and rapid rescue service support.

⁷¹⁶ http://www.cbss.org/

⁷¹⁷ In the context of its UN membership, Sweden takes part in civil security and disaster relief activities within agencies such as the UN Office for the Coordination of Humanitarian Affairs (OCHA), the UN Disaster Assessment and Coordination (UNDAC) and the International Atomic Energy Agency (IAEA). Also, Sweden's extensive and well-developed cooperation with NATO, its relation to the Euro-Atlantic Partnership Council (EAPC), the Partnership for Peace (PfP) programme and various CM operations is worthwhile mentioning. Close collaboration within NATO has "strategic importance for Sweden and a way to contribute to international peace and security" (Skr. 2008/09:137, p. 21).

⁷¹⁸ The five legal obstacles identified were: i) access for international assistance; ii) residence and work permits; iii) requirements for bringing in goods; iv) liability issues; and v) approval of doctors with foreign training. Gaps in Sweden's capacities are mainly attributed to lack of knowledge concerning Swedish society, its civil security system and applicable regulations among the relevant actors (SOU 2012:29, p. 32-33).

percent of the population considering that the state is doing enough to manage natural/man-made disasters and to fight terrorism (Eurobarometer 2011: 371). At the same time, Swedish citizens are less concerned about the imminent dangers of major disasters or crises than their European fellows. A recent Eurobarometer study shows that 48, 31 and 18 percent of Swedes expressed concerns related to man-made disasters, terrorist attacks and natural disasters, respectively, with fairly small percentages articulating a grave concern (Eurobarometer 2012:383).

2.3.2 Information

The authority holding the geographical area responsibility at each level of government is responsible for providing public information on preparedness whereas MSB is tasked with assisting crisis communication. In relation to this, MSB runs several websites providing information⁷¹⁹ and is active in social network forums such as Facebook, Twitter and YouTube.

Regarding response, the Warning and Information System (Varning-och Informationssystemet, VMA) ensures that information on acute accidents and serious incidences is immediately communicated to the public (Prop. 2005/06:133, see also Krisinformation.se 2012c). The requesting authority⁷²⁰ is responsible for the content of the message, which covers four key items, namely i) what has/can happen; ii) what is the main threat; iii) what should citizens do to protect themselves; and iv) what can the public do to contribute to the civil security operations. The message is forwarded to the SOS Alarm responsible for operating the Swedish emergency number *112* who informs the Swedish Radio who in turn ensures that the information is transmitted through all radio and TV channels. Outdoor warning systems are in place in all locations with more than 1,000 inhabitants as well as around nuclear power plant zones, totalling 4,500 sirens (Krisinformation.se 2012c). For the latter areas, all households also have special indoor radio or warning system receivers. MSB is responsible for the VMA at the national level, while operations and maintenance of the system lie at the municipal levels, usually with the local rescue services (Räddningstjänsten 2008).

Depending on the crisis at hand – and closely related to its gravity, pace and proximity – people prefer different types of sources to keep themselves informed about the course of the event (Ghersetti 2010). Broadcast media, i.e. TV and radio, play a particular role when it comes to providing information during major disasters (see Figure 2). Daily press and online news are also used by a large majority of the population whereas the relevant authorities' websites and social media would be used by fewer people.

⁷¹⁹ Central information websites targeting the public are *Krisinformation.se* (provides information from government agencies and others responsible for how they handle different crises - before, during and after the crisis); *DinSäkerhet.se* (on risks and security of individuals); *Informationssäkerhet.se* (provides practical support to enhance systematic information security from Swedish authorities primarily targeting personnel with specific responsibilities for information security in their organisations); Tjugofyra7.se (MSB's "news site" that monitors and reports on the development of MSB and preparedness responsibilities and aims to stimulate public debate on civil security issues)

⁷²⁰ Depending on the type of crisis, the following entities are entitled to request an alert message: chief rescue leaders at municipal and state levels, chief fire leaders at municipal level, Swedish Radiation Safety Authority, police, infectious disease specialists, plants with dangerous activities (pursuant to Chapter 2, § 4, Law on protection against accidents) and SOS Alarm. See <u>https://www.msb.se/sv/Insats--beredskap/Hantera-olyckor-kriser/Varningsystem--nodsandare/VMA/Begara-sandning/</u>, accessed 15 October 2012.

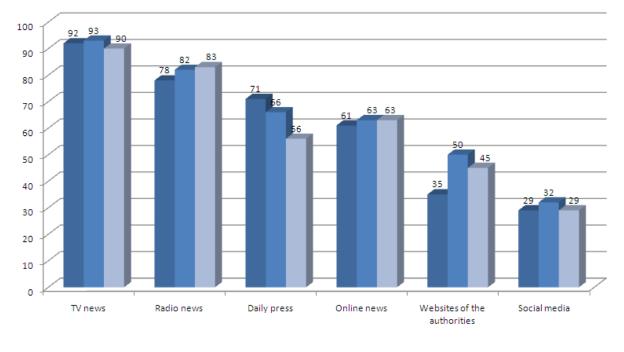


Figure 11: Use of media during crisis

Terror attack with many killed in neighbouring country
 Epidemic approaching the country
 Toxic gass within the municipality
 Source: The figure is based on Ghersetti 2010, p. 527.

Altogether 33 percent and 41 percent of the citizens feel that they are informed about disaster preparedness and response in Sweden, respectively (Eurobarometer 2009:328).

Inspections and evaluations of the civil security system are made available in different ways. Government public assessments (*Statens Offentliga Utredningar*, SOU) and the ministries' report series (*Departementsserien*, DS) are available in the government's online publications database.⁷²¹ The Constitutional Committee of Parliament (*Konstitutionskommiteen*, KU), through which MPs can hold government and individual ministers accountable for misconduct, also publishes all reported cases online (see more in Section 3.3.1). Moreover, assessment reports carried out by the Justice Ombudsman (*Justitieombudsmannen*, JO) and the Swedish National Audit Office (*Riksrevisionen*, SNAO), both of which represent agencies under the Parliament, are available on the respective agency websites (see Section 3.1 and 3.3.2).

2.3.3 Education

MSB is responsible for ensuring that training sessions and exercises are organised within the CM area (Förordning 2008:1002 §5). MSB offers professional training in areas such as protection against accidents, rescue operations, rescue leadership, basic and advanced courses in societal security and

⁷²¹ As per 31 January 2013, the number of available SOU and DS reports in the government's publication database (<u>http://www.regeringen.se/sb/d/108</u>) amounted to 1,900 and 1,000, respectively.

preparedness and others. Moreover, MSB support to CM related exercises is carried out in a direct (whereby it takes part in organising exercises as well as supporting participation) and indirect fashion (whereby it mainly provides expert support to additional exercises organised nationally and internationally). In 2011, MSB spent 184 and 55 million SEK, respectively, on the above mentioned training and exercise activities (MSB 2012a, p. 27-28).

The government instruction also establishes MSB's responsibility for raising awareness. It uses both online and offline methods (MSB 2013b). For example, the website *Säkerhetspolitik.se* discusses threats, risks, crisis management and defence issues and targets students and teachers in secondary school. The website has on average 1,500 hits per day (MSB 2013b, p. 18). In collaboration with other actors, MSB organizes training days for teachers and also produces school materials and knowledge games. In a targeted campaign entitled "Ready?" launched in September 2011, MSB and SAF developed and distributed information materials on defence and crisis management matters to 115,000 18-year olds across the country (MSB 2011b).

In addition, non-profit organisations carry out CM-related awareness and training activities targeting the public in areas such as awareness of fire and water security, day-to-day security and during emergencies, first aid and cardiopulmonary resuscitation. Such activities are first and foremost carried out by the Swedish voluntary defence organisations including the Swedish Red Cross (see Section 2.4.1).

MSB also channels funds to research and technological developments (Förordning 2008:1002, §12). In 2011, MSB spent 118 MSEK on 80 different research projects (MSB, 2012a).⁷²² MSB's *Research for a Safer Society* research programme (2011-2013) is divided into three areas: i) a safer society; ii) risks, threats and vulnerabilities; and iii) prevent, prepare, manage and learn (MSB, 2010c). Research is also promoted through a bilateral collaboration agreement between Sweden and the US Department of Homeland Security (MSB 2013a).⁷²³

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

Non-profit associations, voluntary defence organisations and religious communities play an important role in providing complementary resources to the agency-oriented civil security system in Sweden (SOU 2012:29, p. 72).

Through the regulation on voluntary defence (Förordning 1994: 524), the government is engaged in a formal partnership with 18 voluntary defence organisations.⁷²⁴ These organisations are non-profit,

⁷²² Notably, research funds were spent on a wide range of issues covering MSB's competency area thus ranging across accidents, crisis and civil defense.

⁷²³ The "Agreement between the Government of the United States of America and the Government of the Kingdom of Sweden on Cooperation in Science and Technology for Homeland Security Matters" was signed in 2007. Under this agreement, 14 sub-agreements were established in the period 2008-2011 dealing with amongst others research on Islamic radicalization, chemical and biological measures and cyber security.

⁷²⁴ Civil defence organisations are non-profit, independent and established on the basis of citizens' initiatives and count approximately 580,000 members. As per the regulation, the following 18 organisations are included under the civil defence organization umbrella: the Swedish Vehicle Corps (Sveriges Bilkårers Riksförbund); the

independent and established on citizens' initiatives, and include more than 400,000 members (Lagerblad 2013). MSB is responsible for establishing separate agreements and tasks as well as for distributing fund allocations across these organisations within their sector.⁷²⁵

MSB has entered into formal (written) agreements with 11 voluntary defence organisations as well as 5-10 other organisations that are not part of the defence organisations network (MSB May 2013). The organisations are involved in both the preparation and response phases of the CM cycle. They train volunteers across various competency areas as well as provide hands-on and technical support – ranging from information distribution and psycho-social assistance for the injured and family relatives to specialized drivers and pilots for transportation and logistics assignments etc. (SOU 2012:29). Volunteers participate on a regular basis in various training sessions and exercises organised by MSB in collaboration with regional and local partners.

In terms of financial support, MSB provides funds to non-profit and civil defence organisations under the so-called "2.4 allocation". Funds are divided into "general" organisational support and "specific" operational support of which the latter is linked to particular CM related tasks that the organisations carry out on MSB's request. In 2011, the financial support provided to these organisations totalled 31 million SEK (MSB 2012a, p. 29) of which the largest contributions were assigned to Red Cross Sweden (RCS) and other the voluntary defence organisations (MSB 2012a, p. 82-83).

At the local level, collaboration between local authorities and volunteers takes place within the framework of voluntary resource groups (*frivilliga resursgrupper*). Comprising mainly members of civil defence organisations, these groups ensure that municipalities have access to extra personnel during crises. In 2012, formal agreements between local authorities and voluntary resource groups were in place in 131 of Sweden's 290 municipalities.⁷²⁶

Example: Red Cross Sweden (RCS)

RCS was established in 1865 and represents the largest humanitarian organisation in the country with offices in four cities. In 2011, the professional staff totalled 319 whereas another 57 delegates were contracted for

Voluntary Automobile Association (Frivilliga Automobilkårernas Riksförbund); the Voluntary Pilot Association (Frivilliga flygkåren); the Voluntary Motorcycle Association (Frivilliga Motorcykelkårernas Riksförbund); the Swedish Defence Personnel Service Association (Försvarets Personaltjänstförbund); the Voluntary Radio Organisation (Frivilliga radioorganisationen); the Air Force Volunteers Association (Flygvapenfrivilligas Riksförbund); the Operational Engineers (Insatsingenjörerna); the Swedish Dog Utility Association (Svenska Brukshundklubben); the Swedish Blue Star (Svenska Blå Stjärnan); the Swedish Civil Defence Association (Sveriges civilförsvarsförbund); the Swedish Parachute Association (Svenska fallskärmsförbundet); the Women's Voluntary Defence Association (Riksförbundet Sveriges lottakårer); the Swedish Defence Training Association (Svenska försvarsutbildningsförbundet); the Sea Defence Association (Sjövärnskårernas Riksförbund); the Swedish Shooting Sport Federation (Svenska skyttesportsförbundet) (Förordning 1994:524)

⁷²⁵ In addition to MSB, the Swedish Armed Forces distribute tasks and funds to the same organisations related to the SAF's mandated area of responsibility (Förordning 1994:524).

⁷²⁶ A list of municipalities where voluntary resource groups are contracted as of 15 June 2012 is available at <u>http://www.civil.se/frg/har-finns-frg/</u> (accessed 10 December 2012).

international field operations. Its member base counts 160,000 persons and 31,000 volunteers (Röda Korset 2012).

In the field of civil security, the organisation's goal is to "have the capacity and ability to deal with accidents, crises and disasters and to take an active part in the Swedish society's crisis preparedness" [authors' translation] (Röda Korset 2012, p. 36). Its main tasks are to provide shelter and relief as well as to engage volunteers that can provide caring support to injured and affected as well as their relatives. In the aftermath of the 2004 tsunami incident, the Red Cross was also given the responsibility to recruit and train crisis support staff at the country's three main airports.

Funds are raised through membership fees, donations and external contributions and allocated both to international and national operations and further subdivided into sector areas. In 2011, expenditures related to crisis and disaster preparedness internationally and nationally amounted to 37 and 49 MSEK, respectively (Röda Korset 2012, p. 32-33). RCS is the largest recipient of MSB's support to non-profit organisations. In 2011, the organisation received close to 11 million SEK for carrying out various training activities and another 1.4 million SEK in organisational support (MSB 2012a).

A series of seminars on the Swedish civil security system organized in 2012-2013 by the organisation titled Society and Defence (*Folk och Försvar*) have touched upon the issue of the role of volunteer organisations in crisis management. According to Peter Lagerblad, chairman of the Voluntary Defence Organizations' Cooperation Committee, the professionalization of society has led to a situation where volunteer forces have not been nurtured; there is thus a general lack of structure for effectively involving volunteers in CM operations (Lagerblad 2013a). The fact that voluntary resource group agreements in more than half of the municipalities are currently missing may illustrate the failure of the current civil security system in involving such actors.

2.4.2 Role of profit-oriented organisations

The profit-oriented sector has no formal role in the Swedish civil security system. However, they are heavily engaged in security matters, which can be understood in a historical context whereby the government eagerly engaged the industrial sector in defence efforts during the Cold War era. Moreover, due to the responsibility and similarity principles- whereby actors who are responsible for an activity or function under normal conditions are also responsible for keeping such activities and functions intact during a crisis and whereby operations shall, as far as possible, be organised in the same way during emergencies as under normal conditions – profit-oriented organisations have certain responsibilities. In a country where much of the critical infrastructures - e.g. electricity supply, telecommunications, transportation and financial services - are in the hands of private companies, such companies have operational and financial obligations regarding CM. In terms of preparedness, private-sector companies are encouraged to establish internal risk and vulnerability analysis as well as to take part in training sessions and exercises where multiple CM actors participate to enhance interaction (MSB 2010e). Voluntary collaboration between the public and the private spheres exists in various fields, i.e. the National Telecom Liaison Group (Nationella telesamverkansgruppen) and the collaboration between the Swedish National Grid and Swedenergy (SOU 2012:29, p. 71-72). During the response phase, they work to uphold critical functions and services as well as to provide situational information to authorities and customers. In certain sectors, companies are under specific legal minimum requirements. For example, electricity providers have an obligation to ensure that interruptions in the transmission of electricity do not exceed 24 hours (Lag 1997:857, Chap. 3 §9a).

Private sector companies decide internally how to set aside necessary financial resources within their own budgets in order to cope with their CM responsibilities. In terms of inclusion, and with an overall objective to protect societal functions, public-private interaction and collaboration is seen as crucial. Private companies therefore take part in training sessions and exercises organised by local, regional and national authorities on a regular basis. The Confederation of Swedish Enterprise, a key network representing corporations in Sweden, has formed a subunit dedicated to security (the "security delegation to provide a forum for exchange of ideas, experiences and knowledge – including joint seminars – on security matters among private sector actors.⁷²⁷

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Table 3 and 4 provide an overview of the most important professional inquiries that have taken place in the civil security field during 2000-2012. As few major crises have in fact occurred, the number of incident-related inquiries is low. However, a significant number of assessments have been carried out to analyse overall CM capacities and specific agencies that play a central role in the civil security system (here labelled "non-incident related inquiries"). Below we will gauge the effectiveness of the Swedish civil security system through the lenses of two event and two non-event related inquiries.

Table 3: Indicative list of	incident-related inquiries,	2000-2012.
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The 2004 Indian Ocean earthquake and tsunami (2004)	 State Public Inquiry: Sweden and the tsunami – assessment and recommendations (SOU 2005:104) State Public Inquiry: The tsunami tapes (SOU 2007:44) 			
The 2005 Gudrun storm	- Swedish Forest Agency: Assessment of economic and social consequences of the storm <i>Gudrun</i> (Skogsstyrelsen 2006:12)			
The 2007 Per storm - Swedish Energy Agency: Assessment of the storm Pär (ER 2007:37)				
Source: This overview is based on website searchers of government publications (<u>http://www.regeringen.se</u>); MSB				
(<u>www.msb.se</u>); the Swedish Forest Agency (<u>http://www.skogsstyrelsen.se</u>); and the Energy Agence (<u>http://www.energimyndigheten.se</u>)				

Table 4: Non-incident related inquiries, 2000-2012

State Public Inquiries	Assessment on security in a new era (SOU 2001:41) Assessment on a system for coordination of crisis information (SOU2003:11) Assessment on crisis preparedness and civil defence in municipalities and counties (SOU 2004:134)
	Assessment on a new agency to cope with accidents and crises (SOU 2007:31) Assessment on enhanced emergency preparedness in the central payment system (SOU 2011:78)

⁷²⁷ For more information, see <u>http://www.svensktnaringsliv.se/fragor/nsd/naringslivets-sakerhetsdelegation-nsd_12672.html</u>

ANVIL Deliverable 2.1: Compilation of country studies

	Assessment on the country's capacity to receive international support during serious peacetime crisis and incidents (SOU 2012:29) Assessment on the society's alerting service (SOU 2013:33)
Swedish National Audit Office	 Report on the Armed Forces' support to society during crisis (RiR 2011:15) Report on Pandemics and the management of threats to human health (RiR 2008:1) Report on government CM and control concerning society's preparedness during severe incidents (RiR 2008:4) Report on protection of dangerous goods (RiR 2008:29) Report on preparedness for nuclear accidents (RiR 2007:4) Report on the safety of hydroelectric dams (RiR 2007:9) Report on government efforts to tackle widespread power outages (RiR 2007:17) Report on crisis preparedness in the payment system (RiR 2007:28)
Swedish Agency for Public Management	Agency analysis: MSB (Statskontoret 2011a) Agency analysis: Institute for Communicable Disease Control (Statskontoret 2011b) Agency analysis: National Board for Health and Welfare (Statskontoret 2008)
MSB	Assessment on Measures to improve society's collective capacity to prevent and manage IT incidents (MSB 2010)

Source: The overview is based on a compilation of reports on the website search of the Swedish National Audit Office (<u>http://www.riksrevisionen.se/</u>); The Swedish Agency for Public Management (<u>www.statskontoret.se</u>); the government publications (<u>http://www.regeringen.se</u>);MSB (<u>www.msb.se</u>)

Incident-related assessment: The Indian Ocean earthquake and tsunami, 2004

The tsunami disaster in Southeast Asia on 26 December 2004 is one of the greatest natural disasters in recent times. It also affected many Swedes who were on holiday primarily in Thailand. Over 500 Swedish citizens were killed, a large number were injured and thousands were evacuated. The disaster seriously tested the capacity of the political and operational civil security system in Sweden.

The political (Betänkande 2005/06:KU8)) and professional (SOU 2005:104) inquiries carried out in the aftermath of the disaster directed heavy criticism towards the political leadership for lack of preparedness and timely action. Due to insufficient intelligence and analysis capacities as well as an inadequate internal reporting system (in particular within the PM Office and the Ministry of Foreign Affairs) and inter-departmental communication, the relevant ministries failed to understand the seriousness of the disaster and the degree to which it affected Swedish citizens. The fact that the ministers did not meet until one and a half days after they were notified about the incident further delayed cross-departmental information sharing and possibilities for discussing and collaborating on a broader set of actions in a more timely fashion. The SOU report furthermore pointed towards unclear roles and responsibilities between ministries and the PM Office during a crisis situation and argued that gaps in the crisis capacities could have been identified and remedied in advance provided that a full-blown inter-departmental exercise had been organized.

Due to informational and recognition failures at the political level, the initiation of the crisis operation took more time than was deemed acceptable. Limits to the operational response included i) inadequate crisis organization within the MFA that resulted in insufficient capacities for dealing with information coming in from the public and registration of missing and dead persons, ii) a lack of rules and regulations for the involvement of Swedish rescue services and catastrophe medicine teams abroad including their delayed deployment, and iii) delayed evacuation efforts due to internal information gaps within the MFA who was not aware of the 1984 agreement that the government had with Scandinavian Airlines (SAS) for crisis evacuations (KU 2005: 199-203).

To summarize, the CM efforts in the 2004 tsunami incident were criticized both by political and professional inquiries. The main gaps in the system were i) the lack of a functional crisis organization within the government, ii) inadequate emergency preparedness within the ministries; iii) insufficiently prepared healthcare systems for undertaking operations abroad; iv) insufficient preparedness for complex and major catastrophes on the part of the consular services (SOU 2005:104: 13-17).

Incident-related assessment: The Gudrun storm, 2005

Only a few weeks later, on 8 January 2005, Sweden was hit by the powerful storm Gudrun. Eighteen persons lost their lives – seven in accidents directly related to the storm and another eleven in relation to the clean-up operations – which makes it amongst the deadliest natural disasters in the country.⁷²⁸ Moreover, the storm resulted in severe infrastructure breakdowns: power cuts affected 730,000 electricity subscribers; failure in the phone network affected 250,000 persons; and interruptions in train traffic amounted to 340 trains/day.⁷²⁹ The forest industry was severely affected since 75 million cubic meters of trees were destroyed. The estimated cost of Gudrun amounted to 20 billion SEK, of which two thirds was related to the forest sector. In the week that followed, 4,300 train departures were cancelled and international train freight traffic came to a standstill over two days (RFR 2007/08:5).

In contrast to the tsunami, the Gudrun storm was according to assessment reports managed in a quicker and more decisive fashion (KBM 2005; SKL 2005). Likewise, local and regional authorities were largely capable of dealing with the incident notwithstanding certain deficiencies in collaboration and interaction.

The private sector, in particular telecom and electric distribution companies, received harsh criticism in the aftermath of the disaster for providing insufficient information both to local authorities and the public, and for not offering reliable prognoses for service recovery. The breakdown in telecom services (linked to the disturbances in electricity supplies) severely complicated communication and information in the immediate CM phase. This situation, where localized information was particularly lacking, affected the development and dissemination of situation reports and thus impeded CM operations and interaction and collaboration between different actors. Lack of information to the public contributed to an overloading of the 112 SOS Alarm services. The need for a more robust telecom and electricity services better prepared for crisis incidents emerged as a central lesson learned. As a result of *Gudrun*, statutory functional requirements now limit unplanned interruptions in electricity supplies to 24 hours.

Non-incident-related assessment: Agency analysis of MSB, 2011

On behalf of the government, the Swedish Agency for Public Management was tasked to carry out an agency analysis of MSB two years after its founding. The report states that MSB is on track when it comes to fulfilling the stated objective of the establishment of the agency (Statskontoret 2011a, p. 8). In terms of exact results, however, judgments on effectiveness are complicated by the fact that

⁷²⁸ MSB's database on natural disasters and accidents: <u>http://ndb.msb.se/ViewCase.aspx?id=21&l=SV&xMax=779848.5757999998&xMin=258450.495000001&yMax</u> <u>=6525010.9945&yMin=6111275.669500001</u> ⁷²⁹

⁷²⁹ Krisberedskapsmyndigheten, 2005

the agency has not been capable of specifying measurable results against which performance can be gauged; that no other documents or analyses exist that could testify to goal attainment; and that, given the complex nature of its assignment and integrated nature of the civil security field, it is difficult to isolate the results produced by MSB (as opposed to other actors or external factors).⁷³⁰

Key challenges were identified as follows: i) internal coordination; ii) enhanced methods for monitoring and result achievement; iii) development of functions and operations related to the third area of MSB responsibility, i.e. civil defence; iv) establishment of processes, criteria and indicators related to funds allocations set aside for transfers; and iv) integration of national and international preparedness operations.

Non-incident-related assessment: Analysis of the government CM capacities, 2008

SNAO is mandated to carry out independent assessments of public authorities and agencies to control whether existing rules and regulations are followed, whether results and goals are achieved and how government funds are spent. In 2008, it carried out an assessment of the government's capacities in crisis management and its governance of societal preparedness during major crises (RiR 2008:9).

In its concluding remarks, SNAO reported that the government has developed the civil security system at all levels as well as enhanced its own capacity to identify and alert when crises emerge as well as to analyse and coordinate CM actions. It has thereby remedied the main shortages that emerged in the aftermath of the handling of the 2004 tsunami disaster (RiR 2008:9, p. 7).

Nonetheless, it notes that the overall governance of CM in Sweden is weak due to the government's i) insufficient monitoring capacities; ii) lack of a comprehensive overview over existing CM capabilities and related cost at national levels; and iii) inadequate control over the actions undertaken by relevant authorities and agencies through government decisions. Governance in the CM field therefore becomes ad hoc and event-based rather than focused on prevention. In addition, it emphasizes that the legal framework is not appropriate for major crisis incidents where it may be necessary for the national level to assume operational CM leadership responsibilities (RiR 2008:9, p. 8-9).⁷³¹

Assessment findings

The complexity of today's crises – which cross political and functional boundaries and implicate many public and private actors who hold joint responsibility for crisis management – challenges the effectiveness of the Swedish civil security system. The perceived key to success is cooperation and

⁷³⁰ Thus, for example, it was not possible for the assessment authors to find evidence for the production of synergy effects which were foreseen as one of the major objectives with the collapsing of the previous three agencies into one. That said, interviewees with personnel linked to key actors that MSB relates with expressed general satisfaction with the establishment of the agency and deemed that MSB's output was better than the output produced by the three previous agencies combined (Statskontoret 2011a, p. 57-58).

⁷³¹ The Swedish National Audit Office has pointed out that the legal framework fails to provide sufficient opportunities for nationally led CM operations required by extreme cases. This may be because the government assumes that the principle of responsibility along with prepared cooperation can solve any situation. However, the report holds that the government should be able, through emergency legislation, to designate an authority for nationally leading operational action in exceptional crises (RiR 2008:9)

coordination – in Swedish summarised by the buzzword *samverkan*. Vertical and horizontal cooperation between the different administrative levels and the multiple actors engaged and affected, respectively, is the *sine qua non* to effectively tackle major disasters in the country. There seems to be a need to further work on developing the intricate web or network of individuals and actors from all sectors to ensure that they adjust to one another and "move together" as a crisis unfolds.

3.1.2 Limits to national capacities

Sweden requested external assistance related to major crises in Sweden on two occasions. Within the ANVIL period of analysis, Sweden requested and received assistance from the EU's Monitoring and Information Centre (MIC) in relation to the *Gudrun* incident. Germany and the Czech Republic provided power aggregators. Furthermore, financial support was provided through the EU's Solidarity Funds in the aftermath of the crisis (MSB nd, naturolycksdatabasen). In addition to this, approximately 5,000 persons from different countries were engaged to repair and restore the electricity system (SOU2012:29, p. 55). In 1998, Sweden received external assistance from, amongst others, Norway to take care of fire-damaged youth in relation to the Gothenburg discothèque fires (SOU2012:29, p. 56).

As mentioned in Section 2.2.2, the Swedish constitution does not provide for the declaration of a state of emergency but is required to deal with peacetime crises and disasters within regular decision-making structures.

3.2 Efficiency

Owing to the decentralized nature of the civil security system that follows from the responsibility principle, a myriad of actors are responsible – including financially – for civil security preparedness and response. The budgets covering the CM field therefore range from those prepared and overseen by elected authorities at municipal, county and state levels, a myriad of government agencies in various sectors, public institutions and organisations, numerous public and private companies, non-governmental organisations, associations and so forth. As noted by the department for CM coordination at the MoD (email correspondence 10.01.2013) and MSB (phone interview 22.01.2013), the resources put into the CM field across actors and sectors have not been compiled and the total expenditures thus remain unknown.

	20	09	20	10	20	11	20	12	20	13
	MSEK	%								
Defence	37,698	89.5	41,653	91.2	40,087	90.8	40,019	90.4	42,278	91.5
Societal security	3,762	8.9	3,559	7.8	3 710	8.4	3,849	8.7	3,516	7.6
Radiation safety	301	0.7	317	0.7	310	0.7	335	0.8	352	0.8
Electrical Safety	50	0.1	47	0.1	45	0.1	49	0.1	51	0.1
Other	296	0.7	89	0.2	1	0.0	4	0.0	0	0.0
Total	42,106	100	45,665	100	44,153	100	44,257	100	46,197	100

Table 11: Budget area 6, 2009-2013

Note: Figures are based on actual expenditures (2009, 2010, 2011), projections (2012) and government proposals (2013). Source: Prop. 2011/12:1; Prop. 2010/2011:1.

In the national budget, civil security is covered under Budget Area 6, concerning defence and societal security and is situated under the MoD. A lions' share of this budget is dedicated to defence with smaller allocations distributed across the three remaining budget headings, namely i) societal security; ii) radiation safety; and iii) electrical safety. In 2011, expenditures in Area 6 amounted to 44 billion SEK which represented 5.5 percent of the total state budget. As displayed in the Table 5, fund allocations to defence and the three civil security-related budget headings, combined, amounted to 40.1 (90.8 percent) and 4.1 billion SEK (9.2 percent), respectively. For the same year, expenditures exceeded the budget forecast by 150 MSEK for the societal security allocation.⁷³²

Value-for-money perspectives usually feature monitoring and assessment efforts. In 2010, SNAO pointed out that fragmentation of CM responsibilities within the government potentially obstruct efficiency: "The consequence of the fact that the individual ministries today largely control the agencies' emergency preparedness is a higher risk of costly and reactive measures that are not balanced against the overall national needs" [authors translation] (RiR 2008:9, p. 10). In a similar fashion, assessments carried out of specific agencies central to the Swedish civil security system point towards both political and technical challenges to cost-effectiveness. For example, SNAOs evaluation of SAF involvement in CM concludes that ambiguity in responsibility undermine conditions for effective use of resources (RiR 2011:15). In its report on MSB, the Swedish Agency for Public Management pointed out that "the agency is not presenting any argument concerning cost-effectiveness, neither in the annual report nor in individual accounts of specific activities" [authors translation] (Statskontoret 2011, p. 8). In addition, agencies are from time to time criticized for insufficient financial analysis as per the official requirements.⁷³³ Incident-related inquiries may take efficiency seriously, as can for example be seen in the very thorough cost-benefit analysis carried out in the context of MSB and NBHW's report (2011) on the H1N1 incident.

Restructuring and reforms have indeed considered efficiency aspects. As a key example, the government-driven civil security reform of 2009 that replaced KBM, SRV and SPF with one single agency, namely MSB, were driven by the twin goal of enhancing synergies and promoting rationalization (Statskontoret 2011). Cost-savings were foreseen to mainly come from rationalisation of administration and building costs. According to government calculations in advance of the reform, the agency's management costs would be reduced by 150 MSEK compared to the projected figures for the three previous agencies (Prop. 2007/08:92, p. 62). However, as activities have been added and deleted and multiple transactions between various financial envelopes have taken place since then, it has been difficult to measure whether the reform produced results in terms of efficiency (Statskontoret 2011, p. 28).

Privatization remains rather low on the CM agenda. According to MSB, certain functions are regularly outsourced, such as inventory and warehouse buildings, services related to the organisation of training sessions and IT support etc. (phone interview with MSB 22.01.2013). The biggest contract, currently owned by a consortium comprising Saab, Eltel Network and Cassidian, is related to the

⁷³² Budget allocation amounted to 3.562 billion SEK whereas total expenditures amounted to 3.710 billion SEK.

⁷³³ These requirements are laid out in Förordning 2000:605

operation of the *Rakel* radio-communication system (MSB 2012a). Privatization efforts are usually partly due to efficiency considerations but most of the time coupled with concerns related to internal technical competencies.

The construction, operation, management and development of the *Rakel* radio-communication system represent the biggest investment in the civil security field over the past few years (MSB 2012a, p. 21). On behalf of the government, MSB remains responsible for *Rakel*. In the official report published in advance of the 2003 parliamentary decision to establish the system, five out of fifteen chapters concerned cost and financing, signifying the importance attached to cost-related issues (SOU 2003:10). In February 2010, the total investment projections amounted to 3 billion SEK (Försvarsdepartementet 2010) which represented a 0.7 billion SEK increase compared to the forecast made in advance of the Parliamentary decision (SOU 2003:10). The Swedish Agency for Public Management's analysis of MSB states that *Rakel* represents a high-risk project due to underfinancing of the system, a lack of sufficient income generation and poor economic prognoses (Statskontoret 2012:1, p. 86-87).

Public interest around civil security budgets and expenditures are largely non-existent while efficiency aspects are not usually featured in public debates in the aftermath of major crises. Whilst costs related to major operations and damages are reported, such news seldom turns into major debates. One exception worth mentioning is related to the assessment of the Swedish authorities' handling of the H1N1 influenza which concludes that the costly mass vaccination campaign saved only six lives (Sveriges Radio, 17 February 2012).

3.3 Legitimacy

3.3.1 Political support

The level of political support for the Swedish civil security system has, with only a few exceptions, been high. In an interview with the newspaper *Aftonbladet* following the release of the 2004 tsunami disaster commission report in December 2005, the chief of the UN Office for Internal Oversight and previous chief of SNAO, Inga-Britt Ahlenius, noted that Sweden lacks a culture for demanding responsibility and that "in any other country in Europe, the government would have resigned after such a crushing critique of an independent inquiry" [authors' translation] (*Aftonbladet* 01.12.2005). In 2006, the minister of foreign affairs left her post partly in response to the critique put forward by the Parliament's Constitutional Committee (Betänkande 2005/06:KU8) and the Tsunami Disaster Committee (SOU 2005:104).

Members of Parliament control the government in various ways, including ministerial questioning in Parliament, written questions to ministers and by filing a complaint with the Committee on the Constitution (*Konstitutionsutskottet*, KU). Table 6 shows the results of a keyword search in the Parliament's questions and complaints online database for the period 2000-2012. Out of a total number of 45,118 Parliamentary questions, written questions and complaints, only a very small fraction include keywords related to the crisis management field. This suggests that civil security is not a highly conflictual area in political terms.

Keyword	Number of hits N = 45,118 (9,034)
Societal preparedness	218 (80)
Crisis management	134 (28)
Crisis preparedness	77 (24)
Natural disasters	102 (9)
Societal protection	72 (57)
Extraordinary event	59 (14)
Terror threats	15 (2)
Information security	13 (4)
Pandemic	49 (5)

Table 12: Interpellations, Q&As and KU complaints, 2000-2012 (2009-2012).

Note: The survey represents the period starting from 1st January 2000 to 31st December 2012. Keywords in Swedish in chronological order were: samhällets beredskap; krishantering, krisberedskap; naturkatastrofer; samhällsskydd; extraordinär händelser; terrorhot; informationssäkerhet; pandemi. Note that fine-tuned search functions were not available which means that the results also include interpellations, questions/answers and KU complaints that related to international relations, financial issues etc.

Source: The Parliamentary website (<u>http://www.riksdagen.se/sv/Dokument-Lagar/Fragor-och-anmalningar/</u>)

3.3.2 Legal support

The Justice Ombudsman (*Justitieombudsmannen*, JO) has the authority to review and assess how agencies and authorities carry out their work under the existing laws and regulations with particular reference to laws that affect authorities' obligations vis-à-vis the public and individual rights.⁷³⁴

Very few civil security-related cases have been put forward and reviewed by the JO. In 2006, a case was put forward against the state secretary under the PM concerning the truthfulness in the story he presented to the tsunami crisis commission (JO 2007/2008, p. 244-253). Whilst not proving that the state secretary intentionally delivered false statements to the crisis commission, the review strongly criticized him for lack of accuracy and for failing to submit additional information upon the commission's request which, in turn, hampered the examination of the disaster commission. In a follow-up case in 2009, the government offices were criticized for considerable delays in providing a journalist access to public documents related to the case.⁷³⁵ There have been no civil security-related cases tested in the court system.

⁷³⁴ That is, governmental authorities (including courts), municipal and county authorities, officials of the state, municipal and county authorities and others entrusted with public authority, see <u>http://www.jo.se</u>

⁷³⁵ JO decision of 27 March 2009, available at <u>http://www.jo.se/PageFiles/1577/342-2008.pdf</u> (accessed 20 January 2013)

3.3.3 Popular trust and support

Citizens' interest in civil security appears considerable. In a 2011 MSB opinion survey, 57 percent of the respondents responded that they were interested in this social issue area (MSB 2012b, p. 11). Looking at comparative figures for issue areas such as Swedish foreign policy, EU cooperation and Sweden's defence, which scored 54, 48 and 41 percent, respectively, it is difficult to draw any other conclusion than that civil security is considered a high salience policy area among Swedes at large.

According to a Eurobarometer (2011:371) study, and as mentioned in Section 2.3.1, more than 65 percent of Swedes believe that the state is doing enough to manage natural/man-made disasters and to fight terrorism. The degree to which citizens believe that Sweden is prepared to face various crises, including natural disasters and terrorism, was also subject to the 2011 MSB opinion survey (MSB, 2012b). As per the results in Figure 3 below, a majority of citizens believe that the country is sufficiently prepared to respond to major transportation accidents, food/drinking water/medicine shortages, natural disasters and major epidemics. Swedes seem less convinced when it comes to the country's capabilities to handle military attacks, radioactive emissions and terrorist attack. Notably, there is a seeming discrepancy between the Eurobarometer and MSB survey results concerning public perceptions on capacities to tackle terrorism. This may be due to the phrasing of the questions - whereas Eurobarometer asks whether Sweden is doing enough to tackle terrorism, MSB asks the degree to which the respondents believe that the country is prepared to respond and handle a terrorist attack if such would occur on Swedish soil. On this specific issue, it is also worthwhile noting that public perceptions of adequate terrorism preparedness have increased significantly from 15 percent in 2007 to 32 percent in 2011 (notwithstanding the Stockholm bombing incident that took place in 2010).

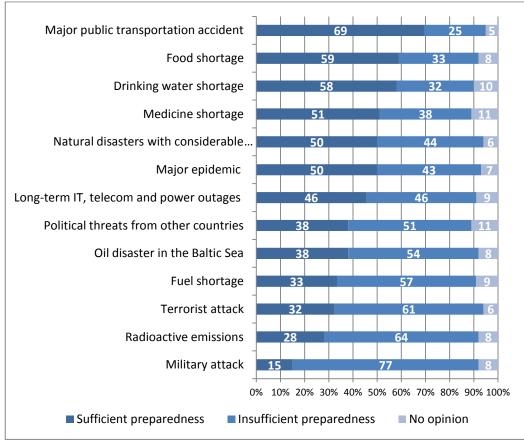


Figure 12: Perceptions on preparedness respond to and face threats and crises, in percent.

Source: MSB 2012b, p. 20

A survey conducted in the aftermath of the 2004 tsunami disaster, representing a Swedish signature crisis in the period since 2000, showed that 20 and 51 percent of the citizens believed that there were very strong or strong reasons to be critical of Sweden's management of the crisis. Whilst trust in CM related agencies somewhat weakened, decline in trust was most noticeable among political institutions. Altogether 51 percent reported declining trust in the government as a whole and the Ministry of Foreign Affairs specifically (Krisberedskapsmyndigheten 2005b, p. 91; 96-97).

Civil security issues and incidents do not seem to have an impact on elections in Sweden.⁷³⁶ Not even when facing harsh criticism, as in the aftermath of the tsunami, do these issues play a role in electoral campaigning and election results. Notably, the Social Democrats lost the post-tsunami elections in 2006. According to the party's own analysis, the tsunami had little effect on voter opinion since and there was no reason to believe that the opposition would have tackled the situation better (Socialdemokraterna 2006, p. 101).⁷³⁷ The analysis does point out, however, that the incident may have undermined the government's general credibility and integrity.

⁷³⁶ Interview with FOI, 11 January 2012

⁷³⁷ Socialdemokraterna 2006, p. 101

4. Swedish Civil Security in the EU Context

Sweden has only once requested (and received) assistance in the context of the EU's Civil Protection Mechanism, namely during the *Gudrun* storm in January 2005. The Swedes requested power generators through the MIC and received generators from Germany and the Czech Republic. In addition, Sweden received 600 MSEK from the EU Solidarity Fund in support of public sector costs related to the incident (MSB nd).⁷³⁸ As per Table 7, Sweden has provided assistance through the MIC on 29 occasions in the period 2007-2011.

Period	Crisis type and country	Contribution
22 02 22 02 2007		1 Swedish expert part of the MIC technical
23.02-22.03 2007	Floods in Bolivia	assistance team
23.07-08.08 2007	Forest fires in fYROM	Equipment and extinguishing foam
24.08-05.09 2007	Forest fires in Greece	1 helicopter (on cost)
03.01-14.01 2008	Earthquake in Kyrgyzstan	Tents and heaters
25.01-26.02 2008	Floods in Bolivia	1 Swedish expert part of the MIC technical assistance team
03.03-21.03 2008	Floods in Ecuador	1 Swedish expert part of the MIC coordination and assessment team
07.05-13.06 2008	Tropical cyclone in Myanmar	2 Swedish experts part of the MIC coordination and assessment team; equipment (tents, blankets, tarpaulins etc.)
13.05-27.06 2008	Earthquake in China	In-kind assistance
04.07-29.08 2008	Storm in the Philippines	1 Swedish expert part of the MIC coordination
04.07-29.08 2008	Storm in the Philippines	and assessment team
12.08-12.09 2008	Armed conflict in Georgia	Medical equipment
08.09-03.10 2008	Storms and cyclones in Haiti	1 Swedish expert part of the EUCP coordination and assessment team
27.11-24.12 2008	Terrorist attack in India	1 Swedish expert facilitated the mission coordination; National Air Medevac (transport grant awarded) ⁷³⁹
09.01-17.01 2009	Gas shortage and harsh winter conditions in Moldova	1 Swedish experts part of the MIC assessment and coordination team
20.03-22.04 2009	Floods in Namibia	1 Swedish experts part of the MIC assessment and coordination team
20.05-05.06 2009	Floods in Tajikistan	1 Swedish experts part of the MIC assessment and coordination team
13.08-27.08 2009	Typhoon in Taiwan	1 Swedish experts part of the MIC assessment and coordination team; equipment (water purification liquid)
26.09-15.10 2009	Floods in the Philippines	1 Swedish expert (water management)
30.09-09.10 2009	Earthquake in Indonesia	1 Swedish experts part of the MIC assessment and coordination team; 1 Swedish communications expert; transportation
11.01-25.01 2010	Snowfall in the Netherlands	Contact/info

Table 13: Provision of Swedish assistance through the MIC, 2007-2011

⁷³⁸ The European Parliament decided in November 2005 to grant Sweden a total of 740 MSEK from the Solidarity Fund. In 2007, however, the Swedish government had to pay back 140 MSEK because the application had accounted for expenditures that were not eligible according to the rules of the Fund as well as because it was not possible to prove the costs.

⁷³⁹ France activated the MIC and requested medical evacuation of European citizens.

13.01-06.04 2010 Earthquake in Haiti		1 Swedish expert part of a TAST module deployment; 2 Swedish experts part of assessment teams; equipment (water purification tablets, tents); 1 TAST base camp as a joint module with Denmark, Norway, Estonia and Finland.
01.03-07.06 2010	Earthquake in Chile	1 Swedish experts part of the MIC assessment and coordination team; 8 mechanical bridges
27.05-23.08 2010	Oil spill in the USA (Gulf of Mexico)	Equipment (containment boom)
06.08-30.11 2010	Floods in Pakistan	Assistance to the EU Air Brigade; in-kind assistance
07.10 2010 (ongoing)	Alkali sludge accident in Hungary	1 Swedish expert
21.10-14.12 2010	Cholera outbreak and hurricane in Haiti	1 Swedish expert part of the EUCP team
01.03-01.08 2011	Repatriation of third country nationals in Tunisia	1 Swedish expert part of the EUCP team; air transportation; equipment (various)
11.03-11.05 2011	Earthquake in Japan	1 Swedish expert part of the EUCP team; equipment (blankets, boots, gloves)
13.09-18.11 2011	Floods in Pakistan	1 Swedish expert part of the EUCP team; 1 Swedish expert part of the TAST
26.10-22.11 2011	Earthquake in Turkey	Equipment (tents)

Source: European Community Civil Protection Mechanism: Activations overview 01.01.2007-31-12-2011, available at http://ec.europa.eu/echo/files/policies/disaster_response/EUCPM_activations_since_01012007.pdf (accessed 18 January 2013)

Sweden takes an active role within the EU's Civil Protection Mechanism (SOU 2012:29, p. 82). During the 2009-2010 training cycle, 51 Swedes participated in the Mechanism's training programme. Over the ten year period from 2002 to 2012, Sweden took part in eleven civil protection exercises organised at the EU level. Together with its sister organisation in Norway, MSB hosted a Community Mechanism exercise, the so-called EU SweNorEx, in 2009. The exercise aimed to develop joint best practices for EU-UN cooperation by joining EU Mechanism and UNDAC experts together into an earthquake scenario on the border between two non-EU countries (MSB and DSB 2009). MSB represents the Swedish focal point for the Community Mechanism and is thus in charge of submitting requests and decisions to provide assistance to the MIC after having informed the MoD (SOU2012:29, p. 87).

According to a recent Eurobarometer survey, Swedes feel least knowledgeable and least informed amongst the respondents across all EU Member States when it comes to the EU's involvement in the civil protection field: only 20 percent of the Swedish respondents are aware of EU's role when it comes to coordinating civil protection inside and outside the Union and only 10 percent feel that they are well informed about civil protection activities that take place within the EU (Eurobarometer 2012). Taking into consideration how active Sweden is in the MIC, especially in terms of the extent to which the country contributes to EU-led interventions, these figures are both surprising and worrying. It seems there is considerable scope for the EU to promote visibility in this area as well as to engage with the public at large to ensure citizen support for the EU's involvement in the civil protection domain. Figure 4 shows the preferred information sources of Swedish citizens.

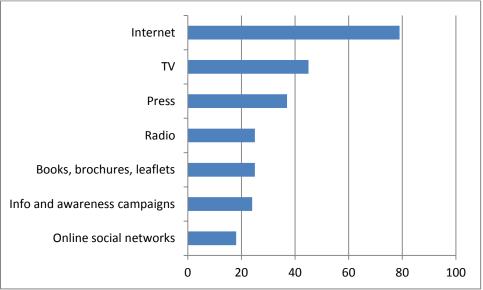


Figure 13: Preferred information sources for EU civil protection policy, percent

Source: Special Eurobarometer Report 383 on Civil Protection, p. 27

Notwithstanding this lack of knowledge and awareness, a large majority (88 percent) agree that coordinated EU actions are more effective than actions undertaken by individual states. A large majority of Swedish respondents also believe that countries do not necessarily have the means to deal with a major crisis on their own (96 percent) and that pooling civil protection resources in the EU can be more cost-effective than if countries manage these resources on their own (79 percent). Finally, 86 percent agree that a joint policy is needed due to the cross-border effects that major disasters may have. In short, whilst appearing quite unaware of EU's role, Swedes are very positive to the Union's involvement in the civil protection field.

5. Conclusion

Sweden is usually regarded as a well governed and prosperous country which has largely escaped some of the more devastating disasters common in other parts of the world. Nevertheless, Sweden has suffered some major crises that left a lasting imprint on public perceptions, its political culture and its civil security system.

Administrative traditions and cultural legacies strongly shape the Swedish civil security system. The system is characterised by a high degree of decentralization where local authorities play a crucial role in preparing for and responding to crisis situations. The state level primarily deals with longer-term strategy development and policy formulation as well as CM coordination across sectors and agencies. Regional authorities provide support to municipal preparatory activities and are responsible for regional coordination during an emergency.

The legal framework clarifies the roles and responsibilities of actors and stakeholders during a crisis. The legal framework is relatively centralized with two key laws (the Act on Municipal and County Council Measures Prior to and During Extra-Ordinary Events in Peacetime and During Periods of Heightened Alert and the Emergency Management and Heightened Alert Regulation) and a myriad of additional acts and regulations (e.g. the Police Act and the Infectious Diseases Act) dealing with specific CM aspects. On the political dimension, the government has the overall executive responsibility for major crises. However, policy formulation and the centrally managed civil security budget rest with the Ministry of Defence whereas other ministries are responsible for development of crisis-related policies and budgets within their sector area of responsibility. On the operational dimension, the Swedish Civil Contingencies Agency works as a coordinating and driving force at the national level and provides support to actors at all levels and across a variety of sectors throughout the crisis management cycle.

Concerning state-citizens relations, Swedes continue to have considerable expectations of the state in the crisis management field: altogether 96 percent of Swedish citizens believe it is reasonable to expect the state to assist or rescue the citizens when a crisis hits the country. At the same time, a total of 71 percent are positive towards getting involved in an emergency. There is an increasing focus on the responsibilities of individuals when it comes to awareness of potential crisis situations, gathering information during an incident and taking a personal responsibility for the safety of themselves and others in their immediate environment. The government at all levels as well as agencies and private sector parties are engaged in a wide range of informational and educational activities to promote knowledge and training of citizens and professionals.

The private sector is an integral part of the Swedish civil security system. Although private companies have no formal role, they are heavily engaged in crisis management activities at many levels. This is partly due to historical reasons (especially the Swedish defence industry during the Cold War), and partly due to the fact that most critical infrastructure (such as telecommunication and electricity) is in the hands of private companies. The non-profit sector, with Red Cross Sweden and the Swedish Voluntary Defence Organizations in the lead, are involved both in preparation and response phases. However, from voluntary organisations' point of view, there is a lack of systematic and effective use of such forces in the current system.

The Swedish civil security system rests on three fundamental principles – responsibility, similarity and proximity – that are mainstreamed throughout the crisis management cycle. It entails that responsibilities, from prevention to preparedness and response as well as learning, rests with multiple actors engaged at different levels. To optimize effectiveness, the system requires a good portion of cooperation and coordination – horizontally as well as vertically – which is proving to be amongst the greatest challenges to effectiveness. The assessments of the handling of the 2004 tsunami and the 2005 Gudrun storm demonstrate the complexity of this coordination issue: in the former case, intra-governmental coordination represented a major problem as the ministries involved were not capable of organising amongst themselves; in the latter case, effective public-private information sharing and communication were amongst the most critical issues. Notably, the development of enhanced contact linkages and networks between different actors during the preparedness phase were seen as vital to the relative success of the H1N1 operations.

In terms of efficiency, civil security budgets are highly fragmented, which makes any assessment of the value-for-money question virtually impossible: not only does each ministry at the national level and regional and local authorities have their own CM-related budgets, but all private sector companies and non-profit organizations also allocate financial resources to tackle disaster situations.

There is no central authority collecting information on what these different actors spend on civil security. Whilst cost-benefit considerations were part of the reform whereby MSB was founded in 2009, there is no evidence today that this reform produced greater efficiency. In light of the outcomes of various assessments undertaken over the past few years, it seems like conscience thinking about the relationship between expenditures and payoffs remain low on the agenda of public institutions and agencies that carry civil security responsibilities. Moreover, cost-effectiveness of CM does not feature as a major media focus in Sweden.

The Swedish civil security system enjoys considerable legitimacy in political circles as well as among the citizens at large. This study shows that, in periods of "business as usual," there is hardly any Parliamentary debate concerning these matters. A major exception is the debate that followed in the wake of the 2004 tsunami and the crushing critique of the government in the ensuing inquiry. However, not even this incident could bring the government down and it was only after compounding (and mainly unrelated) problems that the minister of foreign affairs finally left her post – 15 months after the disaster. More generally, civil security is considered an important policy area and Swedes by and large believe that the country is doing enough to manage natural and man-made disasters.

Finally, bilateral, regional and international cooperation is considered vital by politicians and citizens alike to tackle future incidents. Sweden engages in multiple and increasing cooperation initiatives geared towards operational support as well as in CM research. Collaboration in the context of its EU membership is particularly important for Swedish officials. However, citizens seem unaware of the EU's role and uninformed of what kinds of civil protection activities the EU engages in. There is a considerable scope for increasing visibility of EU actions in the civil security field which in turn may contribute to continued support for EU engagement in this domain among Swedish citizens.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 SWEDEN

1	Introduction	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Section 1	uata)
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	Section 1	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	2	RiR 2011:15	The military has three main functions: 1) to defend Sweden and promote Swedish security; 2) to detect and counter violations of Swedish territory; and 3) to assist the society and other authorities and agencies as needed (RiR 2011:15, p. 25).
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	Section 1	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	Section 2.1.1	
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentary system = 1 Presidential system = 2	1	Section 2.1.1	
2.1.1.c	Is the country a monarchy or a republic?	Monarchy = 1 Republic = 2	1	Section 2.1.1	

2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociational democracy = 1 Majoritarian democracy = 2	1	Section 2.1.1	
2.1.1.e	Is delegation constructed in a top- down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	2	Sections 2.1.1 and 2.2.2	
2.1.2	Culture				
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		31	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		71	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		5	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		29	http://geert- hofstede.com /countries.ht ml	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		20	http://geert- hofstede.com /countries.ht ml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		1,86	http://www.w orldvaluessur vey.org/	Year 2006
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self- expression		2,35	http://www.w orldvaluessur vey.org/	Year 2006
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	1	Section 2.2.1	
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2009	Section 2.2.1	The reform came into force in 2009 (decision made in 2008).

2.2.1.c 2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order? Are formal legal	Formal legislation = 1 Executive order = 2 No = 0	0	Section 2.2.1 Section 2.2.1	
	provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	Yes = 1			
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	No = 0 Yes = 1	0	Section 2.2.1	
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	3	Section 2.2.2	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	1	Section 2.2.2	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1	1	Section 2.2.3	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1	0	Section 2.2.3	
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	0		
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008- 2012?	Register the number	4	Corresponden ce with MSB (28 May 2013)	Only national cross-sectoral exercises

2.2.3.e 2.2.4	How many major exercises with an international dimension have been organised in the period 2008-2012 External dimension	Register the number	17	Corresponden ce with MSB (28 May 2013)	MSB has been responsible for organizing 1-2 international exercises. As for the remaining ones, they have participated
2.2.4 2.2.4.a	Has the country	No = 0	0	Section 2.2.4	Bilateral agreements does
2.2.7.0	signed bilateral agreements with all neighbouring countries?	Yes = 1		Section 2.2.4	not exist with Poland and Germany; regional agreements exist among the Nordic countries (no bilateral agreements)
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	3	Section 2.2.4	Armenia, Ukraine and the US
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	>10	Section 2.2.4	NORDRED, NordHels, NordBer, Copenhangen Agreement, Helsinki Commission, Bonn Agreement, Barents Agreement, CBSS, EU, NATO, various UN agencies
2.2.4.d	Has the country received assistance from partner/neighbourin g country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	1	Section 3.1.2	
2.3	State-citizens				
	relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	1	Section 2.3.1	(Could be score 2 provided that general national insurance schemes financed through taxes could be understood as "mandatory insurance" in the scoring options)
2.3.2	Information				
2.3.2.a	Does the country maintain a siren	No = 0 Yes = 1	1	Section 2.3.2	

ANVIL Deliverable 2.1: Compilation of country studies

	system?				
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	2	Section 2.3.2	Uncertain as to whether score "3" applies.
2.3.2.c	Does the government have a central website with updated information on crisis events?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	2	Section 2.3.2	
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3	2	Section 2.3.2	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/regional level = 1 Yes, at the national level = 2 Yes, at both local/regional and national levels = 3			Unknown
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1	0	MSB phone interview, May 2013	Children and youngsters up to 18 years receive very little CM training, only related to e.g. "what is rescue service" (not e.g. what is expected from individuals in case of a storm).
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/professional = 1 To members and limited public outreach = 2 To member and wide- spread training programmes for general population = 3	3	Sections 2.3.3 and 2.4.1	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	0	MSB phone interview, May 2013	The government runs no TV campaigns in the CM field. MSB runs campaigns but mainly related to raise awareness around accident-related areas and not CM as such.

2.3.3.d 2.3.3.e 2.4	Does the government provide for a budget for sponsoring research/technologic al developments on civil security/crisis management? If yes, please provide the overall volume of research funding for civil security Role of private	No = 0 Yes = 1 Register the number	1 118 MSEK	Section 2.3.3 Section 2.3.3	
	sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non- profit actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	1	Section 2.4.1	
2.4.1.b	Do societal/non- profit actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0, In parts of civil security (e.g. emergency medicine) =1 In (almost) all aspects of civil security = 2	2	Section 2.4.1	
2.4.2	Role of profit-				
	oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	No = 0 Yes = 1	0	Section 2.4.2	
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	No = 0 In parts of civil security (e.g. emergency medicine) = 1 In (almost) all aspects of civil security = 2	0	Section2.4.2	
3	Quality measures	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	1	Section 3.1.2	
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster,	NA	Section 2.2.1	

	NATIONAL LEVEL as a consequence of a crisis?	note NA			
	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster or data is not accessible at this level, note NA	NA	Section 2.2.1	
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	2	Section 2.2.1	Years: 2002; 2009
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000- 12)?	Register the number for 2000-2012.	2	Section 3.1.1	Related to the two reforms (the debate following the 2004 tsunami event could be considered as a third, but it was also integral to the 2009 reform)
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.	1	Section 3.1.1	One (1) state public inquiry on the handling of the tsunami disaster; other civil security –related state public inquiries (both general and sector specific) – see Section 3.1.1
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	1	Section 3.3.1	Only partly due to crisis (mis)management
3.3.2	Legal support				
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	0	Section 3.3.2	No challenges or petitions related to the system as such
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal	Register the number for 2000-2012.	0	Section 3.3.2	No rulings related to the system as such

	and/or institutional framework?				
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None = 0 Partial (legally defined leeway for operational crisis management) = 1 Extensive (e.g. no civilian jurisdiction over military actors in crisis management) = 2		Section 3.3.2	Unknown
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man- made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	67	Special Eurobaromet er 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	65	Special Eurobaromet er 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	0	MSB phone interview 28.05.2013	
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	NA		
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	NA	MSB phone interview 28.05.2013	There is no overview and no reliable data on numbers of volunteers
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments (in case of specific problems with data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011		http://ec.euro pa.eu/echo/fil es/policies/dis aster respons e/EUCPM_acti vations_since 01012007.pd f	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011		http://ec.euro pa.eu/echo/fil es/policies/dis aster_respons e/EUCPM_acti vations_since _01012007.pd	

				f	
				-	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009-2010 training cycle	51	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	11	http://ec.euro pa.eu/echo/p olicies/preven tion_prepared ness/prepare dness_en.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	1	http://ec.euro pa.eu/regiona l_policy/thefu nds/doc/inter ventions_sinc e_2002.doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002-Sept 2012	81,7	http://ec.euro pa.eu/regiona l policy/thefu nds/doc/inter ventions_sinc e_2002.doc	
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	20	Special Eurobaromet er 383 (2012)	
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated	Register the percentage	82	Special Eurobaromet er 383 (2012)	

EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	
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Annex II: H1N1 in Sweden

The H1N1 incident put the Swedish civil security apparatus on high alert from May to December 2009. It is estimated that half a million persons were affected of which 11,000 cases were verified in laboratory testing; 1,600 persons were hospitalised; 136 required intensive care; and 31 persons died due to the H1N1 virus of which 21 belonged to a known "risk group" (MSB & Socialstyrelsen 2011, p. 64). A total of 60 percent of the population received a vaccination from October of that year. The direct vaccination costs amounted to 1.3 billion SEK whereas the total societal cost of the H1N1 amounted to 5.3 billion SEK (MSB & Socialstyrelsen 2011, p. 88). The societal and multi-sectoral consequences – e.g. according to lost work hours and maintenance of critical infrastructures – related to H1N1 were deemed insignificant.

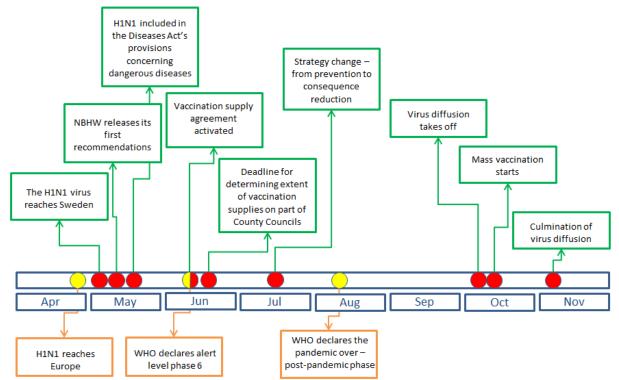


Figure 14: Key dates and decisions for the H1N1 in Sweden, April-November 2009.

Given the responsibility principle in the Swedish civil security system, a myriad of authorities, agencies and institutions have key executive responsibilities and tasks linked to their specific sectors. Because of the overarching and multi-sectoral character of the H1N1 incident, executive responsibility clearly resided with the government and the minister of social affairs as the highest authority in the health sector.

A wide range of actors were involved and responsible for preparation and response tasks in the runup to and during the H1N1 scare. At the national level, NBHW was responsible for central coordination and represented the international contact point during the pandemic. MSB supported coordination efforts and provided expert advice on issues including leadership and communication.

Source: The figure is based on information from MSB & Socialstyrelsen 2011 and The Swedish WHO National Influenza Centre 2011.

Monitoring was carried out by the Swedish Institute for Communicable Disease Control (*Smittskyddsinstitutet*, SMI). The Medical Products Agency (*Läkemedelsverket*, MPA) was responsible for medicine control and monitoring of side effects. The county executive boards (regional level) had the geographic area responsibility and thus were in charge of coordination, interaction and information in their locations whereas the county councils (local level) were responsible for taking measures within the regions regarding vaccination delivery. Operationally, the County Medical Officers of Communicable Disease Control (*Smittskyddsläkarna*) had planning, organizational and monitoring tasks at the regional level. Locally, the municipal councils, having included pandemics in their risks and vulnerability plans and preparations, were responsible for ensuring local services and critical operations (see e.g. MSB & Socialstyrelsen 2011).

The expectations of the state when it came to providing information to prevent the spreading of the disease and to keep social infrastructures up and running were considerable. At the same time, Swedish citizens also put considerable responsibilities on themselves, in particular when it came to making a decision concerning their own vaccination and for reducing contamination (see Table 8).

	Individual responsibility	State responsibility	
To inform themselves about	76	88	To provide information about
the infection	70	00	the infection
To make a decision			To support individual
concerning vaccination for	85	68	decisions on vaccination for
themselves			themselves
To make a decision			To support individual
concerning vaccination for	77	69	decisions on vaccination for
children/relatives			children/relatives
To prevent the spread of	80	96	To prevent the spread of
infection in society	80	86	infection in society
To holp keep sesiety supping	77	07	To help keep critical societal
To help keep society running	//	77 87	functions running

Table 14: Perceptions of individual and state responsibilities under the H1N

Note: The figures represent the percentages of the respondents that the individual and state responsibilities were fairly and very large.

Source: MSB 2011a, p. 21

TV and newspapers were the most frequently used sources of information followed by family, relatives, friends and colleagues. The use of the authorities' special phone service and web platform *krisinformation.se* were known and used by very few.⁷⁴⁰

Generally, the public viewed the government's actions in positive terms (Figure 6). In particular, a significant majority believe that key agencies and the county councils acted in favour of the "public good" in dealing with swine flu. A majority also believe that it was right to offer the vaccine to all residents. However, about one-third perceived that the mentioned parties overreacted and that more than half of respondents doubt if authorities had sufficient knowledge and resources.

⁷⁴⁰ A total of 77% were unfamiliar with the special phone service 020-20-20-00 and Krisinformation.se. Only 1.5 and 4.3% of the population used these services, respectively (MSB 2011a, p. 154).

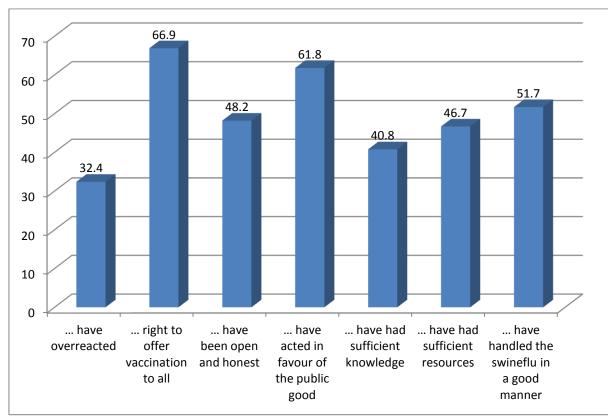


Figure 15: Popular perceptions of the behaviour and actions of agencies and regional authorities

A key private actor in the process was the pharmaceutical company GlaxoSmithKline (GSK), responsible for delivering an approved vaccination in line with an agreement finalised with the NBHW and county councils in 2007 (MSB & Socialstyrelsen 2011). On 11 June, the agreement automatically entered into force due to WHO's declaration of pandemic phase 6. After this date, the county councils had 10 days to decide whether to go for the minimum of 9 or the maximum of 18 million vaccination units. The final order was set to the maximum of 18 million units and was based on recommendations provided by the NBHW at the time. On 29 September, the *Pandemrix* vaccine was approved by the European Commission and delivery ensured the initiation of the mass vaccination in early October. GSK fulfilled their obligations and delivered an approved vaccination as foreseen. By the end of the pandemic phase, however, only 6 out of 18 million units of vaccines were required. MSB and NBHW (2011) recommended a more flexible agreement for the future.⁷⁴¹

Note: The figures represent the percentages of the respondents that considered the behaviour and actions of the agencies (defined as NBHW, MSB, SMI and MPA) and the county councils as fairly good or very good. **Source:** MSB 2011a, p. 19

⁷⁴¹ Due to the changing circumstances, and especially the fact that it became increasingly clear during the autumn that the H1N1 would hit Sweden with less force and that the vaccination proved more effective than anticipated, the assessment carried out by MSB and NBHW recommended that a more flexible agreement, allowing for example for sequential ordering processes and opportunities for renegotiations, should be put in place for the future (MSB & Socialstyrelsen 2011). Notably, in the aftermath of the H1N1, GKS and NBHW entered into an agreement that reduced the number of vaccination units bought by 25%. Moreover, the agreement gave the county councils the right replace the virus strain A (H1N1) with another if the virus would change, or any other flu turns into a pandemic, at a small cost (Socialstyrelsen, 5 May 2012).

In the aftermath of the mass vaccination exercise, 173 children and 32 adults have been diagnosed with narcolepsy (Läkemedelsverket, 16 October 2012). An MPA study showed a four-fold increased risk for children and adolescent vaccinated with Pandemrix. However, as per the GSK agreement, the state remains responsible for the results of law suits and the payment of any financial damages. According to the NBHW, it was necessary for the state to take financial responsibility for damages to ensure quick access to the vaccine (Socialstyrelsen, 10 December 2012).

Other key decisions during the response phase include the government decision to classify H1N1 as a hazard to public health under the Communicable Diseases Act and the decision made by NBHWto change the H1N1 strategy from prevention to consequence reduction (Socialstyrelsen, 15 July 2009).⁷⁴²

The most comprehensive assessment of the event was undertaken jointly by the NBHW and MSB upon the government's request. The report established that Sweden was well prepared to meet a serious pandemic and that it was largely successful in handling the situation (MSB & Socialstyrelsen 2011, p. 16.).⁷⁴³ Key factors contributing to the relative success of the Swedish authorities were the existence of 1) pandemic plans and strategies at national and regional levels, 2) networks and working groups (partly as a result of training activities, etc.), 3) horizontal and vertical coordination, 4) communication with the public, 5) a successful vaccination campaign, 6) swift development of mass vaccination plans, 7) the presence of monitoring systems. However, the report included several recommendations for improvement, including the provision of more flexible pandemic plans and vaccination agreements.⁷⁴⁴

As per Figure 7, public confidence vis-à-vis government agencies at all levels remained high at between 40 and 50 percent during the H1N1 crisis (Ghersetti and Oden 2010, p. 120-121). The respondents' confidence in their own region and county council were higher than in the government. That said, when compared to equivalent surveys undertaken a year earlier, trust in the respondent's region and county council had decreased by 18 percentage points (down from 68 percent) whereas trust in the government in fact increased by 12 percentage points (up from 30 percent). Whilst criticised from time to time in the media, the government seems capable of demonstrating powers to act.

⁷⁴² The former decision made it mandatory for doctors to report incidents which in turn eased the monitoring of H1N1 developments in the initial months (Förordning 2009:380). The latter decision that the NBHW made in consultation with the County Medical Officers of Communicable Disease Control and Swedish Institute for Communicable Disease Control, shifted the focus towards the so-called risk groups in the population (notwithstanding the continued recommendations on mass vaccination).

⁷⁴³ In particular, the outbreaks of the bird flu and SARS in the early 2000s had kick-started pandemics preparation. The NBHW published the national pandemics plan regularly from 2005 onwards and the same year the National Pandemic Group, comprising key actors foreseen to be involved in such an event, was established in 2005. During 2006, the NBHW carried out a comprehensive assessment of the capacities at regional levels.

⁷⁴⁴ For a more thorough overview over the H1N1 preparation and response phase assessment results, see MSB & Socialstyrelsen (2011, p. 11-14).

During 2011 and 2012, the link between *Pandemrix* and narcolepsy became increasingly clear and has contributed to a rather vigorous debate on the state-initiated mass vaccination campaign of 2009.⁷⁴⁵

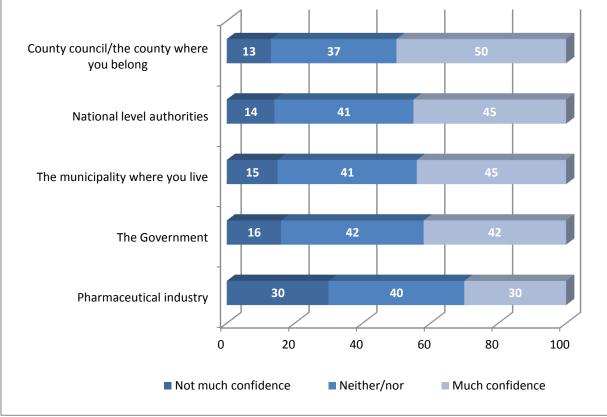


Figure 16: Popular trust in various agencies and the pharmaceutical industry dealing with H1N1

Source: Ghersetti and Oden 2010, p. 120-121

⁷⁴⁵ The NBHW and the Swedish Institute for Communicable Disease Control have received harsh criticism in the media for forcefully carrying out the mass vaccination strategy notwithstanding the fact that, by the time that mass vaccination started in October, they were sitting on information suggesting that the pandemic would be of a much milder character than anticipated. Individuals that sat on key posts during the period in question have testified that they to some extent believed that it was better to be criticized for having done something than the opposite and that an independent assessment is warranted (see e.g. Svenska Dagbladet, 13 February 2012, Sveriges Radio, 17 February 2012). However, no independent assessment is hitherto foreseen.

Annex III: Resources

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- MSB 3, Stockholm, 29 May 2013 (phone interview)
- MSB 4, Stockholm 31 May 2013 (phone interview)
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Switzerland

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Executive Summary

The Swiss civil security system emphasises the primacy of localised solutions and resources following a strict interpretation of the principle of subsidiarity. Responsibility for crisis management first and foremost resides with the cantons and communes. The militia system in armed forces, civil defence and fire brigades is an integral feature of the civil security system. Since the end of the Cold War, Switzerland has reconsidered its emphasis on civil defence and preparation for interstate war as part of a controversial debate. In this context, it has pursued the idea of an integrated system for the protection of the population that deals with a broader variety of risks and encompasses five partner organisations that independently cope with everyday emergencies and upscale authority during sustained and serious crises to the degree needed. The military can be used as a means of last resort for domestic crisis management. The federal level is particularly active in areas that relate to its competence for civil defence, such as warning and shelters, or to some special risks, such as dam ruptures and radiological incidents. The system remains oriented towards the state as dominant actor, though private actors are more and more encouraged to assume responsibilities.

In the past, Switzerland has proven its ability to deal with the types of crises which occur typically on its territory, most notably natural disasters. The country has developed advanced know-how and resources in this area. Switzerland has also reached a high level of sophistication when it comes to conceptual development as well as risk assessment and management approaches, especially in relation to natural hazards. The system's focus on regional autonomy, bottom-up organisation and the militia system ensures a certain degree of legitimacy and local anchorage. However, especially when it comes to cross-regional and unconventional scenarios crisis preparedness and response requires cross-level coordination in many respects, which is often impeded by a lack of standardised mechanisms and procedures. Moreover, major reforms of the system extending beyond mere conceptual innovations remain a challenge in the incremental consensus politics of Swiss consociationalism. Major issues under debate include the desired degree of federal engagement, enhanced cross-level coordination and interoperability and the future of the militia system and the military. These contentious questions will continue to require active public and political scrutiny and

should not be left to expert circles. Although Switzerland is not a member of the EU and does not participate in EU civil protection efforts, it is an active provider of international assistance.

Key Findings

1. Risk assessments and risk-based planning

Switzerland has reached an especially high level of sophistication when it comes to risk assessments, especially in the area of natural hazards management (see section 2.2.3 below for details). Risk assessments are a widespread practice in civil security agencies and there are a number of more or less established guidelines and tools that could be of interest to other countries seeking to develop their own approaches in this field or to exchange experiences. Swiss civil security agencies have been working on a national risk register (Risiken Schweiz), which includes a comprehensive catalogue of risks, detailed scenarios and the assessments with a view to expected frequencies and consequences. Furthermore, they have developed a general method of risk assessment (KATARISK) focusing on natural disasters, technological risks and societal trends but excluding terrorism and armed conflict. It identifies and classifies risks in a quantitative manner taking into account indicators for the frequency and damage of risks as well as for marginal costs and societal risk aversion. Federal and cantonal civil security agencies have also drawn up "threat maps" (Gefahrenkarten), which summarize potential risks for specific areas and regions. Risk assessments provide the basis for riskbased planning. For this purpose, Swiss civil security agencies have developed common guidelines (RIKO) advancing a three step standard procedure and the online tool EconoMe, which allows for the prioritisation of projects based on so-called "protection objectives" (Schutzziele). Interestingly, projects on natural hazard management that induce costs of more than one million CHF need to prove their cost-effectiveness based on these standardised tools and procedure. Hence, there seems to be a special trust in risk assessments and calculation. In order to assist regional and local officials in implementing these methods, civil security agencies have developed a number of standard tools (KATAPLAN, LernRisk, RiskPlan). While the existence of these projects as such does not say anything about their effectiveness or legitimacy or their transferability to other contexts, it is interesting to see that Switzerland seems to be especially conducive to risk thinking in terms of quantitative aspects, especially as there might be normative and functional reservations in other countries. The different tools and guidelines also highlight the need to support the introduction of risk management strategies through accompanying material and information.

2. The militia principle and the protection service

Another peculiar feature of Swiss civil security is the dominant role of the militia principle, which extends not only to the armed forces but also to fire brigades and the so-called protection service (*Schutzdienstpflicht*) that can be drawn upon for crisis response operations. Because of the militia principle the armed forces usually need several days to mobilise larger forces for domestic crisis

management (see section 1). However, the armed forces have used their growing role in long-term domestic crisis response as an argument for the persisting ability to conscript citizens. Fire brigades traditionally rely on the militia principle as well, but nowadays most fire brigades de facto rely on volunteers without forced conscription. The protection service, which Swiss men can join in lieu of mandatory military service, has been subject to particularly controversial debates. There have been unsuccessful proposals for the replacement through a civic service (*Bürgerdienst*) that could also be done in fire brigades or emergency organisations. The protection service is rather unpopular and seen as a stigma, but the increasing participation in domestic crisis preparedness and response operations has been cited as one reason for an improving image. As societal participation is channelled primarily through the militia organisations, the civil security system remains rather state-centred although a considerable number of volunteers is available in relevant organisations (see section 3.3.3). Through the militia principle a large portion of Swiss citizens become acquainted with basic principles of crisis preparedness and response and are likely to have a certain relationship with the issue. However, mandatory service becomes challenged in times of growing regular work demands and increasing individualisation, especially without the unifying threat of the Cold War.

3. Subsidiarity and the pitfalls of informal coordination

Switzerland is an interesting case to study the benefits and pitfalls of subsidiarity as it embraces a particularly strict interpretation of this principle that is deeply enshrined in its legal order and cultural heritage. This should be of particular interest to other federalist and decentralised systems. Civil security in Switzerland first and foremost is a task of the cantons and communes whereas the peacetime role of the federal level is largely confined to that of a service provider, except for special areas with more advanced federal involvement. The advantages of this approach are readily available localised resources and first-hand knowledge of crisis responders that are able to handle most crises very well. However, this arrangement comes under stress during cross-regional crises and especially complex scenarios. Switzerland has aimed to alleviate this problem through various informal networks and coordination mechanisms, such as the Steering Committee Interventions against Natural Hazards (*LAINAT*). Yet, in Switzerland's decentralised federalism cross-cantonal and cross-level cooperation cannot draw upon central command and coordination or standardised procedures. To date, this problem has not been really solved (see sections 2.2.3 and 3.3.1). Hence, Switzerland is a good case to illustrate the assets and drawbacks of decentralisation and subsidiarity, which will also have to be balanced in less ideal-typical systems.

4. Consociationalism and the perils of legitimacy

The Swiss civil security system is not only characterised by the central role of the subsidiarity principle, it also mirrors the country's nature as ideal-typical consociational consensus democracy.

ANVIL Deliverable 2.1: Compilation of country studies

Swiss civil security policy is coordinated through a plethora of consultation mechanisms in the framework of the 'Security Alliance Switzerland'. Switzerland's civil security system is notable for its explicit advancement of a comprehensive approach that rests upon five partner organisations, which form the central pillars of the 'integrated system for the protection of the population'. They discuss common matters in various fora, including the overarching Consultation and Coordination Mechanism of the Security Alliance Switzerland (KKM SVS) as well as the directly civil security-related Governmental Conference Military, Civil Defence, Fire Brigades (RK MZF) and Conference of Cantonal Justice and Police Directors (KKJPD). There are also more specialised bodies such as the Cantonal Coordination Platform CBRN (KP ABC) (see section 2.2.2). The pursuit of common tasks without a central coordination authority requires a great amount of informal exchange and interaction. Together with Switzerland's strong tradition of direct democracy, this is generally seen to ensure a high degree of inclusivity and political and popular support (see sections 3.3.1 and 3.3.3). However, major reforms of the system extending beyond mere conceptual innovations remain a challenge in the incremental consensus politics of Swiss consociationalism. Critics have argued that there is a tendency towards inertia and ineptitude for strategic thinking and towards prolonged discussions in the various coordination and consultation mechanisms. Hence, the consociational setup of the Swiss civil security system is a direct response to the country's political and cultural context that has proven its ability to generate a considerable level of legitimacy. At the same time, conceptual innovations that can be put forward more easily in a consensus-oriented system often seem to make up for a lack of authoritative decision-making.

List of Abbreviations

BABS	Bundesamt für Bevölkerunsschutz (Federal Office for Civil Protection)
BAFU	Bundesamt für Umwelt (Federal Office for the Environment)
BAG	Bundesamt für Gesundheit (Federal Office for Health)
BWL	Bundesamt für wirtschaftliche Landesversorgung (Federal Office for National Economic Supply)
BZG	Bundesgesetz für den Bevölkerungsschutz und den Zivilschutz (Federal Civil Protection and Civil Defence Act)
CBRN	Chemical, biological, radiological, nuclear
EKIF	Eidgenössische Kommission für Impffragen (Swiss Commission for Vaccinations)
GIN	Gemeinsame Informationsplattform Naturgefahren (Common Information Platform Natural Hazards)
IFKIS	Interkantonales Frühwarn- und Kriseninformationssystem (Intercantonal Early Warning and Crisis Information System)
KKJPD	Konferenz der kantonalen Justiz- und Polizeidikretorinnen und –direktoren (Conference of Cantonal Justice and Police Directors)
KKM SVS	Koordinations- und Konsultationsmechanismus Sicherheitsverbund Schweiz (Consultation and Coordination Mechanism of the Security Alliance Switzerland)
LAINAT	Lenkungsausschuss Intervention Naturgefahren (Steering Committee for Interventions against Natural Hazards)
MELANI	Melde- und Analysestelle Informationssicherung (Reporting and Analysis Center for Information Assurance)
NAZ	Nationale Alarmzentrale (National Alarm Center)
OWARNA	Optimierung von Warnung und Alarmierung (Optimisation of Warning and Alarming)
PLANAT	Nationale Plattform Naturgefahren (National Platform for Natural Hazards)
RK MZF	Regierungskonferenz Militär, Zivilschutz, Feuerwehr (Governmental Conference for Military, Civil Defence, Fire Brigades)
SONIA	Sonderstab Information Assurance (Special Task Force on Information Assurance)
SRG SSR	Schweizerische Radio- und Fernsehgesellschaft (Swiss Radio and Television Agency)
VBS	Eidgenössisches Department für Verteidigung, Bevölkerungsschutz und Sport (Federal Department of Defence, Civil Protection and Sport)

1. Introduction

Switzerland's mountainous topography and high precipitation make it vulnerable to floods, landslides and avalanches, especially in the Alpine valleys. Major natural disasters, such as the landslide of Goldau in 1806 and the alpine flood of 1868 spurred the emergency of cross-cantonal solidarity (Pfister 2002, 2004). More recently, a series of severe floods, particularly those in 1987 and 1999, and the cyclone *Lothar* in 1999 reinforced efforts to prepare for natural disasters. There have also been a number of major transportation and industrial accidents related to the importance of Switzerland transit roads and Switzerland's strong chemical industry. Landslides and floods have continued to be the most frequent type of crisis during the period between 2000 and 2012 (Table 1). Most crises have been confined to the local and regional level without putting the country-wide system to a full test.

Table 1: List of Crises 2000-2012

	Crisis description	Crisis category	Damage		
Year/			# of	# of	# of
month	Crisis description	Chisis Category	persons	persons	persons
			killed	injured	affected
2000/10	Landslide (Gondo)	Natural disaster	16		1,500
2001/10	Road accident (Gotthard	Transportation	11		
	tunnel)	accident			
2002/11	Landslides (Geneva, Grisons,	Natural disaster	1		231
	Tessin, Uri)				
2005/08	Flood	Natural disaster	6		2,500
2007/08	Flood	Natural disaster	1		101
2009	H1N1	Infectious	12		13,000
		disease			

Source: Authors⁷⁴⁶

There is no formal overall definition of crisis in Switzerland. Each cantonal law offers its own terminology. Legal definitions use different special terms including "emergency" (*Notlage*), "serious shortage" (*schwere Mangellage*) or "extraordinary situation" (*außerordentliche Lage*). The most important legal term is "disaster" (*Katastrophe*).⁷⁴⁷ Despite important divergences, cantonal laws essentially agree that a disaster is an event that exceeds the normal capacities of local emergency

⁷⁴⁶The EMDAT database (CRED n.d.) served as a starting point for the identification of crises, but the authors included only crises that required some kind of national or regional intervention and extended beyond routine emergencies handled by local emergency workers (see ANVIL definition of crisis).

⁷⁴⁷Throughout the text the authors refer to the prevalent German language terms representing the largest portion of the Swiss territory and population.

agencies and requires coordination and special capacities.⁷⁴⁸ These legal definitions are important primarily because they enable the 'upscaling' of authority to crisis management task forces (see sections 2.1.1 and 2.2.3).

Civil security in Switzerland is a primary task of civilian authorities, but the military can provide assistance in exceptional circumstances. According to article 58 of the federal constitution, the armed forces support civilian authorities during grave threats to internal security or extraordinary situations, such as natural disasters. Because the Swiss army is traditionally based on a militia system the mobilization of larger forces may take several days. If troops happen to be present in a crisis area, they can provide spontaneous assistance for a period of up to 24 hours. The armed forces primarily provide personnel and heavy equipment during prolonged and especially severe crisis at the request of local agencies whose capacities are overstrained and need to be supplemented after some time (Schweizer Armee n.d.). However, the military is a means of last resort whose domestic deployment follows the rules of the subsidiarity principle. Although the army has sought an expansion of its disaster assistance function as a justification for its continuing relevance in a post-Cold War neutral country, its deployment during domestic emergencies remains contested due to historical abuses (Leuenberger 2011).

The Swiss civil security system emphasizes a multiple hazards approach, but also displays strong elements of a specific threats approach. Following a controversial political debate (see section 3.3.1), Switzerland's 1999 security doctrine put forward the argument that security policy would need to be prepared to cope with a broader range of risks including natural and man-made disasters, region and country-wide emergencies, low-scale violence and war (Bundesrat 1999). Since 2010, this comprehensive concept is embedded in the broader idea of the "Security Alliance Switzerland", which is intended to provide a unifying platform for all actors and policies related to internal and external security (Bundesrat 2010a). In this context, civil security agencies have sought to popularise the umbrella term "protection of the general population" (*Bevölkerungsschutz*) that covers the new variety of risks to be dealt with by interconnected crisis management authorities that cope with more crises and emergencies irrespective of the source of the threat (Bundesrat 2001, 2012a). However, specialised actors and strategies come into play for complex threats and tasks and at the higher political levels (see sections 2.2.2 and 2.2.3).⁷⁴⁹ Moreover, the Swiss civil security system remains split between the constitutionally mandated cantonal responsibility for general crisis

⁷⁴⁸See for example the respective laws of the cantons Basel Landschaft (§ 2-4), Bern (Art. 2) and Uri (Art. 2). ⁷⁴⁹See for example the specialised strategies for CBRN protection, critical infrastructure protection and natural disasters (KOM ABC 2007, PLANAT 2009, BABS 2012)

management and the federal competences for wartime civil protection and some specialised scenarios (see section 2.2.1).

2. Analytical Dimensions

2.1 Cultural and historical aspects of the civil security system

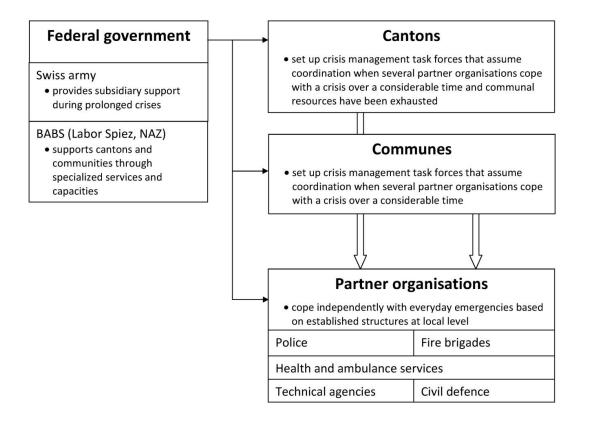
2.1.1 Administrative tradition

The Swiss Confederation is a federal republic with four official languages consisting of 26 cantons that enjoy marked legislative and administrative autonomy. Despite Switzerland's comparatively small size and population, as of March 2013 there are 148 administrative districts and 2,408 communes with differing legal and administrative norms (Statistik Schweiz 2013). Cantons have their own constitutions, parliaments and elected governments. According to the federal constitution, the cantons are sovereign entities (Art. 3) and the federal level assumes only those tasks that are explicitly delegated to it (Art. 42). Based on a rigid interpretation of the subsidiarity principle (Art. 5a), the role of the federal level is limited to tasks that exceed the capacities of the cantons and require a centralized response (Art. 43a). Communes usually have some form of elected legislatives and/or executives, but their political and administrative setup can vary in many respects, depending on regional laws and traditions. The districts primarily are administrative units carrying out tasks for the cantons. Albeit growing cooperative elements in many areas, the setting of binding norms across separate but interwoven levels remains a challenge in Switzerland's "decentralised federalism" (Braun 2003). Switzerland defies the ideal-typical classification of parliamentary or presidential system. The federal parliament (Bundesversammlung) cannot recall the federal council (Bundesrat) even though its members are elected by the parliament rather than the populace (Kriesl and Trechsel 2008, p. 75). Switzerland often has been regarded as the "the clearest prototype" (Lijphart 1999, p. 249) of a consociational democracy stressing inclusivity, proportional representation, direct democracy and consensual decision-making, as embodies in the multi-party and collegial federal council.750

Responsibility is generally awarded to the lowest possible level of government. Hence, crisis preparedness and response are primary tasks of the communes and cantons. Civil security is based

⁷⁵⁰Recently some elements of a majority-opposition system have been introduced through electoral gains by the right-wing Swiss People's Party, a reform of popular referenda and a reorganisation of financial relations in the federal system (Vatter 2008).

on an "integrated system" (*Verbundsystem*) with five partner organisations: police, fire brigades, health and ambulance services, technical agencies and civil defence (Bundesrat 2001, 2012a). The partner organisations cope independently with emergencies at the local level. During severe crises that demand the cooperation of several partner organisations for a sustained period, crisis management task forces can be formed at the communal and cantonal level. They can draw on "leadership support capacities" (*Führungsunterstützung*) for tasks such as alarming and warning. The details of the administrative structures and responsibilities are determined by cantonal and communal laws and statutes.⁷⁵¹



Source: Authors

Figure 1: Civil Security in Switzerland (Organisation Chart)

Crisis management relies on a modular system through which the resources of partner organisations can be augmented and responsibility can be upscaled to the degree needed (see illustration in Figure 1). The federal level provides assistance through the Swiss army and the forces of the "civil defence service" (*Schutzdienstpflicht*) during prolonged crises. Moreover, the federal government supports the cantons and communities through the Federal Office for Civil Protection (*Bundesamt für Bevölkerungsschutz*, BABS), which offers special services for conceptual planning, training, warnings,

⁷⁵¹See for example § 5-13 of the Civil Protection and Civil Defence Law of the canton Basel Landschaft.

situation reports or the maintenance of infrastructures (see sections 2.2.3). Article 44 of the federal constitution stipulates that the federal level and cantons offer each other administrative and legal assistance. On this basis, local and cantonal agencies can ask for support from the federal level or other cantons. According to Article 5 of the Federal Law on Population Protection and Civil Defence, the federal level also can assume coordination in cases that affect several cantons, Switzerland as a whole or border areas in neighbouring countries, but only at the request and with the consent of the cantons. Despite these formal 'upscaling' rules, operational assistance in practice is hampered by the lack of cross-cantonal coordination mechanisms and standardized procedures linking all relevant actors (Bundesrat 2012, pp. 34-35).

2.1.2 Government/societal culture

In cultural terms, most studies characterize Switzerland as a modern and individualist society, though with a special esteem for traditions and performance. Following Hofstede et al.'s (2010) grid-group country studies, Swiss culture has been depicted as individualistic, success-oriented, uncertainty avoiding and short-term oriented. Without falling into the trap of stereotyping, Swiss society tends to value rules, performance, work and precision but also established norms and traditions. German speaking Switzerland generally is more sceptical towards formal hierarchies, acceptant of uncertainty and oriented towards success and performance than French speaking areas. According to the World Value Survey, Switzerland falls within the group of protestant European countries displaying a high degree of secularism and self-expression. It tends slightly more towards traditions but also towards self-expression than comparable countries (Inglehart and Welzel 2010, p. 554). Despite some recent reform efforts, Swiss administrative culture still resembles the Weberian legacy of a legalistic, formalised and hierarchical civil service (Torres 2004, p. 101).

The Swiss civil security system reflects some of these cultural patterns. Cantonal autonomy and popular sovereignty as the central guiding principles of the Swiss confederation are mirrored by the marked emphasis on decentralised solutions and the militia principle in fire brigades, civil defence and armed forces. As a consociational democracy, the Swiss political system is directed towards compromise and inclusion. This generates a certain degree of societal legitimacy, but observers have argued that it also leads to inertia and ineptitude for strategic thinking with a tendency towards prolonged discussions in various coordination and consultation mechanisms (Haltiner 2011, p. 41). This characteristic is reinforced by the strong sense of tradition and conservatism characterising public and political debate (see section 3.3). Furthermore, Swiss civil security has been shaped by the purportedly exceptional experience as a neutral small state and the preparation for interstate war in Europe. Despite ongoing debates about a readjustment, idiosyncratic features such as the

countrywide system of shelters and the civil defence service persist (Mirow 2012). Hence, Swiss "exceptionalism" in security policy has undergone an only partial review (Hagmann 2010).

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

Following the constitutionally mandated division of legislative powers, there are distinct bodies of civil security law at the federal and cantonal level. In addition to constitutional norms and formal laws, civil security provisions can come in the form of regulations and executive orders as well as treaties between cantons and different levels of government or between public and private bodies (Imbach 2008, p. 8). It is important to distinguish between civil defence in the sense of the protection of the population against the consequences of war and armed conflict (*Zivilschutz*) and general civil protection and crisis management. Article 61 of the federal constitution awards the legislative competence for wartime civil protection to the federal level. In addition, the federal level can legislate on assistance mechanisms during especially severe crises in line with the subsidiarity principle. The Federal Civil Protection and Civil Defence Act (BZG) has been adopted in pursuit of this federal competence. Moreover, there are further functional laws and regulations on civil defence that regulate the protection of the national cultural heritage, the civil defence service, alarming and warning, shelters, and the supply of essential goods. Finally, the federal level has legal powers regarding radiation protection, epidemic and epizootic diseases and emergencies involving dams.⁷⁵²

Each of the 26 cantons has adopted its own distinct civil protection laws. They set the basic legal parameters for crisis management and can vary significantly in content and scope. More specialised cantonal laws and regulations deal with fire brigades, public health, policing, and other related issues.⁷⁵³ Internal security – including police action – constitutes a separate body of cantonal law, but the federal level plays a role in some areas, such as counterterrorism, which has led to some confusions and debate in the past (Bundesrat 2012b).

The statutory basis for civil security has gone through a period of change. The new guiding strategy for the protection of the population argued that the implementation of the desired integrated

⁷⁵² For a summary of federal laws see for example: http://www.bevoelkerungsschutz.admin.ch/internet/bs/de/home/dokumente/rechtsgrundlagen.html [Accessed 12 March 2013].

⁷⁵³ See for example the list of legal statutes for the canton Bern available at: https://www.pom.be.ch/pom/de/index/bevoelkerungsschutz-militaer/zivilbevoelkerungsschutz/rechtliche grundlagen.html [Accessed 12 March 2013].

system required a total revision of federal civil security laws (Bundesrat 2001, p. 36). After political and public consultations, the proposal for a new law was adopted by the federal parliament in October 2002. The legal changes focused on the reform of the civil defence service, new financial rules and a clearer formulation of federal and cantonal competences (Bundesrat 2003). The law was confirmed in a popular referendum on 18 May 2003 and entered into force on 1 January 2004, replacing the previous Federal Law on Civil Defence.

The new legal basis underwent a partial reform in 2010 with regard to rather special aspects, such as the maintenance of shelters and the training of civil defence conscripts (Bundesrat 2009, 2010b). However, ongoing discussions about the development of the strategy "2015+" created a momentum for more fundamental changes. The current debate centres on enhanced coordination across levels, interoperability between partner organisations and a revision of the civil defence service. A first report was issued in May 2012 and the introduction of legal changes is envisaged for 2016 or 2017 (Bundesrat 2012, pp. 69-73). There have been calls for a separate legal basis for the management of natural hazards to back up federal level's growing role in this area (Bundesrat 2010c, p. 47).

2.2.2 Political dimension

As civil protection is a primary task of the cantons, most policy decisions on new legislation and structures are reached at the cantonal level. Executive responsibility generally rests with the cantonal governing council (*Regierungsrat*). Most cantons house specialised agencies for civil protection and civil defence that are responsible to the member of the governing council in charge of the issue-area.⁷⁵⁴ In many cantons, civil security policy falls within the remits of the Department for Security. Yet, in the canton Aargau, for example, civil protection policy is dealt with by the Department for Public Health and Social Affairs (Kanton Aargau 2012). Initial responsibility for crisis management in most cases rests with the communal level, more particularly the respective executive head or parliament.

At the federal level, executive responsibility resides with the federal council and the head of the responsible departments. Civil security in general comes under the responsibility of the Federal Department for Defence, Civil Protection and Sports (VBS), which also houses the BABS. However, other federal departments are responsible for specific threats.⁷⁵⁵ The interdepartmental Security Council (*Sicherheitsausschuss*) coordinates security policy at the federal level. There has been an

⁷⁵⁴See for example the respective office in the canton Basel Landschaft: http://www.baselland.ch/Militaer-Bevoelkerungsschutz.273825.0.html [Accessed 14 November 2012].

⁷⁵⁵The Federal Department of Economic Affairs for critical infrastructure protection, the Federal Department of the Interior for epidemics, the Federal Department of the Environment, Transport, Energy and Communication for natural hazards, and the Federal Department of Justice and Police for internal security, including terrorism.

inconclusive debate about the establishment of a security department in order to bundle the scattered competences in one office and account for the blurring divide between internal and external security (Doktor 2008).

Civil security policy in Switzerland's consociational federalism formulation requires inclusive compromise and intensive coordination. Since 2010, the Consultation and Coordination Mechanism of the Security Alliance Switzerland (KKM SVS) aims to enhance inter-cantonal and federal-cantonal dialogue regarding the general direction of security policy. Civil security policy is specifically discussed in the Governmental Conference Military, Civil Defence, Fire Brigades (RK MZF) and the Conference of Cantonal Justice and Police Directors (KKJPD), the heads of which also participate in KKM SVS consultations (Bundesrat 2012a, p. 34). These conferences are flanked by various networks and forums for operational coordination in different functional areas, such as the Cantonal Coordination Platform CBRN (KP ABC) (see section 2.2.3).

The federal constitution does not allow for the declaration of a formal state of emergency overriding individual rights, but there are several more specific emergency provisions. According to the federal constitution, the federal council and/or the federal parliament have the right to issue emergency orders during imminent and urgent threats to internal and external security (Art. 173, 184, 185) and to put into place urgency laws (Art. 165). Controversial recent invocations of urgency clauses dealt with the recapitalisation of the Swiss bank UBS or the destruction of files regarding a case of nuclear smuggling rather than crises in the sense of the ANVIL definition (Trümpler 2012). Many cantonal constitutions include emergency law provisions that include extra-legal and extra-constitutional competences under strict constraints, which can theoretically be invoked during crises and disasters.⁷⁵⁶ The use of these different powers can be challenged at court and remains subject to basic legal constraints. It is important to remind that emergency measures are neatly differentiated from a local or regional state of disaster that allows civil security agencies to form crisis management task forces and pool resources.

2.2.3 Operational dimension

Operational responsibility is vested primarily into partner organisations and civil protection agencies at cantonal and local levels. Police, fire brigades and health and ambulance services operate largely independently and handle everyday emergencies on their own. During prolonged crises that require the participation of several partner organisations, communal and cantonal administrations form crisis management task forces that assume coordination of response operations by partner organisations

⁷⁵⁶See for example the constitutions of the cantons Glarus (Art. 81), Jura (Art. 60) and Thurgau.

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with the ability to draw on support capacities for special tasks like warning. Moreover, the armed forces and members of the civil defence service can provide subsidiary assistance (see also section 2.1). Cantonal civil protection offices provide services and resources such as training and intercantonal coordination. They act under the authority of the responsible member of the governing council (see section 2.2.2). The details of the administrative structures and responsibilities are determined by cantonal civil protection laws (see section 2.2.1). Various cantonal agencies can come into play with regard to specific scenarios. For example, there are offices for natural hazards in most cantons, but they are located in very different agencies and departments dealing with forestry, environment, civil engineering or water engineering.⁷⁵⁷ Cantonal crisis management task forces generally display a high level of professionalism and advanced capacities, but districts and communes vary considerably in the quality of their command and coordination facilities (VBS 2010, p. 9).

At the federal level, the BABS implements civil security policy as a lead agency. Its main tasks are strategy development, cross-agency coordination, planning, research and the maintenance of civil defence infrastructures, such as shelters and sirens. It further supports cantons through specialised resources for CBRN incidents (*Labor Spiez*) and warning and situation reports through the National Emergency Operations Centre (*Nationale Alarmzentrale*/NAZ), which disposed of more substantial coordination responsibilities during radiological incidents, large-scale chemical accidents, dam ruptures and satellite re-entries (BABS n.d.a). Furthermore, there are agencies with more narrow tasks that can come into play and even assume leadership during special crises. For instance, the Federal Office for Health (BAG) is responsible for the management of epidemics, the Federal Office for National Economic Supply (BWL) for critical infrastructures and the Federal IT Steering Unit for cyber risks. In the field of natural hazards, crisis management efforts can draw on various agencies, including the Federal Office for the Environment (BAFU) and the Swiss Federal Institute for Snow and Avalanche Research. Cooperation in some fields is organised in so-called "coordinated areas" that bring together federal, cantonal and private actors.⁷⁵⁸

The lack of overarching structures and standardised procedures complicates upscaling and cooperation across levels and between cantons. Cantons have argued that they often do not know who is responsible at the federal level when it comes to a specific type of crisis and the federal level cannot provide the kind of assistance required by cantons during complex and prolonged crises (VBS

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²³ A list is available at: http://www.kvu.ch/d_afu_adressen.cfm?Nav.Command=Fachbereiche&Module.Method=showFachbereiche&f ach_id=16 [Accessed 21 November 2012].

⁷⁵⁸Currently, there are seven such areas: telematics, CBRN protection, ambulance service, traffic, weather, avalanches and natural disasters (BABS n.d.b).

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2010, p. 8). The establishment of new coordination mechanisms aspires to address this problem to some degree. The Federal Task Force for CBRN and Natural Events (*Bundesstab ABCN*) coordinates federal crisis management during events of nationwide magnitude and relies on the NAZ as a permanent headquarters (Bundesrat 2010). Specialised federal-cantonal coordination networks include the Swiss Commission for CBRN Protection (*KOM ABC*), the Steering Committee Interventions against Natural Hazards (*LAINAT*) and the Special Task Force for Information Assurance (*SONIA*).

The 2005 European floods exemplify how the Swiss civil security system works in practice. After an already wet summer, the north side of the Alps was hit by exceptionally heavy and prolonged rainfalls that led to floods and dam breaks as well as landslides and mudflows. Six people died and the damage amounted to three billion CHF (BAFU 2007a). Crisis management was largely handled by communal and district task forces that coordinated the work of the partner organisations in affected areas and cooperated with cantonal task forces on special tasks, such as the warning of the population, and cooperated with specialised cantonal agencies. Fire brigades organised the first response at the local level. As their capacities became exhausted, they were gradually supplemented by other forces from civil defence organisations, the army, the Samaritans and volunteers. The local police were responsible for tasks like traffic guidance and cordons. At the request of cantons and municipalities, the army offered spontaneous support during the acute response phase and further disaster assistance during the following days and weeks. Assessments concluded that crisis management generally worked well but also pointed to some problems regarding forecast, warning, coordination, communication and the availability of militia forces during a prolonged crisis (BAFU 2007b, see also section 3.1).

Civil security *planning* is a primary task of responsible agencies at the cantonal and municipal level but there are also nation-wide instruments and guidelines. Switzerland has taken steps to enhance its planning and prevention efforts in the field of natural hazards through the National Platform for Natural Hazards (*PLANAT*). Swiss civil security agencies have been particular eager to base their planning activities on the methods of "risk-based planning" and "integral risk management" (Hollenstein et al. 2004, Bründl et al. 2009.). The common guidelines *RIKO* provide an abstract introduction into the concept of risk and a standard procedure of risk-based planning (PLANAT 2009). The online tool *EconoMe*⁷⁵⁹ allows for the prioritisation of projects based on so-called "protection objectives" (*Schutzziele*), which formulate acceptable residual risks and marginal societal costs. *RIKO* and *EconoMe* often require a great deal of effort by officials, but are generally accepted by practitioners (PLANAT 2011). Since civil protection is a primary task of the cantons, the BABS has

⁷⁵⁹ http://www.econome.admin.ch/doku_start.php [Accessed 21 November 2012].

developed the tool *KATAPLAN* that puts forward a common method for the identification and classification of various risks and the planning of response measures by cantonal agencies (BABS 2008) as well as the learning program *LernRisk* and the assessment software *RiskPlan* (BfU and BABS 2005).

Switzerland has also made substantial advancements in the field of risk assessments. In 2008, a report found that risk assessments were widespread in civil security agencies, but it also pointed to a lack of shared understanding, central coordination and comprehensive countrywide assessment (Center for Security Studies 2008). Since 2008, the BABS has worked on a new national risk register (Risiken Schweiz), which includes a comprehensive catalogue of risks, detailed scenarios and the assessments with a view to expected frequencies and consequences (BABS 2010). Furthermore, the BABS has developed KATARISK as a general method of risk assessment focusing on natural disasters, technological risks and societal trends but excluding terrorism and armed conflict. It identifies and classifies risks in a quantitative manner taking into account indicators for the frequency and damage of risks as well as for marginal costs and societal risk aversion (BABS 2003). Federal and cantonal civil security agencies have also drawn up "threat maps", which summarize potential risks for specific areas and regions (BAFU 2012). By now, most cantons have conducted risk assessments using similar methods, but a number of cantons have remained sceptical of the BABS's involvement in their genuine area of competence (Bara 2011). Risk assessment and planning for natural hazards now seem to embrace a basic common understanding and method, but there is a plethora of initiatives with slightly different emphases running in parallel. Most of these activities follow a quantifiable understanding of risk as known from economics or engineering, whose adequateness could be debated on analytical and normative grounds (Hagmann and Dunn Cavelty 2012).

Communication across the different agencies and levels of government has been a challenge. The national radio system *POLYCOM*, which is coordinated by the BABS, seeks to provide a uniform and interoperable radio system for voice and data transmission among relevant public and private actors at all levels of government (BABS 2009). Furthermore, the NAZ serves as federal situation centre during crises with national consequences and distributes warning and situation reports to cantonal agencies. It also can assume countrywide *monitoring* functions for unfolding crises. However, the lack of a common system of situation assessments and reports has been a problem for inter-cantonal and cantonal-federal exchange, but most cantons are not willing to contribute any funding and some of them have already invested resources to develop their own systems (Bundesrat 2012a, p. 35). The new projects *POLYCONNECT* and *POLYDATA*, so far, lack the necessary funds and personnel (Bundesamt für Energie 2012, pp. 27-28).

Logistics is a challenge for Switzerland due to its high tech economy and the vulnerability of transportation networks in the alpine valleys. However, the decentralised system of emergency response and the generally high level of infrastructure development and technical investment usually match requirements. The maintenance of Switzerland's transport system and logistics during crises is handled in the larger context of "national economic supply" (*wirtschaftliche Landesversorgung*). In this system, private industries such as oil companies are required to store up mandatory stocks of essential goods and the logistics industry cooperates with public agencies to protect supply chains from interruptions during crises (see sections 2.3.1 and 2.4.2).

2.2.4 External dimension

Switzerland has entered into five bilateral disaster and emergency assistance agreements through international treaties with all its neighbouring countries.⁷⁶⁰ Minor differences notwithstanding, they generally follow the model of the first agreement, which was signed with Germany in 1984 and includes provisions on contacts, executive responsibilities, the crossing of borders, the use of equipment, coordination and leadership, and funding and compensation. The provision of assistance during everyday emergencies is common practice in border regions. For example, there is a long-standing tradition of cross-border cooperation with German fire brigades along the Rhine that can draw established procedures and contacts (Aebischer 2010, Knüsel 2010). Switzerland has also participated in TERREX 12, a major cross-border exercise with Austrian and German agencies (VBS 2012c).

Switzerland joined the UN in 2002, but it is not a member of the EU and NATO. Despite controversial debates Switzerland basically has remained faithful to an especially resolute interpretation of the neutrality principle (Mirow 2012, pp. 340-341). However, Switzerland is a signatory of functional agreements that touch upon civil security – with a special emphasis on natural disasters and prevention – alongside other tasks. This includes the Alpine Convention (Alpine Convention n.d.) and the International Convention on the Protection of the Rhine (International Commission for the Protection of the Rhine 2012).

In the past, Switzerland has been an assistance-granting rather than an assistance-receiving country. It never received major international assistance during a large-scale crisis or disaster. Switzerland disposes of formal structures for the granting and reception of assistance. According to the federal regulation on disaster assistance (Bundesrat 2004), the delegate for humanitarian assistance decides

⁷⁶⁰ The texts of the individual agreements are available at: http://www.vtg.admin.ch/internet/vtg/de/home/themen/katahi.html [Accessed 1 November 2012].

over assistance requests and can ask the BABS and other agencies for the necessary resources. Cantons and municipalities in border regions can provide cross-border assistance depending on cantonal laws and the bilateral agreement with the respective country. Cantonal agencies assume leadership during assistance efforts in border regions. The costs are carried by the agency and level of government that is providing assistance.

Switzerland is an active supplier of humanitarian aid in foreign countries. Due to its experience with landslides and avalanches Switzerland's capacities for the search and rescue of buried people are particularly asked for. For this purpose, civil security agencies have established the special mechanism Swiss Rescue (*Rettungskette Schweiz*), which is frequently called upon during crises and disasters (Direktion für Entwicklung und Zusammenarbeit 2001).

2.3 The relations between the civil security system and citizens

2.3.1 Expectations

The Swiss state places a number of formal obligations on citizens when it comes to crisis preparedness and response. According to the constitutional principle (Art. 6) of "individual and societal responsibility" every citizen takes care of her/his affairs according to her/his capacities and contributes to the accomplishment of common tasks. Hence, the subsidiarity principle also applies to the state-society relationship. Moreover, citizens are expected to follow the instructions of civil security agencies and can be obliged to place their property at the disposal of emergency services during crisis response operations (Art. 29-32). Most cantonal laws entail related legal obligations, including requisition of property, evacuations or short-time recruiting.⁷⁶¹ The 'protection objectives' developed by civil security agencies (see section 2.2.3) also assume that there is an individual area of responsibility where citizens cannot expect the state to take care of all potential risks.

In addition there are also more long-term expectations beyond immediate crisis response efforts. Swiss citizens are required to insure their houses against damages from natural disasters and other risks and to buy their insurance from the cantonal building insurances, which use the premiums to fund the prevention of and response to emergencies.⁷⁶² Though many Cold War civil defence obligations have been relaxed, home owners can still be required to invest in shelters on their

⁷⁶¹See for example the civil protection and civil defence laws of the cantons Bern (Art. 38-39), Grisons (Art. 11) and Uri (Art. 3).

⁷⁶²More information is available from the association of cantonal bulding insurances: http://kgvonline.ch/KGV/Home-KGV.aspx [Accessed 23 November 2012].

property. Moreover, the Swiss militia principle obliges Swiss men between the age of 20 and 40 that do not serve in the army or civilian service to serve in the protection service (*Schutzdienstpflicht*), which is part of the civil defence system. There is no freedom of choice and the army has the first pick. Civil defence conscripts receive basic and functional training. They can be mobilised for exercises and during crises and receive deficiency compensation. There is an ongoing debate about a readjustment of the protection service, including the opportunity for service in other partner organisations and an upgrading of the protection service vis-à-vis military service (Bundesrat 2012a, p. 47).

Citizen participation in many areas is made mandatory through the militia system, but volunteerism plays a growing role as well. Fire brigades are officially organized based on the militia principle. Service in fire brigades is mandatory for men and women and non-service results in a compensatory fee. However, nowadays most members *de facto* join militia fire brigades on a voluntary basis (Bundesrat 2012a, p. 36-37). Professional fire brigades are rare. Of the 98,368 firefighters only 1,267 are professionals (Feuerwehr Koordination Schweiz 2011). Volunteerism takes place chiefly through the corporations of the Swiss Red Cross (see section 2.4.1). There are no official statistics on volunteers, but according to available numbers there are about 160,000 volunteers (see section 3.3.3). Ambulance and emergency services are largely provided by professionals.

As Eurobarometer polls are not conducted in Switzerland, there are only few indications about the threat perceptions of Swiss citizens. According to the "fear barometer" for 2011, people are most concerned about environmental problems, their physical integrity as well as cultural threats. Following the Fukushima nuclear disaster, radiological contamination became an important concern while the general level of fear remained low (Gesellschaft für praktische Sozialforschung 2011). Hence, the comparatively low level of organised voluntarism does not necessarily indicate an expectation that the state will take care, but can also be read as consequence of a general feeling of security.

2.3.2 Information

The main instrument for the information and warning of the population is the nationwide system of alarm sirens. Switzerland currently runs a system of about 4,700 stationary and 2,800 mobile sirens as well as 700 sirens close to barrages. Local agencies are responsible for the issuing of alarms via the sirens, but they can coordinate a central alarm through the NAZ in case of a cross-regional crisis. The BABS is currently working on a new remote control system for the alarm sirens in the project *POLYALERT*. According to official plans, all sirens are to migrate to the new system by the end of 2015

(Atos 2012). Furthermore, the Swiss Radio and Television Agency (SRG SSR) can spread warnings and orders for the population through the emergency signal *ICARO* (SRG SSR 2011). There are no overall mechanisms for the use of mobile applications or social media.

In response to serious problems revealed by the response to the 2005 floods (see section 2.2.3), the OWARNA (Optimisation of Warning and Alarming) project has reassessed the federal level's role in warning and information under the lead of LAINAT. Following a first report from 2006 (BABS 2006), the federal government adopted a number of measures: improved continuity management, enhanced professional forecasts, more intense involvement of the NAZ and a concept for information exercises. The federal council also demanded a new strategy for the information of the population dealing with standardised procedures, a common information platform and new electronic applications. However, it did not pursue this idea any further due to technical, financial and structural reasons (Bundesrat 2010c).

There are a number of different information tools for various risks but no single comprehensive website. To date, the web portal "naturgefahren.ch"⁷⁶³ offers information on preparedness and response during natural disasters behaviour during crises as well as information on current threats from severe weather, floods, forest fires, avalanches and earthquakes. The Common Information Platform Natural Hazards (GIN)⁷⁶⁴ provides access to up-to-date information on warnings and crises for federal, cantonal and local agencies. Furthermore, there are specialised information systems, such as the Emergency Organisation for Radioactivity⁷⁶⁵, the Intercantonal Early Warning and Crisis Information System (IFKIS) dealing with snow and avalanches⁷⁶⁶ and the Reporting and Analysis Centre for Information Assurance (MELANI) covering threats to information infrastructures⁷⁶⁷.

2.3.3 Education

Education is a task of civil security agencies in cantons and communes, but functional federal agencies are active in their area of responsibility as well. Educational activities generally aim to activate citizen participation. For instance, PLANAT offers information and guidelines regarding risk prevention, preparedness and response for the general public, homeowners, public agencies and experts through various publications, brochures and videos.⁷⁶⁸ The online platform MELANI informs

⁷⁶³ http://www.naturgefahren.ch/ [Accessed 26 November 2012].

⁷⁶⁴ http://www.gin-info.ch/ [Accessed 7 November 2012].

⁷⁶⁵ https://www.naz.ch/de/themen/alarmierung.html [Accessed 26 November 2012].

⁷⁶⁶ http://www.slf.ch/ueber/organisation/warnung_praevention/projekte/ifkis/index_DE [Accessed 26 November 2012].

⁷⁶⁷ http://www.melani.admin.ch/ [Accessed 26 November 2012].

⁷⁶⁸ www.planat.ch [Accessed 26 November 2012].

the public about measures against cyber risks through checklists and the organisation of the Swiss Security Day 2010.⁷⁶⁹ Similar activities for the field of natural hazards exist in the cantons.⁷⁷⁰ Thus, Swiss authorities offer a wide range of information to citizens, but educational material is spread over various sources and distributed in a rather passive way.

Public agencies and voluntary organisations in civil security provide training in relevant areas, but most courses are directed towards professionals. The federal level covers special training for senior crisis management staff whereas cantons are responsible for the more general training efforts⁷⁷¹ In addition, firefighters and police officers receive special training in academies run by their respective professional associations (Feuerwehr Koordination Schweiz n.d., Schweizerisches Polizeiinstitut 2013). A large group of citizens receive education through the basic and advanced training courses that are part of the military and protection service. Moreover, voluntary organisations offer first aid courses for all citizens as well as professional training for their members (see for example Samariter 2013). First aid courses are not mandatory in Switzerland, but most citizens attend a mandatory basic course before they acquire a driver's licence.

There have been no mandatory, comprehensive and nationwide exercises in Switzerland since the practice of "general defence exercises" was disbanded following the end of the Cold War. Some observers regard this as a problem for the ability to cooperate across levels during cross-regional crises (Widmer 2010). The "strategic leadership exercises" in 2005 and 2009 simulated the management of epidemics and electricity breakdowns in the federal government. A third exercise dealing with cyber attacks took place between September 2012 and May 2013 (Bundesrat 2012c). In 2014, there will be a broader exercise in the context of the Security Alliance Switzerland that brings together actors from different levels and issue-areas (Bundesrat 2012a, p. 48).

Switzerland does not have a security research program, but public agencies fund numerous pertinent research projects and institutions. The federal level chiefly leads these efforts, but the cantons can commission research as well. The Swiss Federal Institute of Technology is a particularly important academic partner. For example, the Institute for Snow and Avalanche Research/SLF deals with the forecasting, prevention and management of snow-related disasters (SLF n.d.) and the Center for Security Studies/CSS conducts research on risks and resilience (CSS 2012).

 ⁷⁶⁹ http://www.melani.admin.ch/dienstleistungen/00132/index.html?lang=de [Accessed 26 November 2012].
 ⁷⁷⁰ See for example the canton of Bern:

http://www.naturgefahren.sites.be.ch/naturgefahren_sites/de/index/das_koennen_sie_tun/das_koennen_sie_tun.html [Accessed 26 November 2012].

⁷⁷¹ A central online platform with information on courses and seminars throughout the country is available at: http://kabs.naz.ch/kabs/index.do?language=de_CH [Accessed 26 November 2012].

2.4 The role of the private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

Societal non-profit organisations play a formal role during exceptional and regular emergencies. Voluntary organisations focus on training and special emergency services, such as mountain rescue. These tasks are mostly carried out by the five rescue organisations of the Swiss Red Cross (see below) and the Swiss Mountain Rescue Service, which are incorporated into public crisis management structures. Societal organisations fund their work through private donations, payments from customers and health insurances as well as subsidies by governmental authorities. However, ambulance and rescue services are carried out largely by public health agencies. Moreover, much societal participation is channelled through the militia organisations, most notably the military, civil defence and fire brigades (see section 2.3.1). As a consequence, the civil security system remains rather state-centred although a considerable number of volunteers are available in relevant organisations (see section 3.3.3).

The Swiss Red Cross is the most important societal non-profit organisation in the Swiss civil security system. It is represented throughout the country through its 24 cantonal associations as well as five associated rescue organisations. All together, it has 500,000 members and can draw on more than 70,000 active volunteers, though this also covers various tasks not related to crisis management. There are five rescue organisations in the Red Cross whose work pertains more directly to crisis management. The Samaritans offer training and operate as first responders in some remote alpine valleys. The Swiss Lifeguard Association aims to save people from drowning through prevention and lifeguarding. Swiss Air Rescue provides emergency and ambulance service via air transport. The Swiss Association for Search and Rescue Dogs specialises on the rescue of buried people. The Swiss Military-Medical Association trains members of the military and the protection service.⁷⁷²

2.4.2 Role of profit-oriented organisations

The outsourcing of formal tasks to private security companies is not common in Switzerland's statecentred civil security system, at least when it comes to core crisis management tasks. Emergency, ambulance and rescue services are functions of public authorities or voluntary non-profit organisations. First and foremost, profit-oriented organisations are included either through mandatory cooptation on the basis of legal requirements or in the form of informal networks for

⁷⁷² More information on the Red Cross and its rescue organisations is available at http://www.redcross.ch/activities/rescue/index-de.php [Accessed 26 January 2012].

consultation and information exchange. Hence, they do play some formal role in exceptional and regular crisis management efforts, but their involvement is rather limited.

Private and public operators of critical infrastructures are obliged to ensure the maintenance of their installations and services during crises. They are part of the "technical agencies", which are one of the five official partner organisations in the integrated civil protection system (BABS n.d.d). Furthermore, rules on national economic supply coordinated by the BWL require private companies to maintain mandatory emergency stockpiles (*Pflichtlager*) of essential goods in the areas of food, energy, medicinal substances and some industrial and technological goods like polyethene (BWL 2011).

Increasingly, profit-oriented organisations participate in civil security networks and consultation mechanisms, including the coordinated areas. Experiences with decentralised coordination mechanisms in the federalist state and the militia principle make Switzerland conducive to this form of governance (Dunn Cavelty and Suter 2008). Examples from critical infrastructure protection include the SONIA platform for information infrastructures and the information and analysis platform MELANI that also serves customers from the IT industry. In October 2012, the BWL together with the shipping, trucking and logistics industries established the National Committee for Transportation Logistics, which aims to protect supply chains from interruptions during crises (Heldt 2012).

3. Quality Measures

3.1 Effectiveness

3.1.1 Assessments through professional and political inquiries

Due to the small number of major crises and the rather low level of politicization in crisis management (see section 3.3.1), the demand for incident related public and professional inquiries has been limited. Assessments of civil security have occurred primarily in the context of debates about the general restructuring of the system with regard to the new guiding strategy from 2001 and the new strategy 2015+ (Bundesrat 2001, 2012). To some degree, the lack of inquiries might be explained by the legalistic and hierarchical tradition in Switzerland's Weberian administration and the consensus-orientation characterizing Swiss consociationalism (see section 2.2.1 and 2.2.2).

Nonetheless, one can point to some incident-related inquiries. Following the 2005 European floods (see also section 2.2.3), the Federal Department for the Environment, Traffic and Communication

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charged the BAFU with the conduct of an investigation. The findings were presented in two lengthy reports: one focusing on the description of events and the assessment of forecasts and warnings and one analyzing prevention and response measures (BAFU 2007a, 2007b). The local response to the flood was assessed by a number of administrative reports at the cantonal level.⁷⁷³ The handling of the H1N1 epidemic in 2009 (see Annex II) prompted critical questions from the federal parliament, which led to an inquiry into the organisation of the vaccination campaign and the reasons for the purported overreaction (van Tam et al. 2010). In the aftermath of the Fukushima nuclear accident, the federal council decided to create an interdepartmental working group on emergency measures for extreme events in Switzerland (IDA NOMEX) (Bundeamt für Energie 2012).

The inquiries do not explicitly engage with the concept of effectiveness and the related methodological and conceptual challenges. Rather, crisis management is assessed on the basis of detailed narratives of events and practitioner and expert assessments. Reports usually do not name specific culprits, but point towards more general problems in crisis management. As a bottom-line, reports argue that Switzerland disposes of advanced preparedness and response capacities as well as structures that enable it to deal effectively with most crises. This positive performance is mainly based on the work of the partner organisations at the cantonal and local level. However, there also is recurrent concern that cross-regional and unconventional crises can pose a challenge to the fragmented federal system. The reports on the 2005 floods identified problems in dealing with the almost countrywide consequences. In particular, they underlined the lack of nationwide coordination mechanisms and procedures, insufficient functional expertise at the local level and ineffective forecast and warning instruments (BAFU 2007a, pp. 124-126, 2007b, pp. 343-345). These criticisms led to the attachment of experts for natural hazards to crisis management task forces and the OWARNA project discussed in section 2.3.2. The report on the H1N1 epidemic concluded that Switzerland had been able to manage the effects of the crisis, but, at the same time, it also criticized the lack of cross-level coordination, standardised procedures and clearly stipulated competences. These insights found entrance into the revision of the federal pandemics act, which entailed new coordination powers for the federal level (see Annex II).

3.1.2 Limits to national capacities

In general, Switzerland's crisis management system is regarded as working more or less effectively on the basis of its national means and normal executive powers. External assistance has been restricted to small-scale interventions during typical everyday emergencies in border regions. Although there are no official numbers or detailed data on this kind of local cross-border cooperation, it seems to be

⁷⁷³ See the list at BAFU 2007b, p. 345.

going well according to practitioners' judgments aside from minor technical problems (see section 2.2.4). There is no public evidence that Switzerland ever considered to call for official international assistance during a major national response effort (i.e. outside borderland areas). The Swiss constitution entails national emergency provisions, but during the period of examination it has been invoked only in relation to problems other than the types of crisis considered here (see section 2.2.2). There is no central information about the invocation of emergency provisions in the cantons and the declaration of states of disaster at the regional and local level.

3.2 Efficiency

There are no overall numbers for the costs of civil security in Switzerland. Costs for the various tasks of the federal level are assigned to the responsible ministries and agencies, for example in health or the environment, but civil security costs are not differentiated from other expenditures in these fields. The BABS' annual budget of 142 million CHF in 2011 also includes costs for wartime civil protection (Eidgenössische Finanzverwaltung 2011, p. 94). Cantons and communes bear the bulk of civil security-related expenditures, especially for the local partner organisations. At the same time, the delegation of civil defence related tasks from the federal level to cantons and the sharing of many tasks between cantons and communes leads to a complex system of non-transparent compensations and cross-financing.

Reform discussions related to cost efficiency have centred on the question how the various funding duties of the different levels of government, especially with regard to civil defence expenditures, can be disentangled without risking an undersupply of essential resources and structures. The restructuring of equalisation payments and unbundling of financial competences were approved in a popular referendum in November 2004 (Eidgenössisches Finanzdepartment 2007). According to the new principle of "responsibility funding" each level funds the tasks and resources necessary to fulfil its responsibilities. Hence, the cantons are expected to bear the costs for general emergencies and disasters whereas the federal levels should cover those for armed conflict, increased radiation, incidents involving dams and epidemics and epizootics. The new funding system was expected to lead to reduced costs for the federal level and rising expenditures for cantons and communes (Bundesrat 2001, pp. 32-36). Despite these changes, the maintenance of civil defence forces and equipment as well as general infrastructures continued to require harmonisation and cooperation. Thus, designation of tasks and division of costs continue to be issues of political contestation (Bundesrat 2012, pp. 11-12).

Furthermore, advances in the field of risk planning and assessment have been used as a tool to prioritise measures and calculate necessary costs based on the criteria of acceptable risks and marginal societal costs. In times of austerity public agencies have made the case for a refocusing on "core functions" (VBS 2010, p. 7). The main instruments in this regard have been the formulation of protection objectives, the introduction of the *RIKO* guidelines and the online tool *EconoMe* as well as the development of the *LernRisk* and *RiskPlan* software in order to determine efficiency with respect to the relative costs of potential damages and respective mitigation measures (see section 2.2.3). Projects on natural hazard management that induce costs of more than one million CHF need to prove their cost-effectiveness based on these standardised tools and procedures (Bründl et al. 2009, pp. 805-809). Public agencies are not to blame for the attempt to base the appropriation of financial resources on some kind of "objective" and socially acceptable standard due to fiscal constraints and the uncertainty associated with current-day risks. However, observers have warned that one needs to be aware of the limitations of scientific expertise for authoritative decision-making (Hagmann and Dunn Cavelty 2012).

3.3 Legitimacy

3.3.1 Political support

Swiss civil security is characterized by a relatively low degree of politicization, which might be explained by the rather confirmative attitude of Swiss citizens towards security policy and their sense of perceived security (see section 3.3.3). There have been no collapses of government or electoral defeats/victories that could be directly linked to major crises. Contestation in the security field usually focuses on neutrality and the reform of the military after the Cold War (Hagmann 2010; Haltiner 2011). However, there are aspects of crisis management that affect citizens' life in very visible way and refer to fundamental features of Switzerland's history and political culture, such as civil defence infrastructures or the militia system. Moreover, references to domestic crises operations is a particularly important feature in the search for a new *raison d'être* of the military. The current political and public debate focuses on a popular initiative for the abandonment of the militia principle that found no support in the national parliament but has been countered by a new proposal for a civic service (*Bürgerdienst*) that could also be done in fire brigades or emergency organisations (Neue Zürcher Zeitung 2012). Federal civil security actors voiced concerns that this predominant debate might forestall necessary discussions about further adjustments in civil security (VBS 2010, pp. 6-7).

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However, there have been two major reform debates in civil security, which were initiated by administrative and political rather than societal actors. The first led to the new strategy from 2001 and the introduction of the integrated system for the protection of the general population, including the establishment of the BABS and the introduction of the new federal civil protection law (see section 2.2.1). The second reform debate is currently unfolding with regard to the development of the strategy 2015+ and the first report issued by the federal council in May 2012 (Bundesrat 2012a). Though placed within long-term adaptation processes, the guiding strategy of 2001 was a direct response to the Security Policy Report 2000 (Bundesrat 2001, p. 1) while the Security Policy Report 2010 demanded the development of the strategy 2015+ (Bundesrat, 2010, p. 59). Corresponding reports were submitted at the behest of the federal parliament and council.

The scarcity of high-level political contention with regard to the specifics of crisis management can partially be attributed to the lack of federal legislative competences. The only issue with a considerable number of parliamentary actions throughout the period between 2000 and 2012 has been civil defence with a special emphasis on the protection service and shelters that affect almost all citizens. Specific incidents that prompted some – often specialised – questions in the parliament were the attacks of 11 September 2001, the 2005 floods, the H1N1 crisis and the Fukushima nuclear disaster.⁷⁷⁴ Furthermore, the EURO 2008 fuelled political discussions about the security of mass events (Bruno 2007). Finally, the federal parliament held extensive consultations with public and private stakeholders from different levels regarding reform efforts in relation to the strategy 2015+. Responses were generally positive and criticism centred on specific questions, such as a more prominent role for communes and increased federal funding for civil defence equipment (VBS 2012b).

3.3.2 Legal support

Civil security laws and actions have not been subject to major trials at national courts or with national attention and influence. Similarly, the legal obligations to protect human rights and civil liberties in crisis management operations have not been subject to major public debate. Public authorities are required to abide to human rights standards in any event and citizens can challenge measures and seek redress without any formal limitations. The debate about the misuse of emergency measures to bypass the parliament dealt with issues other than civil security (see section 2.2.2).

⁷⁷⁴ Parliamentary interpellations and questions can be search and browsed at: http://www.parlament.ch/d/suche/Seiten/curia-vista.aspx [Accessed 27 November 2012].

3.3.3 Popular trust and support

Swiss citizens generally feel safe. In the latest *Security 2012* poll conducted by the Center for Security Studies, only 12 percent of the population felt rather or very unsecure whereas 58 percent felt rather and 32 very secure. Moreover, the Swiss population showed a high degree of trust in public institutions, especially the federal council, the national parliament and the police (Szvircsez Tresch and Wenger 2012, pp. 92, 101). Civil security agencies were not explicitly included in the poll. In referenda and polls on security issues, Swiss citizens tend to be confirmative of the government, risk averse and generally conservative (Haltiner 2011, p. 52). This was also visible in the results of the 2003 referendum on the new civil defence and civil protection law, which was approved by 80.6 percent of voters. Major crises, such as the flood of August 2005, have not impinged upon popular perceptions and trust to any visible degree.⁷⁷⁵

As discussed above (see section 2.4.1), voluntarism plays a smaller role in Switzerland than in comparable countries, such as neighbouring Austria. One explanation might be the requirements of the militia system. In general, the civil defence service is rather unpopular and seen as a stigma, but the increasing participation in domestic crisis preparedness and response operations has been cited as one reason for an improving image (VBS 2010, p. 11). However, there is a considerable degree of voluntarism. Most volunteers work in the associations of the Red Cross⁷⁷⁶, the Mountain Rescue Service and the fire brigades. The number of volunteers can only be estimated based on available open sources since there are no official overall statistics. By their own accounts, the Samaritans have 30,563 active members (Schweizerischer Samariterbund n.d.), the Swiss Lifeguard Association 27,500 (Schweizerische Lebensrettungs-Gesellschaft n.d.), REDOG 650 (Schweizerisches Rotes Kreuz n.d.) and the Mountain Rescue Service 2,800 (Alpine Rettung Schweiz 2012, p. 3). This adds up to 61,513 volunteers. Moreover, about 97,000 men and women serve in the fire brigades on a non-professional basis, but there are no numbers on the relation of volunteers and militia members (Feuerwehr Koordination Schweiz 2012). Based on this calculation, there are 158,513 volunteers. This would come down to about 20 volunteers per 1,000 capita in the resident population.

⁷⁷⁵ Eurobarometer data is not available for Switzerland.

⁷⁷⁶ The numbers are restricted to active volunteers, rather than passive members. Most of the 70,000 active Red Cross volunteers mentioned in section 2.4.1 work outside emergency organisations and do not relate directly to civil security and crisis management.

4. Swiss Civil Security in the EU Context

Following its strict neutrality tradition, Switzerland is not part of the EU. Nevertheless it participates in a number of EU policy frameworks, such as Schengen. Some Swiss agencies have loosely considered cooperation with the EU Civil Protection Mechanism. The underlying rationale was that Switzerland might grant external assistance through its experience with search and rescue teams and, in return, gain access to EU training and exercises. Yet so far, there is no political support for a formal cooperation with the EU on civil protection (Doktor 2010, pp. 118-119). Eurobarometer data for Swiss citizens' attitude towards EU civil protection is not available. However, recent polls from November 2012 suggest that public support for a Swiss membership in the EU has declined to an alltime low (Tagesanzeiger 2012). Thus, Switzerland's external civil protection activities are likely to focus on the provisions of international disaster relief efforts through the UN or on a bilateral basis as well as local cross-border cooperation with neighbouring countries (see section 2.2.4).

5. Conclusion

The Swiss civil security system has a strong track record of dealing with the types of crises which typically occur on its territory, most notably natural disasters. This is illustrated by the absence of crisis situations requiring the mobilisation of international assistance or exceptional emergency measures. Switzerland's marked emphasis on local resources and solutions that emphasize regional autonomy and bottom-up organisation combined with subsidiary support from higher levels of government ensures that crisis management caters towards conditions and needs 'on the ground'. Together with the country's strong federal and consociational traditions, it also ensures a comparatively high degree of legitimacy, which is visible in the low degree of open political and public challenges and the electoral support in public referenda. Through the militia system, a considerable portion of the Swiss population has or has had a direct relationship to civil security. Volunteerism remains relevant through fire brigades and non-profit organisations like the Red Cross. Outsourcing of formal public tasks to private companies has not been a major instrument of Swiss civil security policy but private companies and citizens are expected to exercise a basic degree of self-help and comply with various formal obligations.

Switzerland has also reached a high level of sophistication when it comes to strategy development in civil security. Recent reform debates have focused on the adaption to a changing risk environment and a growing role of the federal level in coordination and conceptual development. Together with the various functional strategies, the 2010 security policy report and the draft strategy 2015+ have

laid out a broad conceptual perspective that accounts for new interconnected risks. New and expanded consultation and coordination mechanisms provide forums to discuss general questions and foster implementation. Since the 2005 floods, joint cross-level projects have brought a number of improvements to the field of warning and information. Moreover, Swiss civil security agencies have developed a number of tools for risk assessment and risk-based planning, especially in the area of natural hazards management.

Nevertheless, a number of problems and open questions remain. While new concepts and coordination mechanisms have been added to the civil security system, the basic division of political and legal competences has largely remained unchanged. Hence, crisis management above local and cantonal levels and across functional areas heavily relies on informal channels and voluntary compliance that cannot fully resolve various coordination problems. The current system has not been put to a full test so far. The desirable degree of federal involvement and its potential value added as well as the respective legal and political consequences also remain subject to political debate. Last but not least, uncertainty regarding the future of the militia system, Switzerland's international role and the priority devoted to new risks impinge upon the further adjustment of the civil security system. Thus, important political issues need to be tackled. This exercise requires a broad discussion taking into account various national and international perspectives rather than a further depoliticization of civil security policy through allegedly objective scientific expertise and risk assessments. An open consideration of Switzerland's relationship to the EU could also be helpful to realise a possible value-added, for example through joint exercises or research projects, albeit certainly without formal EU membership in the foreseeable future.

Annex I: Coded Data



ANVIL PROJECT MAPPING PRTOCOL - WP2 SWITZERLAND

1	Introduction	Scoring instruction	Score	Source	Comments
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	0	section 1	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	section 1	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1	section 1	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	1	section 1	
2	Analytical dimensions	Scoring instruction	Score	Source	Comments
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	2	section 2.1.1	
2.1.1.b	Is the political system parliamentary	Parliamentary system = 1	NA	Kriesl and	
	or presidential?	Presidential system = 2	107	Trechsel 2008, p. 75	
2.1.1.c	or presidential? Is the country a monarchy or a republic?		2	Trechsel	
	Is the country a monarchy or a	Presidential system = 2 Monarchy = 1	2	Trechsel 2008, p. 75	
2.1.1.c 2.1.1.d 2.1.1.e	Is the country a monarchy or a republic? Is the political system a consociational or a majoritarian	Presidential system = 2 Monarchy = 1 Republic = 2 Consociational = 1	2	Trechsel 2008, p. 75 section 2.1.1 Lijphart 1999,	

	1	1	I	1	
2.1.2.a.i	Geert Hofstede country national cultural score - DPI		34	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i i	Geert Hofstede country national cultural score - IDV		68	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i ii	Geert Hofstede country national cultural score - MAS		70	http://geert- hofstede.com /countries.ht ml	
2.1.2.a.i v	Geert Hofstede country national cultural score - UAI		58	http://geert- hofstede.com /countries.ht ml	
2.1.2.a. v	Geert Hofstede country national cultural score - LTO		40	http://geert- hofstede.com /countries.ht ml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0,74	http://www. worldvaluess urvey.org/	Year 2006
2.1.2.c	World Value Survey's national score on dimension 2 - survival vs. self- expression		1,9	http://www. worldvaluess urvey.org/	Year 2006
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				
2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	key laws regulates civil	3	section 2.2.1	Cantons have their own key laws.
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2003		

2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	section 2.2.1	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1	0	section 2.2.2	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	No = 0 Yes = 1	1	section 2.2.2	
2.2.2	Political dimension				
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	3	section 2.2.2	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	2	section 2.2.2	
2.2.3	Operational dimension				
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1	1	section 2.2.3	
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1	1	section 2.2.3	Most but not all cantons.
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No=0Bylaw=1By executive mandate = 2	n.a.		
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	2	section 2.3.3	
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008-2012	Register the number	1	section 2.2.4	
2.2.4	External dimension				
2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?		1	http://www.v tg.admin.ch/i nternet/vtg/d e/home/the men/katahi.h tml	

2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	0	http://www.v tg.admin.ch/i nternet/vtg/d e/home/the men/katahi.h tml
2.2.4.c	How many regional/multilateral agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	1	section 2.2.4
2.2.4.d	Has the country received assistance from partner/neighbouring country/ies in response to MAJOR DISASTERS (not day to day cross- border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	0	section 2.2.4
2.3	State-citizens relations			
2.3.1	Expectations			
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibilities for disaster management (e.g. mandatory civil service and/or insurance) = 2	2	section 2.3.1
2.3.2	Information			
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	1	section 2.3.2
2.3.2.b	Does the government have a system for radio/TV warnings	No=0Yes, at the local/regionallevel=1Yes, at the national level=2Yes, at both local/regionaland national levels = 3	2	section 2.3.2
2.3.2.c	Does the government have a central website with updated information on crisis events?	No=0Yes, at the local/regionallevel=1Yes, at the national level=2	0	section 2.3.2

		Yes, at both local/regional and national levels = 3			
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No=0Yes, at the local/regionallevel=1Yes, at the national level=2Yes, at both local/regionaland national levels = 3	0	section 2.3.2	
2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?		0	section 2.3.2	
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?		0	section 2.3.3	
2.3.3.b.	Do societal/voluntary actors offer civil emergency training?	No=0To members/professional=1To members and limitedpublic outreach=2To member ands wide-spreadtrainingprogrammes for generalpopulation = 3	2	section 2.3.3	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?		0	section 2.3.3	
2.3.3.d	Does the government provide for a budget for sponsoring research/technological developments on civil security/crisis management?		0	section 2.3.3	
2.3.3.e	If yes, please provide the overall volume of research funding for civil security	Register the number	0	section 2.3.3	

2.4	Role of private sector				
2.4.1	Role of societal/ non-profit organisations				
2.4.1.a	Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?		1	section 2.4.1	
2.4.1.b	Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	security (e.g. emergency	1	section 2.4.1	
2.4.2	Role of profit-oriented organisations				
2.4.2.a	Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?		1	section 2.4.2	
2.4.2.b	Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?		1	section 2.4.2	
3	Quality measures	Scoring instruction	Score	Source	Comments
_					
3.1	Effectiveness				
3.1 3.1.2	Effectiveness Limits to national capacities				
		Register the number for 2000-2012.	0	section 3.1.2	
3.1.2	Limits to national capacities How many times has external assistance been received during a	2000-2012. Register the number for 2000-2012. If there are	0	section 3.1.2	no central data available
3.1.2 3.1.2.a	Limits to national capacities How many times has external assistance been received during a crisis? How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as	2000-2012. Register the number for 2000-2012. If there are no legal provisions for state of emergency/disaster, note NA Register the number for		section 3.1.2 section 3.1.2	

3.3.1	Political support			
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	1	section 3.3.1
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000-12)?	Register the number for 2000-2012.	n.a.	
3.3.1.c	How many formal and politically instituted inquiries/committees on civil security have been undertaken at the national level?	Register the number for 2000-2012.	2	section 3.1.1
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0	section 3.3.1
3.3.2	Legal support			
3.3.2.a	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	0	section 3.3.2
3.3.2.b	How many landmark judicial or ombudsman rulings have affected the civil security legal and/or institutional framework?	Register the number for 2000-2012.	0	section 3.3.2
3.3.2.c.	Are there restrictions on judicial oversight powers over the REGULAR civil security system (i.e. except in cases of exceptional states of emergency)?	None = 0 Partial (legally defined leeway for operational crisis management) = 1 Extensive (e.g. no civilian jurisdiction over military actors in crisis management) = 2	0	section 3.3.2
3.3.3	Popular trust and support			
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for "Agree" and "Tend to agree"	NA	Special Eurobaromet er 371 (2011)
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for "Agree" and "Tend to agree"	NA	Special Eurobaromet er 371 (2011)
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	Yes= 1	0	
3.3.3.d	If yes to above, list number if accessible	Register the number per		

		1000 capita for 2011			
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non- profit sector?	Register the number per 1000 capita for 2011.	20	section 3.3.3	
4	Civil security in the EU context	Scoring instruction	Score	Source	Comments
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be complet ed by UI/IFHS	http://ec.eur opa.eu/echo/ files/policies/ disaster resp onse/EUCPM _activations_ since_010120 07.pdf	
4.b	How many times has your country contributed to a MIC request - 2007-2011?	Register the number for 2007-2011	To be complet ed by UI/IFHS	http://ec.eur opa.eu/echo/ files/policies/ disaster resp onse/EUCPM _activations since_010120 07.pdf	
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	0	Hollis 2010	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009-2010 training cycle	NA	Hollis 2010	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002-12?	Register the number for 2002-2012	NA	http://ec.eur opa.eu/echo/ policies/prev ention prepa redness/prep aredness en. htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	NA	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions since_2002. doc	

4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	assistance in million euro	NA	http://ec.eur opa.eu/regio nal_policy/th efunds/doc/i nterventions _since_2002. doc
4.h	Based on Eurobarometer data, what percentage of respondents are aware that the EU coordinates civil protection both inside and outside the EU? (Proxy for awareness)	Register the percentage	NA	Special Eurobaromet er 383 (2012)
4.i	Based on Eurobarometer data, what percentage of respondents believe that a coordinated EU action in dealing with disasters is more effective than actions by individual states? Record the sum percentage for "Agree" and "Tend to agree" (Proxy for attitude)	Register the percentage	NA	Special Eurobaromet er 383 (2012)

Annex II: H1N1 in Switzerland

The management of the H1N1 pandemic in Switzerland reflects the general complexity and decentralisation of crisis management in Switzerland. Public health is a shared task of federal and cantonal agencies. Cantons are responsible for the general provision of health services, but the federal level can order measures during "exceptional circumstances" caused by a nationwide epidemic according to Article 6-7 of the Federal Epidemic Law (formerly Art. 10). During the H1N1 pandemic in 2009-2010, the BAG coordinated crisis management at the federal level. The federal agency for therapeutic products *Swissmedic* was responsible for the licensing of vaccines and the Swiss Commission for Vaccinations (EKIF) advised the federal government on the basis of scientific expertise. At the cantonal level, the "cantonal physicians" (*Kantonsärzte*) had to implement measures and organise vaccinations. The pharmaceutical industry was included in the coordination process because it was responsible for the production of vaccines (Van Tam et al. 2010, pp. 19-20). Crisis management efforts could draw on a new national pandemics plan that had been adopted in January 2009 (BAG 2009).

In response to pandemic warnings from the World Health Organisation (WHO), the federal council declared a state of epidemic on 26 April 2009 and established a national pandemics task force under the lead of the BAG on April 29. Public health agencies negotiated first contracts for the purchase of emergency reserves of vaccines in June and July. In October, BAG and EKIF recommended priority vaccinations for risk groups and universal vaccination as soon as enough vaccines would be available. On October 20, all relevant stakeholders discussed the details of the approval and vaccination process in a common meeting. *Swissmedic* approved the first vaccines by the end of October, although with some restrictions that were removed incrementally by the end of November. November 16 was marked as the official starting point for the nationwide vaccination campaign, though some cantons started earlier.⁷⁷⁷

During December, it already became evident that the extent of the pandemic and the demand for vaccination would not match the initial expectations. As a consequence, federal and cantonal public health agencies started to renegotiate contracts with drug companies and resell vaccines. The cut back of crisis management operations and structures started in January and the first evaluations of the vaccination programme began in the same month. By January 2010, there had been 13,000 confirmed cases of H1N1 in Switzerland with 441 hospitalisations and 12 fatalities.⁷⁷⁸ Overall, federal

⁷⁷⁷ See the timeline in van Tam et al. 2010, pp. 68-84.

⁷⁷⁸ See the timeline in van Tam et al. 2010, pp. 68-84.

agencies alone purchased 13 million doses of vaccine worth 84 million CHF. Though Switzerland had sold large stocks to Iran and the WHO, federal and cantonal agencies had to destroy millions of unused doses by the end of 2011 (Neue Zürcher Zeitung 2011). Thus, Switzerland, like other countries, can be criticised for its overreaction to an overrated, or rather constructed, global crisis (Abraham 2011).

In response to parliamentary questions about the vaccination strategy, the BMI commissioned an evaluation by a group of experts that cooperated with the consulting company Ernst & Young and worked under the lead of the BAG (see section 3.1.1). The report acknowledged that the responsible actors had acted under intense time pressure and with scarce reliable information about the evolution and severity of the pandemic. However, the experts pointed out that pandemic emergency plans at the cantonal and federal level were not harmonised and interoperable. Moreover, the final report criticised the slow approval of vaccines, conflicts over responsibilities, the uncoordinated purchase of vaccines and inconsistent and confusing public communication. The main recommendation was a strengthening of federal competences for pandemics planning and vaccinations (Van Tam et al. 2010). A WHO report conducted prior to the H1N1 crises had already found that Switzerland had developed a high level of sophistication in terms of planning and infrastructures but lagged behind in coordination between the different levels and between cantons (WHO 2007). The evaluation found entrance into debates about the revision of the federal epidemics law, which led to a stronger leadership role for the federal government in crisis management and the coordination of vaccinations. It will be subjected to a popular referendum in fall 2013.⁷⁷⁹

Anex III: Resources

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⁷⁷⁹ Further information on the revision process is avaialble at: http://www.bag.admin.ch/themen/medizin/03030/03209/03210/index.html?lang=de [Accessed 28 November 2012].

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United Kingdom

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Executive Summary

Civil security challenges have been common in the UK. Even though the country deals most frequently with floods, the signature crisis for the period 2000-2012 was the bombings in the London underground in 2005.

The UK operates under the 'Integrated Emergency Management' approach. Even though category 1 responders are administered by different government departments, they collaborate efficiently when crises emerge. The details of how the public authorities react to crises are institutionally captured in the Civil Contingencies Act 2004. The act refers to the local responders identified as 'category 1' and 'category 2' responders and is supported by other agencies including NGOs and the media. In general, the British civil security system follows a bottom-up and decentralised perspective in crisis management, with a high focus upon the responsibilities of the category 1 responders. Most crises will be confronted locally and the central government's intervention and coordination will be requested if an emergency on a large scale escalates and overwhelms category 1 responders' capacities or if the crisis has a transnational character. Emergency response will be led by the ministry holding the 'lead government department' role, a responsibility allocated according to the nature of the crisis. There are certain crisis scenarios which dictate that the central government will take the lead role supporting the local category 1 responders, e.g. counter-terrorism issues.

The British civil security system has, to date, managed different types of emergencies quite successfully and with its own capacities, avoiding uncontrollable escalation. This inference is drawn upon the evidence gathered within the framework of this study. From the research, it is also clear that the UK has not required significant assistance from its European partners or neighbouring countries. This is also because of the practitioners' reluctance to involve external factors in problems that have been considered as domestic concerns by British society. In general, British citizens have confidence in how their government tackles civil security challenges; however the media adopt a more critical perspective towards governmental actions. Popular support is one of the different aspects contributing to the legitimacy of the British civil security apparatus. The Cabinet Office, through their Civil Contingencies Secretariat, is subjected to the scrutiny process undertaken by parliamentary committees whose agenda relates to national and domestic security. In addition, the Parliament can delegate the national courts to further investigate specific cases regarding the liability of the emergency services.

Practitioners do share an administrative mentality resulting from their common experiences with a range of crises and emergencies. The research conducted has not revealed that the British civil security system is significantly influenced by national characteristics.

Key Findings

1. Interestingly, the indices developed by Hofstede et al. hardly explain the sentiments of solidarity and belonging to the same community which the British citizens develop during civil crises and emergencies. True, the society might be strongly individualist but at times of calamity, the British unite.

2. The civil security system is very localised in the UK. Crises are confronted by the local authorities quickly when they emerge. Emergency response follows a bottom-up approach, with the central government's coordinating role rarely needed for small-scale crises. The localised emergency response under the doctrine of integrated crisis management appears to deliver.

3. The civil security system follows a civilian approach. The Ministry of Defence is marginally involved in civil crisis management and only after being requested to do so. The institutional framework regulating the military's involvement in civil protection is explicit and gives a straightforward meaning that the army's involvement should be the last resort when disasters strike.

4. The voluntary and private sectors' engagement in emergency response depends very much upon *ad hoc* agreements with the local authorities when crises emerge. The general legal frame of how these agreements between the private sector and local authorities should be conducted is given by the official documentation.

5. The British governments have been very reluctant to seek external assistance in what are considered crises of internal nature. However, this apparent reluctance has not prevented British practitioners to be actively involved in the Civil Protection Mechanism regarding joint training and providing assistance to other countries. Also, British policy-makers often initiate policy recommendations regarding civil protection at the EU level.

6. We have witnessed a general difficulty for respondents to provide information about budgets and what actually makes emergency response efficient.

7. The British press and media are quite critical about the British governments' reactions and choices in civil security, at least more critical than the picture presented by the independent reports.

8. The British ombusdman is in general not an institution employed for filing civil security complaints. The majority of cases brought before the ombusdman are complaints about the operation of National Health System (NHS) but we could not retrieve complaints that refer to public health matters and thus could be relevant to our study.

List of Abbreviations

CCA	Crisis Coordination Arrangements
CCS	Civil Contingencies Secretariat
COBR	Cabinet Office Briefing Rooms
CSOs	Civil Society Organisations
DEFRA	Department for Environment, Food and Rural Affairs
DERA	Defence Evaluation and Research Agency
EPC	Emergency Planning College
HO CAST	Home Office Centre for Applied Science and Technology
HPA	Health Protection Agency
IDV	Individualist Index
IRA	Irish Republican Army
LGD	Lead Government Department
LRF	Local Resilience Fora
LTO	Long Term Orientation
MACC	Military Aid to Civil Community
MIC	Monitoring and Information Centre
MoD	Ministry of Defence
NRA	National Risk Assessment
РРА	Public-Private Agreement
РРР	Public Private Partnership
RED	Resilience and Emergency Division
RICU	Research Information and Communications Unit
UAI	Uncertainty Avoidance Index
WHO	World Health Organisation
WVS	World Values Survey

1. Introduction

Crises, emergencies and disasters are not rare phenomena in the United Kingdom. From the threat of a Soviet nuclear strike during the Cold War to the IRA terrorist attacks of the 1970s and 1980s, the massive strikes of miners and trade unions in the 1970s, the civil unrest in Manchester and Liverpool in the 1980s, the devastating storms of the 1990s and the many industrial and transport accidents in the 1990s, the British civil security system has had multiple challenges (International Disaster Database, undated). The most frequent crises for the period 2000-2012 have been the floods which caused problems of infrastructure and affected a large portion of the British population. For example, in September 2012 the flooding of the Ouse River in Yorkshire actually split the city of York in two (BBC 2012).

In the last decade there was one major crisis that left its mark on the psyche of the British people and this was the London bombings in July 2007. The terrorist attack in the London underground activated the central government's mechanism within an hour of its occurrence (Interview 2, London, July 2012). The London bombings can be considered as the signature crisis for the period 2000-2012 in the UK for a number of reasons. First, it caused an extensive number of casualties, injuries and material damages. Second, it greatly alerted the central government to the extent that news of the incident reached the prime minister in less than an hour (Interview 2, London, July 2012); the Cabinet Office Briefing Rooms (COBR) was then activated. Third, it had a major psychological impact on the British people, raising their awareness of terrorism (Interview 7, York, November 2012). And fourth, it resulted in changes in the country's political system: there was fervent parliamentary debate (Interview 8, London, November 2012) and new governmental units regarding radicalisation were formulated (Research, Information and Communications Unit, RICU).

Apart from the London bombings, some other extensive disasters and crises of the last decade are:

• The outbreak of foot-and-mouth disease in 2001, a viral disease affecting cattle. The crisis alerted the country's civil security mechanism; even the military participated in the emergency response (Interview 9, London, November 2012). The estimated financial cost of the crisis surpassed 8 billion pounds (National Audit Office, 2002). Note here that 2001 saw a significant change in government thinking around emergency planning as a result of the many major crises in the year, which led to the development and introduction of the Civil Contingencies Act and the ensuing creation of the Civil Contingencies Secretariat.

- -The Buncefield depot explosion in 2005 resulted in a large-scale fire which the emergency services managed to extinguish after a strenuous effort, and in order to limit a potential ecological catastrophe that could even affect neighbouring countries (Interviews 5 and 6, Essex, November 2012).
- -The swine flu pandemic in 2009 caused a significant number of deaths even though the British government launched an emergency response effort (Interviews 13 and 14, Essex, December 2012).
- -The volcanic ash cloud crisis in 2010 resulted in chaos as it blocked the transport system of the country for several days (BBC 2010).
- -The London riots in August 2011 were triggered by the killing of a civilian by the police in London, which quickly developed into a protest against societal problems in the underprivileged areas of the urban centres; the crisis soon acquired dimensions of public disorder.

-Combining information from the International Disaster Database, the website of the BBC and interviews conducted with civil security stakeholders in the UK, Table 1 presents the most significant civil security crisis for the last decade in the UK.⁷⁸⁰

Year/Month	Crisis Description	Crisis Category	Damage		
			Persons killed	Persons injured	Persons affected
October 2000	Storm	Natural disaster	12		19,504
February 2001	Foot-and-mouth disease	Pandemics/infectious diseases			Whole society
February 2001	Transport accident	Industrial/transportation accidents	13		70
July 2003	Extreme temperature	Natural disaster	301		
January 2004	Miscellaneous accident	Industrial/transportation accidents	14		
November 2004	Transport accident	Industrial/transportation accidents			150

Table 1: Major civil security crises in the UK for the period 2000-2012

⁷⁸⁰ We have excluded from Table 1 the London riots of 2011 as they are not considered a civil security crisis according to the working definition of civil security developed in ANVIL's Work Package 1.

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January 2005	Storm	Natural disaster			3,000	
December 2005	Buncefield depot explosion	Industrial/transportation accidents			Not easily estimated	
July 2005	London bombings	Terrorist attack	56	770		
January 2007	Storm	Natural disaster	13			
April 2007	Earthquake	Natural disaster			4,501	
June 2007	Flood	Natural disaster			30,000	
July 2007	Flood	Natural disaster			340,000	
September 2008	Flood	Natural disaster			3,000	
April 2009	Transport accident	Industrial/transportation accidents	16			
May 2009	Swine Flu pandemic	Pandemics/infectious diseases	362			
November 2009	Flood	Natural disaster			3,900	
April 2010	Volcanic Ash Cloud	Natural disaster/Critical infrastructure failure			Whole society	
Source: International Disaster Database, British press and Interviews						

Source: International Disaster Database, British press and Interviews

There is a great variety of definitions of emergencies, crises and disasters in British policy documents. For example, the *Civil Contingencies Act 2004* defines as an 'emergency' as:

(a) an event or situation which threatens serious damage to human welfare in a place in the United Kingdom,

(b) an event or situation which threatens serious damage to the environment of a place in the United Kingdom, or

(c) war, or terrorism, which threatens serious damage to the security of the United Kingdom (Civil Contingencies Act 2004, Part 1, Article 1, Paragraph 1).

There are three levels of emergency determined according to the magnitude of the damage caused. Level 3 emergencies would imply a major catastrophe. The UK has not yet faced a level 3 emergency. Even the London bombings were defined as a level 2 emergency (Interview 2, London, July 2012; Interview 11, Essex, December 2012).

The UK's Civil Contingencies Secretariat (CCS), the principal governmental authority responsible for coordinating crisis management, defines crisis as an 'emergency of magnitude and/or severity requiring the activation of central government response' (The UK Civil Protection Lexicon 2011).

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Published by the London Emergency Services Liaison Panel, the *Major Incident Procedure Manual* talks about major incidents as 'any emergency that requires the implementation of special arrangements by one or more of the emergency services and will generally include the involvement of, either directly or indirectly, large numbers of people (London Emergency Services Liaison Panel, Paragraph 2.1.1). Despite their different wordings and different focus, the two definitions are compatible with each other. In general, these and other definitions should be in line with the one provided by the *Civil Contingencies Act 2004* which is the highest legal framework regarding civil security and civil protection in the UK.

Crisis management in the UK is of a civilian nature. There are specific provisions in the policy documents which describe the authorisation of the military's involvement in crisis management, known as Military Aid to the Civil Authorities (MACA). As the Ministry of Defence (MoD) confirms 'Military Aid to the Civil Authorities covers aid to the civil power, other government departments and the community at large' (MoD, undated). A local authority can also request of the central government that the military get involved under the provision of Military Aid to Civil Community (MACC). This is a very rare phenomenon; for example, MACC was invoked during the 2009 floods in Cumbria (Interviews 5 and 6, Essex, November 2012). In general, the British army will engage with civil security issues if the magnitude of the emergency surpasses the local capabilities of emergency response or when the nature of the crisis is such that the involvement of the military is deemed mandatory, for instance in cases of bioterrorist attacks or of disposing hazardous material. So far, the MoD has never been allocated the role of LGD in a crisis or emergency (Interviews 3 and 4, London, July 2012). The army's involvement should be the last resort in civil crisis management. This was confirmed by the minister of armed forces when he delivered a speech regarding the 2011 London riots, an incident when the military was actually summoned to participate in tackling the crisis (British Government, 2011).

The research conducted for this study has revealed an elaborate approach towards emergency response in the UK. Crisis management abides by a specific threats approach. This means that the reaction of the civil security mechanism will be modified according to the nature and magnitude of the crisis. Assignment of LGD responsibility will depend upon the nature of the crisis. What is more, the variety of policy documents regarding different types of civil security challenges reinforces our view that the British civil security system operates under a specific threats approach. Thus, apart from the *Civil Contingencies Act 2004* and the 2010 *A Strong Britain in an Age of Uncertainty: The National Security Strategy* which are both of general nature, there are also the more specialised

CONTEST Strategy of 2011 referring to counter-terrorism, the *UK Cyber Security Strategy* of 2011 and the 2011 *Local to Global: Reducing the Risk from Organised Crime* (UK Cabinet Office, 2011).

2. Analytical Dimensions

2.1 Cultural and Historical Aspects of the Civil Security System

2.1.1 Administrative Tradition

In order to understand how the British public administration deals with civil crises in the UK, we need to provide some context concerning the country's administrative tradition. The United Kingdom of Great Britain and Northern Ireland is a unitary state with a parliamentary political system that operates under the Crown. Even though a monarchy, the country's polity is a parliamentary democracy, with the House of Lords and the House of Commons being the two camerae of the British Parliament. This is also known as the Westminster model of government (Garnett and Lynch, 2012). The United Kingdom's political system is based upon first-past-the post electoral representation, therefore it can be characterised as a majoritarian democracy. Arend Lijphart characterises the British political system as a 'parliamentary-plurality system' (Lijphart, 1991, p. 74). The country, consisting of England, Wales, Scotland and Northern Ireland, is geographically and historically divided into 92 counties. Administratively, the country is regionally divided into local government areas.

The current legal and institutional frame of crisis management in the UK has been greatly influenced by two main approaches: firstly, the 'Integrated Emergency Management' approach, according to which 'Contingency planning arrangements need to be integrated both within and between organisations in a coherent multi-agency effort to build greater overall resilience to disruptive challenges. They should be an integral part of departmental and organisational planning and should work both individually and in collaboration with each other on certain key activities' (Ministry of Defence, 2007). The inter-agency cooperation extends to all different fields of crisis management: anticipation, assessment, prevention, preparation, response, recovery management (*ibid*.). Moreover, the 'New Dimension Programme', approved by the government after the events of 11 September 2001, increased the capacity of the Fire Service so as to respond to major disasters and so that the UK can even deal with multiple domestic emergencies at the same time (House of Commons, Public Accounts Committee, 2009).

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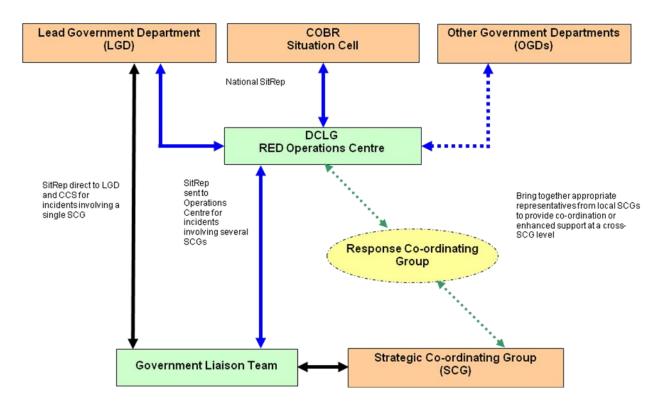
Focusing now on aspects of the British civil security mechanism, one of its key features is the decentralisation of responsibilities regarding emergency response. Even though most of the British policy documents refer to a general crisis management framework applicable in the whole country, they also mention explicitly the overarching authority of the devolved governments of Scotland, Wales and Northern Ireland for crises occurring in their regions (Cabinet Office, 2004). The involvement of the voluntary sector and the allocation of responsibilities to the facilities as Category 2 Responders (see *Operational Dimension* sub-section below) add weight to our opinion that the British civil security system is highly decentralised.

Crisis management in the UK follows principally a bottom-up approach. It is the local authorities that will firstly deal with a crisis by mobilising the local resilience fora (see *Operational Dimension* subsection below) (Interview 1, Essex, June 2012). If the crisis escalates, the local authorities may consider activating the national capacities by referring to the central government (upscaling). In case of a major, inter-regional crisis, it is the government that will declare the emergency (downscaling); it will convene the National Strategic Advisory Team (NSAT) and will coordinate the distribution of capabilities amidst the affected counties and regions (Interviews 5 and 6, Essex, November 2012). In general, however, the crisis usually rests within the control of local authorities. It is quite rare for the central government to pass order to counties regarding medium-scale emergencies.

If the magnitude of a crisis is significantly overwhelming and acquires national dimensions, then the COBR will confer as a crisis task force under the chairmanship of the prime minister, with the participation of senior civil officers, ministers, representatives from the CCS and the security services. As Omand (2010: 61-62) observes, COBR has 'developed into a purpose-built situation centre with the capacity to house teams of senior officials with their secure communications from the main government departments, the intelligence community and the police'. COBR will deal with the strategic coordination of crisis response, nominating the LGD responsible for dealing with the crisis (Interview 1, Essex, June 2012). COBR has convened in order to provide the strategic direction of crisis management in events such as the London bombings, the swine flu crisis, the Buncefield explosion and the London riots.

In Figure 1, we provide a simplified depiction of the governance of emergency response in the UK.

Linking local with central government



Source: Department for Communities and Local Government

2.1.2 Government/social culture

In an effort to quantify and measure cultural elements, we employ here some of the indicators conceived by the sociologist Geert Hofstede and collaborators (Hofstede *et al.,* 2010).

Firstly, in the 'Individualist Index' (IDV), the UK scores 89, indicating a strongly individualist society (Hofstede *et al.*, 2010). This chimes with British society's focus upon prosperity and wealth resulting from one's own efforts. Regarding crisis management, the high decentralisation of the civil security system and the emphasis on individual responsibilities of each of the Category 1 and 2 responders can possibly be associated with the individualist nature of the British society (see also *Operational Dimension* sub-section below). Yet, we cannot be sure about the existence of a causal relation because the British people do develop a sentiment of solidarity and community when faced with crises and disasters which partly results from a long-standing tradition of societal resilience rooted in the World War II bombing of British cities (the 'Dunkirk spirit') (Interviews 5 and 6, Essex, November 2012; Interview 9, London, 2012; Interview 7, York, November 2012). Bonds of solidarity resurfacing during periods of crisis do not support the IDV index score allocated to the UK by Hofstede *et al.* A plausible explanation for the contentious results could flow from cultural theory, which affirms that

individuals consult with their various social milieux (families, working environments, groups of friends) while assessing dangers (Douglas, 2003, p. 12). In this case, even though the British traditionally behave individualistically, they tend to develop a communitarian understanding of emergency response and resilience due to an understanding of what constitutes an emergency with the aid of their fellow citizens.

Hofstede's definition of the Uncertainty Avoidance Index (UAI) is 'the extent to which the members of a culture feel threatened by ambiguous or unknown situation' (Hofstede & Hofstede, 2005, p. 167). In the UAI, the UK scores 35, showing that the British people do not feel threatened by an ambivalent future. However, the elaborate development of the civil security system in the UK, its attention to prevention, its preparedness by means of training and exercising, and its pre-emption of crisis are signs of a community of people that would like to avoid unpleasant contingencies. Again, we realise here a certain contradiction between the UAI and what is actually practised.

Finally, regarding the orientation of British society towards time (LTO Index), '[a]t 25 the UK scores as a short term oriented society which drives on a great respect for history and tradition as well as a focus on quick results in the future' (Hofstede *et al.*, 2010). The way the British civil security system is structured favours a quick reaction to emergencies so as to minimise the damage caused. Taking into account the aforementioned observation regarding the British World War II mentality, we can conclude with some safety that the UK's score here is accurate.

Another helpful tool to differentiate British society from other societal contexts is the processed data of the World Value Survey (WVS) and more specifically the scores of the UK in the *traditional-secular values* scale and the *survival-self expression values* scale (World Values Surveys Organization, 2012). In the former, the UK scored 0.29 in round 4 of the WVS. The score of 0.06 in round 5 of the WVS categorises British society very close to the middle of the continuum of traditional versus secular values. This combination of antithetical elements in the British mentality is borne out by how British people lead their lives, something we demonstrated above. Even though they care mainly for their individual well-being, the British shift towards the traditional values of community and solidarity in emergencies. In the survival versus self expression continuum, the UK scored 1.31 for Round 4 and 1.68 for Round 5. British society keeps the worries of survival at a distance, implying a society of prosperity where survival is considered a fact, and which moves towards a higher quality of living. Indeed, British citizens have high expectations from their government regarding civil protection; they expect that the civil security system will deliver and protect them in case of an emergency (Interviews 3 and 4, London, July 2012).

2.2 Legal/constitutional aspects of the civil security system

2.2.1 Statutory basis

The elaborate civil security system of the UK emanates from a detailed legal and institutional framework. First of all, the Civil Contingencies Act 2004 functions as the basic legal platform for civil security and civil protection in the UK. The CCS of the Cabinet Office, the main governmental agency dealing with crisis management in the UK, published the statutory *Emergency Preparedness Guidance* (chapters of which have been revised in 2011 and 2012) so as to provide a more detailed account of emergency preparedness and response. Crisis management was also the objective of the Major Incident Procedure Manual mentioned in the introduction, published by the emergency services of the London area to shed light on the responsibilities of the emergency responders. Last but not least, a Voluntary Engagement Guidance Note has also been drafted to elucidate the role of the voluntary sector in emergencies. As we see, there is no single document that includes all the details concerning crisis management in the UK.⁷⁸¹ Different civil security stakeholders have proceeded to publishing policy documents regarding the delivery of civil security; of course these documents are compatible with the 2004 act. Referring to changes in the legal framework regulating crisis management, the British government has put effort into keeping the Act updated. It put in place 'The Civil Contingencies Act Enhancement Programme' which modified provisions of the act and consequently inaugurated changes in chapters of the Emergency Preparedness Guidance. Taking into consideration this description of different policy documents, it can be said that the UK civil security system depends upon formal legislation, that is, the 2004 act and ensuing updates, for its function and legal control.

2.2.2 Political dimension

The legal context of the British civil security system is very clear regarding the distribution of labour between the central government, the category 1 responders, and the voluntary sector. The executive responsibility for crisis preparedness and response lies with the lower level of public administration, the category 1 responders (see 'Operational Dimension' sub-section below).

The formulation of legislation on civil security rests with the British government and the Parliament. The 'Policy Unit' in the Cabinet Office can advise the prime minister regarding new legislative frameworks (Bentley *et al.*, 1999, 414). Any piece of legislation on civil security ought to enjoy the approval of the British Parliament. Even when the country faces a major crisis, the government

⁷⁸¹ We have mentioned here just some of the many official documents that refer to different aspects of crisis management, available from the Cabinet Office.

should present Parliament with every 'emergency regulation' that it intends to adopt. The latter should amend (if it thinks necessary) and approve the regulation within a period of seven days. Otherwise, they are considered invalid and '... cease to have effect' (Cabinet Office, Civil Contingencies Secretariat, undated).

2.2.3 Operational dimension

When crises strike, the Strategic Co-ordinating Group (SCG) operating at the local level plays a significant role in crisis management (see Figure 1 above). When crises upscale and acquire a cross-county or sub-national dimension, there is additional role for a sub-nationally directed form of response coordinated through the Resilience and Emergency Divisions (REDs). Within the UK, England for example is divided into four REDs whose seats are in Leeds, Birmingham, London and Bristol (Interviews 5 and 6, Essex, November 2012). But how and when is the central government involved? The Cabinet Office is very explicit on the matter:

1. Most incidents are handled at a local level by the emergency services and by the appropriate local authority or authorities with no direct involvement by central government (though government departments with a potential interest would keep themselves informed on developing events and the handling of the media).

2. Where the UK central government does become involved, the initial response should come from a lead government department. The lead department would be responsible for alerting the CCS as soon as it considered that any incident (or potential incident) was likely to require collective consideration by a range of departments. The CCS would then be in a position to assess the broad picture, consulting others as necessary, and discuss with the lead department whether the incident was of a scale or complexity to require central coordination or support (Cabinet Office, undated 1).

The strategic planning in case of a major incident (level 2 and 3 emergencies) rests with COBR, which will take the strategic decisions, liaise with the different government departments and nominate the LGD for coping with the specific crisis (Interview 2, London, July 2012; Interviews 5 and 6, Essex, November 2012; House of Commons, 2010). The overall crisis management will then be supervised by the appointed LGD (Cabinet Office, 2010).

Following from Figure 1, when crises/emergencies are locally managed the SCG directs the actions of category 1 and 2 responders and reports progress to the LGD through the government liaison team (if requested). If the crisis is beyond local capabilities or has a cross-county dimension, the Response

Co-ordinating Group (RCG) could act as a coordinating platform 'bringing together' the local SCGs. The RCG then reports to the Department of Communities and Local Government (DCLG) RED Operations Centre, which in its turn keeps informing other governmental structures (see Figure 1 above). During an inter-county or sub-national crisis, the government liaison team can also be communicating with DCLG RED Operations Centre.

In all cases, the Civil Contingencies Secretariat (CCS) is kept informed through the LGD with regards to the progress of the emergency response.

Operationally, the actors that are deployed in emergency response in the UK are distinguished as category 1 and category 2 responders. According to the *Revised Short Guide to the CC Act 2004*, category 1 responders are:

- Emergencies services: police forces; British Transport Police; fire authorities; ambulance services; Maritime and Coastguard Agency
- Local authorities: all principal local authorities (i.e. metropolitan districts, shire counties, shire districts, shire unitaries); port health authorities
- Health bodies: primary care trusts; acute trusts; foundation trusts; local health boards (in Wales); Any Welsh NHS Trust which provides public health services; Health Protection Agency
- Government agencies: Environment Agency; Scottish Environment Agency

and category 2 responders are:

- Utilities: electricity distributors and transmitters; gas distributors; water and sewerage undertakers; Telephone service providers (fixed and mobile)
- Transport: network rail; train operating companies (passenger and freight); London Underground; transport for London; airport operators; harbour authorities; Highways Agency
- Health bodies: strategic health authorities
- Government agencies: Health and Safety Executive (Cabinet Office, Civil Contingencies Secretariat, undated).

At the tactical level, on the site of the incident, every emergency service from category 1 responders will be led by its bronze, silver and gold commander which corresponds to tactical, operational and

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strategic command of the emergency service's actions in the incident (*Major Incident Procedure Manual*, 2012, pp. 22-27). The gold commander associated with the LGD (this means his/her emergency service belongs administratively to the LGD) will have the general supervision of emergency response. The emergency services coordinate their reactions on site in the framework of gold and silver coordinating groups (*ibid*.). In major crises, the line of communication and exchange of information with COBR is ensured through the gold coordinating group (Interviews 5 and 6, Essex, November 2012). If the crises have a regional or local character, the coordination of responses between the region's emergency responders will be the responsibility of a regional nominated coordinator (Cabinet Office, Civil Contingencies Secretariat, undated). The relationship between category 1 and category 2 responders is determined by the simple principle: 'The right issue, at the right time, at the right level' (Cabinet Office, 2009a, p. 3). In cases when decisions are taken collectively, accountability lies with the SCG. In general, issues of accountability lie with the actors taking decisions in each case and their corresponding superior authority (read government Department here).

The British civil security system has heavily invested in crisis prevention. Therefore, emergency planners focus on emergency planning and risk assessment. Emergency planning is one of the main activities of the category 1 responders, each one of which is obliged to maintain an emergency plan. Category 1 responders must have regard to risk assessments when deciding which plans and when are required and when developing and reviewing the contents of them' (Cabinet Office, various dates, Chapter 5: Emergency Planning). Furthermore, category 1 responders should take into account how category 2 responders can be involved in crisis management while developing their plans (*ibid.*). Concerning risk assessment, a necessary piece of information for developing any type of emergency plans, the Cabinet Office publishes every year the *National Risk Register of Civil Emergencies*, an unclassified public version of the country's *National Risk Assessment* (NRA), where the likelihoods of emergencies are assessed according to their probability and potential impact. The CCS is the governmental agency responsible for compiling the NRA. However, as contingencies vary on a local scale, the *local resilience fora* (LRF) should also develop their own local risk profiles, the *community risk registers* (Interviews 3 and 4, London, July 2012; Cabinet Office, 2012).

2.2.4 External dimension

With regard to international cooperation to tackle a domestic civil crisis, the UK has not signed any bilateral agreements or memoranda of understanding on the exclusive topic of collaboration with other countries in crises (Interviews 3 and 4, London, July 2012). The EU Civil Protection Mechanism will operate as an institutional framework for all *ad hoc* agreements following the occurrence of a

crisis (Interview 11, Essex, December 2012). That said, our research has scrutinised / examined certain bilateral treaties of the UK which can have political implications in the field of civil security. For example,

- A convention between the UK and Finland entered into force in 1984 regarding cooperation in matters of social security; even though the agreement mainly considered health care issues, it also included provisions on public health (Foreign and Commonwealth Office (Treaty Section), undated).
- With the ratification of the Good Friday Agreement between the British and Irish governments in 1998, many security-related topics, inter alia terrorism and policing, were addressed (Northern Ireland Office, 2001).
- The UK signed an agreement with the USA in 2004 to cooperate in the fields of scientific and technological applications for critical infrastructure protection and other homeland/civil security matters. Within the framework of this agreement the two governments proceeded in 2012 to an exchange of notes (Foreign and Commonwealth Office (Treaty Section), undated).
- In May 2012, the UK and France decided to install a device detecting 'radioactive and fissionable materials' called Cyclamen in the French terminal of the Channel Tunnel (Foreign and Commonwealth Office (Treaty Section), 2012).

Our qualitative inquiry has indicated that the UK has not invoked a bilateral agreement with regard to crisis management in the period 2000-2012. In any case, this decision would have to come from the higher echelons of the UK government.

The British government participates in a limited number of multilateral frames of cooperation in crisis management. It is a member of the 'Bonn Agreement' which, among other issues, engages with pollution as a maritime disaster; within the EU Civil Protection Mechanism, it participates in a working group of 6 member states discussing key aspects of the Mechanism;⁷⁸² it also has membership in the 'Regional Environmental Centre for Central and Eastern Europe' (REC), in the 'International Organisation of Fire & Rescue Service', and in the 'Regional Coordination Council for South Eastern Europe' (RCC SEE). Cooperation with other member states solidifies the country's exchange of information regarding potential threats. It also builds up the necessary coordination

⁷⁸² Based upon exchange of notes with the International Team of CCS.

skills that the country's International Search and Rescue (ISAR) and Urban Search and Rescue (USAR) teams need in order to operate outside the UK's borders (Interview 12, Essex, December 2012). What is more, the UK has been encouraging cooperation in new fields such as counter-terrorism in the framework of some of these multinational regimes of cooperation, especially within the EU (Interview 2, London, July 2012).⁷⁸³ Cooperation with other countries and European partners finally proffers a back-up plan in the quite rare eventuality that the central government is overwhelmed and needs external assistance to deal with a disaster. For instance, in the severe snowfalls of winter 2009, the UK government requested grit-salt through the EU Civil Protection Mechanism as the country's own supplies were reaching their limits (Interviews 3 and 4, London, July 2012).

2.3 Relation between the civil security system and citizens

2.3.1 Expectations

Citizens' perceptions of what constitutes a civil security challenge are an important element for mapping out a country's civil security system, simply because public perceptions of threat actually formulate citizens' expectations from the civil security mechanism of the country. In recent years terrorist attacks, floods, industrial accidents and marine pollution have been considered principal concerns amongst the British population. The *Special Eurobarometer Survey on Civil Protection 328* revealed that 59 percent of British citizens feel at risk from floods, 32 percent from industrial accidents and 20 percent from marine pollution. In the *Special Eurobarometer Survey on Civil Protection 383*, a similar question was posed to the responders, this time asking about categories of disasters. So, 45 percent of the British feel concerned about natural disasters, 71 percent about terrorist attacks and 61 percent worry about man-made disasters other than terrorist attacks (e.g. nuclear accidents).

To a certain extent, the British civil security system does allocate particular responsibilities to the citizens in periods of crisis. According to the policy document *Principles of Effective Response and Recovery*,

The private and voluntary sectors and the general public itself are key participants in the recovery management effort. The flow of authoritative information following the

⁷⁸³ However, the discussion about giving EU Civil Protection Mechanism more autonomy through more capabilities and jurisdictions did not flourish as an idea amidst the British policy-makers (Interviews 3 and 4, London, July 2012).

principles set out above underpins the resilience of a community to disruptive challenges, supports business continuity management arrangements and facilitates 'self-help' (Cabinet Office, undated 2).

This passage does not define the responsibility of the citizens in concrete terms; it only highlights their importance during the recovery phase of crisis management. In general, British policy documents do not determine a legally institutionalised role for the public in periods of civil crisis; citizens are supposed to obey and cooperate with the authorities. A certain level of preparedness for emergencies has already been infused in a considerable portion of the British population. The *Special Eurobarometer Survey on Civil Protection 328* registers a proportion of 35 percent of British citizens to have already taken personal actions (preparing a first aid kit, purchasing torches) in order to deal with a potential emergency (while 49 percent have not considered doing so).

From the citizens' perspective, there are high expectations of the British government regarding civil security. They expect that the authorities and security services will be able to protect them in case of an emergency or a disaster. Key informants have depicted the issue very clearly: 'There has been rising expectation that the government will protect the public, and also reduced tolerance towards failures to deal with emergencies and disasters' (Interviews 3 and 4, London, July 2012). At the same time, British citizens are very fond of volunteering. They participate in voluntary organisations specialising in recovery and relief such as St John Ambulance and the Red Cross, mainly at the local level. The voluntary sector organisations participate in the LRF and the local authorities maintain lists of the volunteers registered in their vicinity. Especially in cases of coastal flooding, actions of the volunteers under the coordination of the authorities have worked very effectively (Interview 2, London, July 2012).

2.3.2 Information

The British authorities have an obligation to increase citizens' awareness about potential civil security threats (Cabinet Office, 2009). In the UK, such information is closely related to the nature of the crisis. For instance, raising awareness on counter-terrorism will mainly be a task left to central government. In fact, the fight against radicalisation and fundamentalism in the UK is a duty of a governmental agency, the Research Information and Communications Unit (RICU) (Interview 2, London, July 2012). Moreover, another governmental agency, the Home Office Centre for Applied Science and Technology (HO CAST) contributes to public awareness by means of research and development. HO CAST liaises with the scientific community and contributes to studies regarding crisis management which can then be made public (Home Office, undated).

There are cases where public awareness will be informed both at the local and national levels, for example in the case of a pandemic. The local health services will inform the public but information will also be available at the national level through the News Centre of the Health Protection Agency (Health Protection Agency, undated 2). With regard to floods, in liaising with the Environment Agency which will issue warnings of coastal or inland flooding, the local authorities will support the delivery of public information concerning likelihood and potential impact of floods.

A very common tool for increasing public awareness of emergencies is information campaigns, which generally take place at the local level. Discussions with key informants raised one campaign which is organised at the national level, i.e. the national fire campaign (Interviews 5 and 6, Essex, November 2012). This is more commonly known as the 'Fire Kills' campaign, 'the national campaign designed to educate people about fire safety to help them prevent fires' (Department for Communities and Local Government, 2012). Two other awareness campaigns promoted by the UK Government refer to extreme weather conditions; they are called 'Get Ready for Summer' and 'Get Ready for Winter'.⁷⁸⁴

The occurrence of a crisis will signal a specific route of supplying information to the public. Again, the local authorities will initiate the process of informing the citizens. The local emergency responders will make use of social networks (Twitter, Facebook) and will also use text messaging through the 'Floodline Warnings Direct Service' which is centrally managed by the Environment Agency (Interviews 3 and 4, London, July 2012; Environment Agency, undated). When a crisis acquires national dimensions, the government, through the CCS, can make use of television stations to alert citizens. The BBC is the country's nominated 'Emergency Broadcast System'. Citizens may also be notified through a voluntary organisation, the Radio Amateurs' Emergency Network (Interview 1, Essex, June 2012). According to the *Revised Guidelines on Emergency Preparedness*, the flow of information from different sources in a major emergency will be coordinated and supervised by the national 'News Co-ordination Centre' (Cabinet Office, 2009b). The UK has decommissioned its national siren system since the end of the Cold War and more precisely since 1992 (UKWMO Communications, undated).

In general, the CCS has not established a centrally administered website that would inform citizens about the occurrence of major emergencies and disasters. It has a website for information on UK resilience and crisis management (http://www.cabinetoffice.gov.uk/news/owner/139) and the secretariat maintains its own Twitter account (http://twitter.com/UKResilience).

Based upon exchange of notes with regional emergency planner.

2.3.3 Education

With regard to educating citizens on the probability of an emergency so as to be vigilant and prepared, in the UK the responsibility lies at the local level. The LRFs will educate citizens on emergencies and potential disasters through local campaigns and social networks. They will also educate children by visiting schools and addressing youth on emergency preparedness (Interviews 5 and 6, Essex, November 2012). In this field, the emergency planning unit of Essex County has developed educational material (known as "What If") to address school education on crisis prevention and emergency response that is now nationally and internationally recognised.⁷⁸⁵

Exercises can either focus upon testing the operational capability of the civil security mechanism or testing the coordination capacity of the civil security stakeholders. A simulation exercise would lie within the former aspect, tabletop (meaning scenario-based exercises that are conducted on paper) and EU modules exercises would constitute the latter.

It is a legal obligation for the UK's emergency responders to exercise on a regular basis. According to the *Emergency Preparedness Guidance 2011*, all emergency responders have their own emergency plans/contingency plans; the latter envisage exercises and staff training on how to tackle crises (Cabinet Office, 2011). For instance, the Health Protection Agency (HPA) has its own emergency response unit which will be responsible for organising exercises. Citing the HPA's website, 'On behalf of the Department of Health, training courses and exercises are delivered every year throughout England to develop resilience across healthcare organisations' (Health Protection Agency, undated 1).

At the national level, the government coordinates three or four exercises every year (Tier 1 exercises), two of them necessarily in the field of counter-terrorism (Interviews 3 and 4, London, July 2012). In 2012, one of these exercises specifically concerned security at the London Olympics.786 Interestingly, exercises in the UK do not involve all government departments. In other words, inter-departmental exercises are a rare phenomenon because of the difficulties in coordinating all departments together and because of the significant budget expenditures required for a national exercise involving all sectors of the government (Interview 7, York, November 2012).

The training of the country's emergency planners is under the aegis of the Emergency Planning College (EPC), administered by the CCS. The college is responsible for training emergency planners

⁷⁸⁵ Based upon exchange of notes with regional emergency planner.

⁷⁸⁶ This information was retrieved through an exchange of notes with the International Team of CCS.

from the private and public sectors, as well as international partners, through brief courses and seminars as well as through small-scale exercises. The type of training on crisis management provided by the EPC, for instance courses on the EU Civil Protection Mechanism, is unique in the British context; in other words there is no other public authority, private organisation or civil society group offering such intense programmes on civil protection (Interview 7, York, November 2012).

At the local level, exercising and training will be organised through the local resilience fora (Interview 2, London, July 2012). Counties may take the initiative to invite other regions of the UK and conduct a joint exercise. However, this type of exercise is based upon local initiatives and it is not an obligation flowing from governmental or legal requirements (Interviews 5 and 6, Essex, November 2012).

Finally, at the international level, the UK hosted an EU co-funded exercise in Hertfordshire in 2010, Exercise Orion (Exercise Orion, 2010), and has participated in a number of other exercises in recent years, including FloodEx in the Netherlands and EVROS in Greece. The UK has also recently participated in an EU Modules exercise. Additionally, in the framework of annual NATO Civil Emergency Planning Exercises, the UK usually provides expertise to assist with training and directing staff.⁷⁸⁷

2.4 Role of private sector in maintaining civil security

2.4.1 Role of societal/non-profit organisations/NGOs

Citizens can also be engaged in emergency preparedness and response in more institutionalised terms by means of recruiting the private and the voluntary sectors. The latter, especially, is involved in the official arrangements for emergency preparedness (training, exercises, pre-planning) and also in the response, recovery and relief phases of the crisis cycle. The *Voluntary Engagement Guidance Note* (which accompanies the statutory *Emergency Preparedness Guidance*) reports that the engagement of the voluntary sector in the UK focalises at the local level and on the category 1 responders. More precisely, 'the engagement of the voluntary sector in civil protection is most effectively managed at the local level, supplemented by regional co-ordination and a national policy framework' and 'Category 1 responders will make the most of the resources and expertise that the voluntary sector can offer, putting this relationship on a more robust and long-term footing' (Cabinet

⁷⁸⁷ Based upon exchange of notes with the International Team of CCS.

Office, undated 3). The majority of the key informants participating in this study have confirmed the important role of the voluntary sector in different crises and major emergencies such as floods and the London riots (Interview 2, London, July 2012; Interview 8, London, November 2012).

A variety of civil society organisations participates in crisis management in the UK and is represented in the National Board of Volunteers. They vary in their objectives and in size as well as in their potential involvement in major emergencies. There is no official government list of the civil society organisations (CSOs) that contribute to crisis management in the UK, which is reasonable since different CSOs can participate in different LRFs. In other words, it depends on the local county councils and on the agreements they have signed with CSOs. Yet, a *Memorandum of Understanding between Members of the Voluntary Sector Civil Protection Forum Working Party*, (Cabinet Office, undated 4) details the following fundamental CSOs active in the field of civil protection:

- British Red Cross
- Cruse Bereavement Care
- Radio Amateurs' Emergency Network
- St John Ambulance
- The Salvation Army
- Victim Support Service
- WRVS (an organisation for the care of older people).

From the profiles of these organisations it can be observed that some of them have similar objectives (e.g. the British Red Cross and St John Ambulance participate in emergency response; in very similar terms Cruse Bereavement Care and the Victim Support Service can deal with disaster relief) whereas others have a very unique mandate, such as the Radio Amateurs' Emergency Network that will alert citizens locally in case of a major emergency. Financially, these organisations are sustained by the support of the local communities, via donations, but when they are involved in emergency response, they will also be subsidised by the local category 1 responders (Cabinet Office, undated 3). Any further involvement of the CSOs at local level in emergency planning, risk assessment and exercises will be decided by the LRF (Interviews 5 and 6, Essex, November 2012).

In the UK, key informants have confirmed that the most significant non-profit organisations preoccupied with civil protection are the British Red Cross and St John Ambulance. In addition to

central offices in London, both organisations hold regional offices which conduct agreements with the local authorities at the county level (*ibid*.).⁷⁸⁸ There is an informal division of labour between the British Red Cross and the St John Ambulance in the UK. The former leads disaster relief and post-trauma support, e.g. in case of fires and industrial accidents. The latter specialises in training of the public in first aid and on first aid provision at small-scale public events.⁷⁸⁹

The British Red Cross is localised, with operational units scattered across 21 areas of the country. Apart from its remunerated personnel, the organisation can operationally count upon around 35,000 volunteers (Red Cross, EU Office, undated). The British Red Cross provided recovery and relief services (mainly supporting the health sector) when disasters struck in Haiti, Kenya, and Libya (just to name a few of its operations). The British Red Cross has been active on British soil with assistance provided to the public in cases of industrial accidents, critical infrastructure failure (power cuts) and extreme weather conditions. For example, the organisation had a strong presence in the relief process during the severe winter of 2011-2012 that hit Scotland (British Red Cross, 2011, 6-7).

2.4.2 Role of profit-oriented organizations

Turning now to the private sector (profit oriented organisations), the following remarks can be made. First, the key informants of our research have stated that there are no autonomous private agencies that deliver crisis management in the UK. Second, almost no key informant specifically named a public-private agreement (PPA) exclusively designed for crisis management. When we mentioned to one of our interviewees the role of the G4S security firm in the London Olympics, the reply came that cooperation between the British government and G4S does not lie within the field of civil security (Interview 7, York, November 2012). Thirdly, key informants draw a distinction between involvement of the private sector in operational dimensions of crisis management and its administrative facets. In the former, the British government has not outsourced responsibilities to private companies on a regular and systematic basis; in the latter, there is some limited involvement of private companies in telecommunications, ensuring communication between the security services (e.g. Serco in the field of information systems) (Interview 11, Essex, December 2012; Serco, undated).

Despite the observations above and even though there is no concrete information about how the private sector is involved in civil security by means of enumerating PPAs, it should be noted that both the category 1 responders and central government can sign *ad hoc* agreements with private

⁷⁸⁸ Our efforts to conduct interviews with representatives from the two organisations have not met with success.

⁷⁸⁹ Informal exchange of ideas with volunteer of St John Ambulance.

companies if crises occur. This is also apparent in the fact that most category 2 responders in the UK are privatised facilities. For instance, the East of England area maintains local arrangements with private companies to support various activities on a daily basis.⁷⁹⁰

3. Quality Measures

3.1 Effectiveness

The effectiveness of a civil security system is defined as its ability to deliver civil security and thus protect citizens in a major emergency, crisis or disaster. This section is divided into three parts. We initially try to assess the effectiveness of the British civil security system by illustrating factors rendering crisis management in the UK successful. We present these factors as they have been depicted by the key informants of our study. We then cross-examine the practitioners' opinions with the objective views expressed in public reports. Finally, we discuss the limits of British national capacities for crisis management.

3.1.1 Assessment by key informants and professional/political inquiries

The following question was posed to our interviewees: 'In an effort to assess the function of the civil security mechanism in the UK, what, in your opinion, are the factors which constitute its successful operation?' Here are some points summarising their answers:

- Abundance of capabilities: The UK is ready to deal with a number of contingencies because of its capability teams spread all over the UK which are adequately equipped and well trained to face contingencies.
- *Coordination*: The civil security mechanism in the UK depends upon standardised procedures with regard to training, exercising and involvement of the emergency services. The fact that these procedures are similar for all emergency services increases the coordination and interoperability of the category 1 Responders, thus promising timely delivery of civil protection.
- Integrated crisis management approach: Following from the latter point, the coordination of the emergency services and the policy-makers responsible for crisis management (primarily the civil servants of the CCS) serves a rationale of risk reduction in the UK. The British civil security system is highly proactive in its attempts to prevent crises and disasters.

Based upon exchange of notes with regional emergency planner.

- Tradition of resilience: The UK has traditionally dealt with a series of civil crises in the past. German bombings during World War II, nuclear safety during the Cold War, the terrorist activity of the Irish Republican Army (IRA), the London bombings, the London riots and the frequent floods have all bequeathed to the British civil security system either infrastructures or lessons learnt regarding crisis management.
- Low likelihood of catastrophic natural disasters: The geo-morphological position of the UK and its mild climate reduce the likelihood of major natural disasters such as volcano eruptions, forest fires and large-scale earthquakes.

However, are these opinions confirmed by scientific and public views on the functionality of crisis management in the UK? To objectively assess the British civil security system, we return to the most typical crisis (floods) and the signature crisis (London bombings) in the UK and report here how they have been perceived by independent reports and public inquiries.⁷⁹¹

In 2008, Sir Michael Pitt was commissioned by the government to independently review how the emergency services reacted in the 2007 floods (see introduction). As Sir Michael's review stated, 'The floods of last year caused the country's largest peacetime emergency since World War II' (Foreword of the Pitt review, 2008, p. vii). Even though the review has admitted the successful confrontation of this severe civil crisis, it focused on a number of lessons learnt, highlighting areas where British public administration could improve its operations. Sir Michael Pitt has recommended an amelioration of the flood warning system in the UK, improvements on how flood risk management is administered by the local authorities (suggesting inter alia more responsibilities for the Environment Agency), better preparation and more information that should both be combined with more engagement of the private sector and, finally, adequate usage of other countries' experience with floods in order to increase public awareness (ibid.). The government fully embraced the constructive criticism expressed in the Pitt Review and initialised a process of implementing the various recommendations. The Department for Environment, Food and Rural Affairs has monitored progress up to January 2012. Our scanning of the Government's Response to Sir Michael Pitt's Review (Final Progress Report) confirms that, by January 2012, the vast majority of recommendations had already been implemented (DEFRA, 2012).

⁷⁹¹ We have decided to focus on two instead of five cases so as to keep the structure of the analysis as tight as possible. Moreover, there is an extreme scarcity of political inquiries and reports in the UK concerning crises and disasters that are not somehow linked with or requested by the government or the Parliament.

Comparing the opinions of the practitioners with the above review on floods, we witness slight deviations. For example, most of the key informants have described a well prepared civil security mechanism whereas the Pitt Review reports that this was not always the case. We observe, nevertheless, that the British civil security system has its own integrated mechanisms, like the auditing process of the 2007 floods, to enhance the delivery of civil security.

Another major crisis scrutinised by independent inquiry for confirming the effective reaction of the British civil security system was the London bombings in 2005. The incidents were initially investigated on request of the House of Commons. The resultant *Report of the Official Account of the Bombings in London on* 7^{th} *July 2005* is a detailed chronicle of the incident including profiles of the suicide bombers as well as well-argued reflections upon the terrorists' incentives. One can find here signs of prompt reaction to the crisis, for example the fact that COBR convened less than an hour after the incident (Interview 2, London, July 2012; House of Commons, 2006). What is more, in May 2011, Lady Justice Hallett, acting as an independent coroner investigating issues of liability of the emergency services, testified about the victims of London bombings: 'I am satisfied on the balance of probabilities that each of them would have died whatever time the emergency services had reached and rescued them'. In other words, the independent inquest on the London bombings reached the conclusion that the number of casualties from the terrorist attack was not the outcome of a belated reaction on behalf of the authorities. The coroner also praised the collaboration of London's Metropolitan Police in her investigations (Judicial Communications Office, undated).

In general, the reports following the London bombings show an adequate response of the British civil security mechanism, a view also expressed by practitioners. Yet, aspects of the incident still remain unresolved by the existing inquiries; for example whether all accomplices of the suicide bombers have been tracked down. Such questions have led to public demands for a fully independent public inquiry. For example, there is a website called 'J7: The July 7th Truth Campaign' that has the form of a public forum discussing whether an independent public inquiry should be organised into the London bombings. Through the website, one can even sign a petition for this inquiry. We are not citing this website here as a source of information but as an example of how public opinion reacted to the way UK authorities dealt with the country's signature crisis for the 2000-2012 period (J7: The July 7th Truth Campaign, undated).

3.1.2 Limits to national capacities

A country's ability to deliver civil protection without requiring external assistance also demonstrates effective resilience to crises. It is a very rare phenomenon for the UK to ask for help from other

countries to deal with civil crises. For the period 2000-2012, our key informants have made available information about two instances when the UK considered and accepted external assistance (the Buncefield fire and snowfalls in 2011) (Interviews 3 and 4, London, July 2012; Interviews 5 and 6, Essex, November 2012). External assistance should not be considered a sign of weakness of the British civil security apparatus: on the contrary, the ability of civil servants to quickly evaluate the situation and ask for external assistance at the most appropriate time should be deemed a trait of responsiveness and interaction of an effective civil security system.

What is more, even though legal provisions exist for declaring a state of emergency in the country, meaning here a generalised disruption of civil liberties authorised by the prime minister for the sake of civil security and ensuing implementation of military law, this has never occurred in the UK (Interview 9, London, November 2012). Declaring a state of emergency in the whole country would signify an overwhelming catastrophic event paralysing the country's infrastructures and public administration. No crisis has escalated to such an extent in the UK as to necessitate such a radical measure. Crises are managed at their very initial level, hence revealing the readiness and preparedness of the British civil security system.

3.2 Efficiency

For the last decade and in particular after the events of 11 September 2001 (9/11), continuous efforts have been made to increase the efficiency of the civil security system of the UK. Efficiency can be considered to entail intelligent spending of available resources, targeting maximum delivery of civil protection. Based upon opinions expressed by the practitioners themselves, in this section we present a series of parameters related to the simple definition provided above.

To a certain extent, the official discourse about efficiency is conspicuous in the political decisions around civil security. As previously mentioned, in the post-9/11 era the Labour government established the 'New Dimension Doctrine' and the resultant 'New Dimension Programme' according to which the country should be capable of simultaneously tackling three major natural disasters of a magnitude similar to the 9/11 attacks (Interview 12, Essex, December 2012). This could only be possible by an increase both in the capabilities dedicated to crisis management and their coordinated and reasonable usage. It is in this political context that we should consider the operational adaptation of the civil security apparatus of the UK. To ensure efficient use of the allocated resources, the British public administration applied an integrated approach towards risk management, bringing the different civil security stakeholders closer to each other, ensuring

compatibility between their different standardised procedures and thus maximising the efficiency of emergency response (Interview 7, York, November 2012; Interview 12, Essex, December 2012).

In an initial effort to express the magnitude of the budget dedicated to civil security in the UK, we turn to the national statistics as these are presented to Eurostat, even though they may not demonstrate the exact allocation of resources between the government departments. Some indicators that address government expenditures (general government) expressed in national GDP percentages, in different areas that can associate with civil security, and for the period 2007-2011, are presented in Table 2.

Category of Expenditure	2007	2008	2009	2010	2011
Civil Defence	0	0	0	0	0
Public Order and Safety	2.5	2.7	2.8	2.7	2.6
Police Services	1.3	1.4	1.6	1.5	1.4
Fire-Protection Services	0.2	0.2	0.3	0.2	0.2
Environment Protection	1	0.9	1.1	1	1
Source: Eurostat, COFOG (undated)					

Table 2: Indicators of government expenditures 2007-2011

Debate on the efficiency of the civil security system significantly intensified after the London bombings. The budget allocated to counter-terrorism increased exponentially after 2005, spilling over to civil security issues and domestic matters under the authority of the Home Office. The annual budget allocated for counter-terrorism was £2.5 billion in 2007 and would reach £3.5 billion in the fiscal year 2010-2011 (McSmith, 2007). This has generally favoured the updating and modernisation of the civil security infrastructure, always with a high emphasis on preventing a major civil crisis due to a terrorist attack (Interview 2, London, July 2012). Yet, from 2008 onwards, according to a 2012 announcement of the home secretary, Theresa May, the department has experienced budget cuts, forcing it to proceed to efforts to save about £1.1 billion every year until 2015. As Victoria Ward writes in the *Telegraph*, 'The National Audit Office said the department had not 'fully considered' efficiency and effectiveness when evaluating where cuts should be made' (Ward, 2012). However, the increase of the Home Office budget year on year due to terrorism has been so high that the current decrease of predicted expenditures may not necessarily impede the delivery of civil protection (Interview 2, London, July 2012).

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In an endeavour to measure efficiency by concentrating on budget issues (and thus calculate whether the country's civil security system is a good value for money), British policy-makers certainly agree upon one thing: that it is extremely difficult to calculate the exact amount of money allocated for civil security in the UK. None of the interviewees of the present study has presented us with a clear answer on this matter. This is mainly because budget issues on civil security are not centrally managed by the government. In each county, there is a certain amount allocated by the local authorities for crisis management and risk assessment. Apart from that, each category 1 responder can have funds coming from the government department to which they belong (for instance the police can be aided by the Home Office). This also means that funds for civil security may not come exclusively from the Home Office; for example, the Ministry of Defence sponsors 'Search and Rescue' (SAR) operations, which can be conducted not only abroad but also in the homeland.⁷⁹² Last but not least, emergency services at the local level may be distinct legal entities with the ability to impose local taxation, a portion of which can be dedicated to emergency preparedness and response (Interviews 5 and 6, Essex, November 2012). All these result in a rich variation of the available resources and of respective civil security capacities from county to county in the UK.

Following from the points on the budget, an important facet of efficiency is the economisation of resources, which in the developed, industrialised countries has often been associated with the privatisation of areas of public administration. With a few exceptions, our British interviewees have not reported concrete examples of civil security activities that are privatised. In a document on *public private partnerships* (PPPs), the British government refers to 28 defence contracts binding public and private interests; however, there is no further mention of contracts specialised on civil security. As stated in the document, 'the government is considering the form of a PPP for the Defence Evaluation and Research Agency (DERA) to enable it to respond to the changing demands of MoD customers, and to unlock its extensive store of expertise and knowledge to benefit the UK economy as a whole' (HM Treasury, 2000, p. 9). Two things should be stressed here. Firstly, DERA's scope can only be implicitly linked with crisis management; besides, it is HO CAST that is the key player on research and development issues of civil security. Secondly, the PPPs mentioned above refer to the government's role as an entrepreneur, as a provider of security expertise which can be financially exploited, and not as a receiver or consumer of services of the private sector. The document on PPPs does not reveal governmental intentions to outsource civil security responsibilities to private companies.

⁷⁹² The UK Defence Statistics Factsheet (2011 Edition) registers 1960 incidents for 2010 where SAR Units were deployed.

Let us not forget that the category 1 responders, the British emergency services, always remain vital parts of the country's public administration. Efficiency emanates from the ability of the category 1 responders to collaborate with each other under the strategic guidance of the LGD and the operational coordination secured by the appointed gold, silver or bronze commander. The utilities' cooperation as category 2 responders – and this is where one can talk about enterprises with heavily involved private interests – can be guaranteed with *ad hoc* agreements when crises actually emerge (Interviews 3 and 4, London, July 2012).

To conclude, interviewing civil servants with a view to obtaining a straightforward answer about whether spending on crisis management is efficient did not lead to concrete results. It appears that even policy-makers themselves cannot decisively resolve the elusive matter of efficiency. To a certain extent, this may also be due to the unpredictability of crises (e.g. natural disasters) which means that it is difficult to speculate, as early as in the emergency planning phase, what resources will suffice to tackle the crises.

3.3 Legitimacy

[E]mergency regulations must be presented to Parliament for its approval as soon as practicable after being made. Parliament may amend the regulations and must approve them within seven days of laying. If Parliamentary approval is not forthcoming, the regulations cease to have effect (Cabinet Office, Civil Contingencies Secretariat, undated).

As in every aspect of public life in a democratic polity, the authorities' choices on crisis management should be adequately legitimised. The existing political science literature on the matter is vast and refers to a variety of legitimacy criteria.⁷⁹³ In this study, we consider three principal factors which can legitimise a civil security system: political support for the country's civil security system, legal support and scrutiny of how civil crises have been tackled by the authorities, and popular trust and support in how crisis management works in the UK.

⁷⁹³ For example, Robert Dahl, Fritz Scharpf, Christopher Lord, Albert Weale, David Beetham, Jürgen Habermas have all authored on legitimacy.

3.3.1 Political support

Whether the options made by the public administration while facing a crisis are legitimate can be qualitatively assessed by examining the support these options gained by the different political and partisan powers. The opening quote from the short version of the Civil Contingencies Act 2004 clearly demonstrates that legislation on emergencies and any relevant amendments should have the consent of the British Parliament. And the British civil security system has certainly not been unaltered in the last two decades. The end of the Cold War signified the end of civil defence with its focus on nuclear deterrence, reflecting a political shift in the priorities of civil security (Interview 9, London, November 2012). Yet, political discourse on the effectiveness of crisis management in the UK thrived especially after 9/11. The event triggered fervent political debate around civil security which boiled down to the adoption of the Civil Contingencies Act in 2004. It was mandatory to bring together all scattered legislation about crisis management in a comprehensive manner, reflecting the British government's anxiety about homeland security. The London bombings of 2005 initiated a new round of political debates around crisis management, an endeavour to ascertain civil protection. In the framework of the 'Civil Contingencies Enhancement Programme', the Cabinet Office proceeded to update certain chapters of the Civil Contingencies Act. The process was concluded in late 2011. The 'Enhancement Programme' involved not only parliamentary discussions but also public consultations with the civil security stakeholders.

Major crises in the UK have not provoked extensive political turmoil. No government has resigned because of an emergency or a disaster. Even in the case of London bombings, as presented in the previous section, liability was sought by judicial means, yet it did not cause a political reaction against the handling of the crisis by the Cabinet Office.

Civil security issues are often the topic of parliamentary discussions. There are two parliamentary Committees that engage themselves with civil security issues: the Home Affairs Committee and the National Security Committee. To these two should be added sub-committee F of the Lord's Select Committee on EU Affairs, a sub-committee that deals with Home Affairs and the EU. From discussions with parliamentarians, it appears that there are about 20 parliamentary inquiries (either ongoing or concluded) which can be associated with civil security issues (Interview 8, London, November 2012).⁷⁹⁴ We report here the most important ones for the period 2000-2012:

⁷⁹⁴ We filed a question with the <u>House of Commons Information Office</u> and they launched a search on their database on our behalf. By using the terms: 'Civil defence' OR 'Intelligence services' OR 'Emergencies' OR 'National security' OR 'Terrorism' OR 'Counter-terrorism', the office has reported back to us that, from

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From the Commons' Select Committee on Home Affairs:

- The Work of the UK Border Agency/Border Force (ongoing),
- Independent Police Complaints Commission (ongoing),
- E-Crime (ongoing),
- Olympics Security (ongoing),
- Firearms Control (ongoing),
- Government Review of Counter-Terrorism (concluded),
- Policing Large Scale Disorder (concluded),
- Roots of Violent Radicalisation (concluded),
- Unauthorised tapping into or hacking of mobile communications (concluded);

From the Lords' Select Committee on the EU, Sub-Committee F Home Affairs:

- EU Internal Security Strategy (concluded),
- Cyber-attacks (concluded).

In addition to the parliamentary inquiries, a great number of parliamentary questions, both in written and oral format, are addressed every year in the Parliament on civil security issues. The government is obliged to answer to these questions (Interview 9, London, November 2012). The interviewees in our research assert that if one takes into account questions on terrorism, parliamentary questions can reach a three-digit number (Interview 8, London, November 2012).⁷⁹⁵ The relative frequency of parliamentary inquiries and parliamentary questions indicates that civil security is a topic attracting the attention of the British political system for the period 2000-2012. It also indicates that the mechanisms for holding the government to account for its actions in the field of crisis management are in place.

December 2000 to early January 2013, there had been 9,235 parliamentary questions and 277 political inquiries posed by committees.

⁷⁹⁵ See footnote 747.

3.3.2 Legal support

From the perspective of the judiciary, public authorities can ask a national court to investigate a disaster, emergency or crisis. In other words, they can set up a 'tribunal of inquiry' following the *Inquiries Act 2005*. For the period 2000-2012, only the 'coroner's inquests into the London bombings of 2005' can be noted, conducted by Lady Justice Hallett, acting as the responsible coroner. This inquest abided by legislation prior to the *Inquiries Act 2005*. According to the Cabinet Office, 'No inquiries into a disaster have been set up under the 2005 Act, which came into force on 7 June 2005 throughout the UK' (Cabinet Office, undated 5).⁷⁹⁶ Citizens can file a complaint about misdeeds in crisis management to the Parliamentary and Health Service ombudsman. In the *Annual Report 2011-2012*, it is registered that for the specific time-span the ombudsman communicated 24 complaints to the Home Office for formal investigation. These were mostly related to the UK Border Agency and there is no specific reference in the report of complaints explicitly made about crisis management (Parliamentary and Health Service Ombudsman, 2012, p. 17). During discussions with interviewees, we have observed that the ombudsman is an institutional control mechanism that is not that much employed to scrutinise the British civil security system.

3.3.3 Popular trust and support

The final aspect of a civil security system's legitimacy that we review here is citizens' support for the government's choices in civil security and their overall trust in the civil security system. According to the *Special Eurobarometer Survey 371*, 56 percent of the British public generally perceive that their country reacts adequately to crises and disasters. This percentage is even higher (64 percent) for the fight against terrorism; the large majority of the British public feel that their government takes enough precautions to prevent terrorist attacks. These data are confirmed by interviewees who mentioned that the visibility of the emergency services has won people's support and consequently has augmented their own willingness to contribute to emergency response (Interview 10, Essex, December 2012). The activity of emergency responders is somewhat more critically viewed by the media. For example, for the July 2007 floods, the *BBC* referred to how the personnel of the emergency services may have been numerically inadequate to deal with the crisis (BBC, 2007). Based upon a poll by YouGov, the *Huffington Post* reports for the UK Riots that 'A third of Britons think the government's response has been hasty and badly thought through' (Huffington Post, 2011). What we

⁷⁹⁶ See also Cabinet Office (undated 6). Interestingly, the oil storage firm maintaining the Buncefield depot was found guilty for the explosion in December 2005. This issue was raised, however, as a corporate criminal trial before the national courts. See Lewis & Macalister (2010).

see here is that the British press, based upon a public survey, reveals a differentiated picture concerning public satisfaction with the government reaction towards this particular crisis. Even though Eurobarometer surveys in general register public satisfaction with the British civil security system, this is still not without exceptions.

Last but not least, British citizens show their support towards the civil security system by their intention to participate in crisis management when required. Even though, for reasons of space, we cannot provide a clear picture of how many the volunteers are in the official registries of each of the LRFs of the country, citizens' involvement when crises occur has been a constant aid for the emergency services (Interview 2, London, July 2012; Interview 8, London, November 2012).

4. UK Civil Security in the EU Context

The British government is well known for its critical stance towards deepening the political integration of the EU. Besides, the UK has opt-outs from EU policy areas, for example the common immigration policy and the free movement of persons within the EU. The euroscepticism of British policy-makers extends to civil security issues. As an interviewee acutely states, 'EU institutions do not really play a role in emergency response internally in the UK (Interview 7, York, November 2012). This statement complies with two very important factors which limit an advanced involvement of the EU institutions in crisis management in the UK, at least from an operational perspective. First, the subject in question involves traditionally sensitive areas, most of the times closely related to history, about which British practitioners are not ready to collaborate with the EU as they envisage these areas as very closely related to British national sovereignty. Second and following from the last point, emergencies and disasters are considered domestic issues that should be confronted internally. Interestingly, discussions about the role of the EU for the British civil security system seem to be kept within the context of the central government, with limited dissemination of information towards the local governments; top-down information flow from the governmental structures towards the category 1 responders with regard to the EU value-added appears to be sporadic.⁷⁹⁷

Despite the reluctance of practitioners, British civil security is not as introverted as one might expect it to be. At the level of political initiatives, the UK has not lagged behind in the EU context. The UK participates in the EU Civil Protection Mechanism; the CCS is the UK's contact point for the Mechanism. In fact, the UK is a member of a seven-country informal working group that debates

⁷⁹⁷ Based upon exchange of notes with regional emergency planner.

main aspects of EU civil protection.⁷⁹⁸ The EU Commission is currently discussing with member states and the European Parliament the extension of the Mechanism's mandate from preparedness and response to include coordination of the member states' prevention measures, obliging the member states to acknowledge their risk management plans (this is because not all member states of the EU have adopted the practice and the annual exercise of 'National Risk Assessment'). An interviewee from the CCS confirms these recent developments, 'The UK supports the general thrust to encourage risk assessment across member states and the sharing of best practice and expertise in this area' (Interviews 3 and 4, London, July 2012). Notice also here that the *EU Crisis Coordination Arrangements* (CCA) were agreed between the member states in 2005 under the UK presidency of the EU. CCA determine a common platform for political direction across member states in transboundary disasters, if this direction is needed (*ibid*.). Last but not least, the British government has pushed forward the idea to adopt a common *EU Counter-terrorism Strategy* and a *Civil Contingencies Strategy* (Interview 2, London, July 2012). What we see here is that, at the conceptual level of political initiatives, British policy-makers are not bereft of actions.

We have witnessed similar enthusiasm on issues of preparedness when these are linked with training and exercises. British civil servants participate in the Mechanism's training programme. In the 2009-2010 training cycle 43 UK practitioners were trained on how to collaborate with emergency planners from other country-members of the Mechanism (Hollis, 2010). Very interestingly here, training on how to coordinate activities within the Mechanism is offered by the British side as well. The UK's Emergency Planning College offers a unique, intensive seminar called 'Community Mechanism Introduction', with instructors from different European countries covering a variety of issues from basic knowledge of EU activities on civil protection to brief tabletop exercises (Interview 7, York, November 2012). We were able to follow part of the training in November-December 2012 and can confirm the attendance of students/emergency planners from different European partners and their willingness to learn from each other, create networks and get accustomed to cooperation in case they have to operate together. Furthermore, we have seen above that the UK hosted the EU Exercise ORION, a simulation exercise co-organised by the EU and the British civil security stakeholders (Interviews 3 and 4, London, July 2012). As can be seen, British policy-makers show increased interest in liaising with European partners and thus ameliorate their cooperation.

Cooperation with the EU is significantly less in the context of operations, meaning here that for actual emergency response and recovery, the UK has consistently preferred to depend upon the

⁷⁹⁸ Based upon exchange of views with the International Team of CCS.

country's own capacities. The British government has referred to the EU's Monitoring and Information Centre (MIC) once, activating the Civil Protection Mechanism to obtain grit-salt from other member states in the 2011 snowfalls (see sub-section 'External Dimension'). Again, the country has only once benefitted from the EU Solidarity Fund when it was granted 162.3 million euros for recovering from the 2007 Floods. The UK has been willing, though, to proffer assistance. That said, the country has contributed thirteen times to requests for assistance channeled through the Community Mechanism (EU Commission, DG REGIO, undated; EU Commission, DG ECHO, undated 2). Reluctance to ask for help from the EU Civil Protection Mechanism is not only because of the UK's tradition of euroscepticism but also because the country is well-prepared to deal with crises and disasters so that external assistance is ultimately not required. An important observation here is that when the UK civil security system is indeed overwhelmed, British policy-makers do not hesitate to ask other European partners for assistance. Setting aside national pride and sovereignty claims, a country's ability to admit that a crisis is truly overwhelming should be seen as a strong asset of its civil security system, boosting the latter's effectiveness.

At the end of the day, British citizens themselves are not so negative towards cooperation in the EU context. Even though only 31 percent of the British are aware of the EU's activities in the field of civil protection, 76 percent of them regard a coordinated EU action as likely to deliver more effectively than isolated member state actions (Special Eurobarometer 383, 2012).

5. Conclusion

In the previous sections, we presented the basic features of the British civil security system and tried to objectively evaluate its ability to deliver civil protection against disasters, emergencies and crises. We initially mapped out the British civil security system by focusing upon:

1. Its historical and cultural dimensions. The British civil security system has benefitted from the long tradition of UK resilience dating back to World War II. The role of culture has been significant in certain, but not all, aspects determining the country's civil security mechanism. For example, the cultural element has affected how citizens react to crisis, increasing their feelings of community and solidarity. British culture as a distinct national feature does not seem to affect how British practitioners and policy-makers deal with crisis, though. It is instead their organisational culture, meaning here the administrative habits they develop as part of the civil security decision-making structures, which affect their perception of crises and how these should be confronted.

- 2. Legal and constitutional aspects, where we confirmed that crisis management in the UK is highly decentralised. The role of central government is to coordinate, and a bottom-up approach is followed, with the first responders being local authorities. Responsibilities, jurisdictions and the liability of the emergency responders are all well-defined in the official documents (law or statutory). What is more, the British administration has focused on an integrated crisis management approach, with high emphasis on risk assessment, crisis prevention and emergency preparedness. The formidable experience of the London bombings in 2005 taught the public administration that the UK has to prevent and pre-empt crises, not solely to anticipate them. We have discerned the following mentality amidst civil security organisations: we will pre-plan in advance our reaction to crises but will do what is necessary when crises actually emerge.
- 3. *State-citizen relations*: The British trust their government for their protection from civil security challenges. They also have high expectations from it. At the same time, the public administration tries to keep the public updated concerning imminent emergencies and disasters. This is the main responsibility of emergency preparedness at the local level, where local authorities undertake both dissemination of information and education of the public towards contingencies.
- 4. The role of the private sector: There is no legal framework in the UK outsourcing, on a regular basis, responsibilities for crisis management to the private, profit-oriented sector. Private companies can be summoned to assist in a crisis when the latter actually occurs. We did not discover any public-private agreements focusing exclusively on emergency response. During emergency response, the heavily privatised utilities (electricity companies, transportation, etc.) will be recruited, most often, by local authorities via *ad hoc* agreements. The voluntary sector is involved with the training of volunteers and when disasters strike it can be allocated duties related to relief and recovery by the local authorities.

We then proceeded to the assessment of the country's civil security system by examining:

a. *Its effectiveness*. The UK civil security system has successfully reacted to a number of crises and among them to the decade's signature crisis, the London bombings. The interviewees/British policy-makers have depicted a highly effective crisis management. However, more independent views and the press have often complained about how the system has reacted towards non-terrorism related threats, for example the floods, which are the typical crisis for the country. As we will see in the H1N1 case-study (see Annex 3), the absolute focus on crisis prevention may have led the administration to provide more detailed accounts of the operational details for certain crises, thus favouring their confrontation over others. What is more, the civil security system appears very hierarchical, well-determined to almost the last detail. Pre-planning and hierarchical decision-making have a side-effect, though: they deprive the emergency planner of the necessary flexibility to tackle crises that escalate unpredictably quickly and massively, to take initiatives and thus avoid delays in delivering civil protection.

b. *Its efficiency*. From our discussion with the British civil security stakeholders we conclude that it is still not fully apparent in the UK what an efficient civil security would be. The economisation of resources has been the general request of both the government and the public (as long as it translates in no more taxes). In recent years, the lion's share of the budget for civil security has been allocated to counter-terrorism. Yet, the likelihood of a terrorist attack has decreased since 2005. Is it efficient to still be allocating such considerable expenditures for counter-terrorism while emergency services might be overstretched when dealing with other types of crises? Adding to this, the Home Office is undergoing a period of restraining budgets. How can the point when saving expenditures does not affect the delivery of civil protection be calculated? This type of more critical reflection seems necessary.

c. *Its legitimacy*. In the UK, the necessary political and judicial tools are in place to review the function of the civil security mechanism and thus to hold the system to account for failing to protect citizens. Parliamentarians do consider civil security in their daily routine, even though they disproportionately emphasise counter-terrorism in comparison to other civil crises. In general, the activities of emergency planners and responders are supported by the citizens, even though the British press does adopt a more critical stance towards governmental choices in crisis management. This is more conspicuous in highly politicised disasters and crises, such as the London bombings and the London riots.

With regard to cooperation with the EU on civil security issues, the UK has adopted a cautious line of action up to now. The country shows willingness to collaborate with other EU member states and EU institutions on crisis prevention and risk assessment, yet it has been reluctant to extend EU cooperation in emergency response when response takes place within the borders of the UK. But what about trans-boundary crises? Unlike other European countries, the British civil security system has not been tested by severe trans-boundary crises. For example, how well would the British civil security system have reacted if the bombings in 2005 had taken place in the Channel Tunnel instead

of the London underground? Our estimation is that in such cases the value-added of EU assistance can be significant and has not been sufficiently assessed by the British practitioners. True, the British government has taken certain initiatives to collaborate with its European partners, especially in the framework of the EU Civil Protection Mechanism. Yet, these political initiatives regarding transboundary crisis management should turn towards more interaction between the European countries' civil security mechanisms, thus preparing the emergency planners to coordinate with each other. The EU institutions, in particular the EU Commission and DG ECHO, are suitable actors for fostering debates on how to increase cooperation at operational and tactical levels.

Annex I: Coded Data

		Anne	ex I (Quan	titative Data)	
1		Scoring instructions	Score	Source	Comments (in case of specific problems with data)
1. a	Is there an official/formal definition of crisis?	No = 0 Yes = 1	1	Cabinet Office, UK Civil Protection Lexicon: Version 2.0.1	
1. b	Is the crisis management approach primarily based on military or civilian operations?	Military = 1 Civilian = 2	2	Interviews	
1.c.	If civilian operations dominate, is the military used for support for crisis management operations?	No = 0 In exceptional situations = 1 Regularly = 2	1	Interviews	
1.d	Does the country take MAINLY an all hazards/generic or MAINLY a specific/functional threats approach to crises and disasters?	Mainly all hazard = 1 Mainly specific threats = 2	2	Observation emanating from data analysis	
2		Scoring instruction	Score	Source	Comments (in case of specific problems with data)
2.1	Cultural and historical aspects				
2.1.1	Administrative tradition				
2.1.1.a	Is the state unitary or federal?	Unitary = 1 Federal = 2	1	Garnett and Lynch (2012)	
2.1.1.b	Is the political system parliamentary or presidential?	Parliamentar y system = 1 Presidential system = 2	1	Garnett and Lynch (2012)	
2.1.1.c	ls the country a monarchy or a republic?	Monarchy = 1	1	Garnett and Lynch (2012)	

		Republic = 2			
2.1.1.d	Is the political system a consociational or a majoritarian democracy?	Consociation al democracy = 1 Majoritarian democracy = 2	2	Garnett and Lynch (2012)	
2.1.1.e	Is delegation constructed in a top-down or bottom-up fashion?	Top-down = 1 Bottom-up = 2 Both = 3	3	Civil Contingencies Act 2004	
2.1.2	Culture				
2.1.2.a .i	Geert Hofstede country national cultural score - DPI		35	http://geert- hofstede.com/countries.h tml	
2.1.2.a .ii	Geert Hofstede country national cultural score - IDV		89	<u>http://geert-</u> <u>hofstede.com/countries.h</u> <u>tml</u>	
2.1.2.a .iii	Geert Hofstede country national cultural score - MAS		66	<u>http://geert-</u> <u>hofstede.com/countries.h</u> <u>tml</u>	
2.1.2.a .iv	Geert Hofstede country national cultural score - UAI		35	http://geert- hofstede.com/countries.h tml	
2.1.2.a .v	Geert Hofstede country national cultural score - LTO		25	http://geert- hofstede.com/countries.h tml	
2.1.2.b	World Value Survey's national score on dimension 1 - traditional vs. secular		0.06	http://www.worldvaluess urvey.org/	2006
2.1.2.c	WorldValueSurvey'snationalscore on dimension2 - survival vs. self-expression		1.68	http://www.worldvaluess urvey.org/	2006
2.2	Legal & constitutional aspects				
2.2.1	Statutory basis				

2.2.1.a	To what extent is the legal framework that regulates civil security centralized versus fragmented?	Highly centralized (1-2 key laws regulates civil security) = 1 Neither centralized nor fragmented (3-5 key laws regulates civil security) = 2 Highly fragmented (6 or more key laws regulates civil security) = 3	One (1)	Cabinet Office Civil	There is one law (Civil Contingencies Act 2004) but many ensuing policy documents draw legitimacy from this law.
2.2.1.b	When was the last major reform in the civil security field undertaken?	Provide the year of the reform	2004	Cabinet Office, Civil Contingencies Secretariat, www.cabinetoffice.gov.uk /content/civil- contingencies-secretariat	
2.2.1.c	Does the statutory basis of the civil security system rely on formal legislation or executive order?	Formal legislation = 1 Executive order = 2	1	Cabinet Office, Civil Contingencies Secretariat, www.cabinetoffice.gov.uk /content/civil- contingencies-secretariat	
2.2.1.c	Are formal legal provisions in place allowing the state to call for a state of emergency (including derogations from political order)?	No = 0 Yes = 1	1	Civil Contingencies Act 2004	
2.2.1.d	Are formal legal provisions in place allowing the state to call for a state of disaster (facilitated operational coordination mechanism)?	No = 0 Yes = 1	0		To the best of our knowledge, the term is not at all used in the British civil security system.
2.2.2	Political dimension				

			-		
2.2.2.a	On what level of government does executive responsibility for civil security FIRST AND FOREMOST rest?	At the national level = 1 At the regional level = 2 At the local level = 3	3	Interviews	
2.2.2.b	On what level of government does policy formulation for civil security FIRST AND FOREMOST rest?	Atthenationallevel=Attheregionallevel=Atthelocallevel=3	1	Cabinet Office's site commenting on the updating of the Civil Contingencies Secretariat	
2.2.3	Operational				
222-	dimension	No = 0	1	Civil Contingonaise Art	It is the Civil
2.2.3.a	Is there a specialised agency for crisis response at the national level?	No = 0 Yes = 1	1	Civil Contingencies Act 2004	It is the Civil Contingencies Secretariat.
2.2.3.b	Are there specialised agencies for crisis response at the regional level?	No = 0 Yes = 1	1	Interviews	At the regional level the country is divided in RED teams but the crises are first and foremost dealt at the local level.
2.2.3.c	Is the exercise system formalised by law or executive mandate?	No = 0 By law = 1 By executive mandate = 2	1	Emergency Preparedness Guidance 2011	
2.2.3.d	How many major exercises with a national dimension have been organised in the period 2008-2012?	Register the number	3 or 4 per year	Exchange of notes with the International Team, Civil Contingencies Secretariat	We could not retrieve an actual list that is public and contains the exact number of exercises.
2.2.3.e	How many major exercises with an international dimension have been organised in the period 2008- 2012	Register the number	5	http://ec.europa.eu/echo /civil_protection/civil/prot e/exercises.htm	We register here the number of exercises that the EU civil protection exercises the UK has participated in.
2.2.4	External dimension				

2.2.4.a	Has the country signed bilateral agreements with all neighbouring countries?	No = 0 Yes = 1	1	Exchange of notes with the International Team, Civil Contingencies Secretariat	
2.2.4.b	How many countries has the country signed bilateral agreements with OTHER THAN the neighbouring countries?	Register the number.	3	Foreign and Commonwealth Office (Treaty Section)	However, they are not exclusively on crisis management (according to what crisis is defined for ANVIL).
2.2.4.c	How many regional/multilater al agreements on RESPONSE oriented disaster management (i.e. not general conventions on environmental protection) is the country part of?	Register the number.	1	Exchange of notes with the International Team, Civil Contingencies Secretariat	This is the Bonn Agreement.
2.2.4.d	Has the country received assistance from partner/neighbouri ng country/ies in response to MAJOR DISASTERS (not day to day cross-border help) during the period 2000-2012?"	No = 0 One or two times = 1 More than two times = 3	1	Interviews	
2.3	State-citizens relations				
2.3.1	Expectations				
2.3.1.a	Do citizens have a formal/legal obligation or responsibility in civil security? Please choose the maximal score on a scale (i.e. option 2 includes yes option 1 as well).	Not formally specified = 0 Temporary support upon request by public authorities = 1 Regular private responsibiliti es for disaster managemen	1	Principles of Effective Response and Recovery 2010	

					I
		t (e.g. mandatory civil service and/or insurance) = 2			
2.3.2	Information				
2.3.2.a	Does the country maintain a siren system?	No = 0 Yes = 1	0	Exchange of notes with Regional Authorities	
2.3.2.b	Does the government have a system for radio/TV warnings	No = 0 Yes, at the local/region al level = 1 Yes, at the national level = 2 Yes, at both local/region al and national levels = 3	3	Annex 7A: Revision to Emergency Preparedness 2012; www.cabinetoffice.gov.uk /sites/default/files/resour ces/Chapter-7-Annex- 7Av2_amends_18042012. pdf	
2.3.2.c	Does the government have a central website with updated information on crisis events?	No = 0 Yes, at the local/region al level = 1 Yes, at the national level = 2 Yes, at both local/region al and national levels = 3	0		We could not retrieve one.
2.3.2.d	Does the government make use of social media (Facebook, Twitter etc.) to update citizens on relevant crisis issues?	No = 0 Yes, at the local/region al level = 1 Yes, at the national level = 2 Yes, at both local/region al and national levels = 3	3	twitter.com/UKResilience	

2.3.2.e	Does the government have a mobile application for reaching citizens with vital crisis/security information?	No = 0 Yes, at the local/region al level = 1 Yes, at the national level = 2 Yes, at both local/region al and national levels = 3	N/A		Missing data.
2.3.3	Education				
2.3.3.a	Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	No = 0 Yes = 1	0	Interviews	Training does take place but depends upon the local authorities.
2.3.3.b	Do societal/voluntary actors offer civil emergency training?	No = 0 To members/pr ofessional = 1 To members and limited public outreach = 2 To member and wide- spread training programmes for general population = 3	2	Exchange of notes with Regional Authorities	
2.3.3.c	Does the government run TV campaigns to raise awareness of crisis issues among the public?	No = 0 Yes, moderately (once per year) = 1 Yes, extensively (more than once per year) = 2	1	Interviews	

2224	D the	N- 0	4	FUDOCTAT COFOC	[]
2.3.3.d	Does the	No = 0	1	EUROSTAT, COFOG	
	government	Yes = 1			
	provide for a				
	budget for				
	sponsoring				
	research/technolog				
	ical developments				
	on civil				
	security/crisis				
	management?				
2.3.3.e	lf yes, please	Register the	25.3	EUROSTAT, COFOG	This refers to R & D for
	provide the overall	number	mn		'public order and
	volume of research		euros		safety'.
	funding for civil				salety.
	security		for		
			2011		
2.4	Dela of universe				
2.4	Role of private				
2.4.1	sector Role of societal/				
2.4.1	non-profit				
	-				
2.4.1.a	organisations Do societal/non-	No = 0	1	Voluntary Engagement	
2.4.1.a			T		
	profit actors play	Yes = 1		Guidance Note	
	an official/legally			accompanying Emergency	
	mandated role in			Preparedness	
	EXCEPTIONAL				
	crises?				
2.4.1.b	Do societal/non-	No = 0, In	0		If one refers to training
	profit actors play	parts of civil			of volunteers here, this
	an official/legally	security (e.g.			role is not legally
	mandated role in	emergency			mandated in the UK.
	the REGULAR	medicine) =1			
	provision of civil	-			
	security?	In (almost)			
		all aspects of			
		civil security			
		= 2			
2.4.2	Role of profit-				
	oriented				
	organisations				
2.4.2.a	Do for-	No = 0	0	Interviews	
	profit/private	Yes = 1			
	actors play an				
	official/legally				
	mandated role in				
	EXCEPTIONAL				
	crises?				
2.4.2.b	Do for-	No = 0	0	Interviews	
	profit/private	In parts of			
	actors play an	civil security			
	official/legally	-			
	mandated role in	(e.g.			
	the REGULAR	emergency			
	provision of civil	medicine) =			
1		,		l	

	security?	1			
		In (almost) all aspects of civil security = 2			
3		Scoring instructions	Score	Source	Comments (in case of specific problems with data)
3.1	Effectiveness				
3.1.2	Limits to national capacities				
3.1.2.a	How many times has external assistance been received during a crisis?	Register the number for 2000-2012.	1	Interviews and EU Comm, DG ECHO	
3.1.2.b	How many times have a state of emergency or disaster been declared AT THE NATIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/ disaster, note NA	0	Interview with MP	
3.1.2.c	How many times have a state of emergency or disaster been declared AT THE REGIONAL LEVEL as a consequence of a crisis?	Register the number for 2000-2012. If there are no legal provisions for state of emergency/ disaster or data is not accessible at this level, note NA	N/A		Missing data.
3.3	Legitimacy				
3.3.1	Political support				
3.3.1.a	How many major reforms have been undertaken?	Register the number for 2000-2012.	2	CabinetOffice,CivilContingenciesSecretariat,www.cabinetoffice.gov.uk/content/civil-	

				contingencies-secretariat	
3.3.1.b	How many major national political debates on crisis management structures or performance have taken place (2000- 12)?	Register the number for 2000-2012.	2	Cabinet Office, Civil Contingencies Secretariat, www.cabinetoffice.gov.uk /content/civil- contingencies-secretariat	
3.3.1.c	How many formal and politically instituted inquiries/committe es on civil security have been undertaken at the national level?	Register the number for 2000-2012.	277	Exchange of notes with the House of Commons, Information Office	But 11 are the most relevant parliamentary inquiries.
3.3.1.d	Has there been a premature change in the government (replacement of individual ministers up to full resignation of government) due to civil security issues?	No = 0 1-2 instances = 1 3 or more instances = 3	0	Subjective assessment following from descriptive data analysis	
3.3.2	Legal support				
3.3.2 3.3.2.a	Legal support How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system have been filed?	Register the number for 2000-2012.	N/A		Please, refer to the corresponding passages of the country report.
	How many NATIONALLY NOTED judicial challenges or ombudsman petitions concerning the civil security system	number for	N/A N/A		corresponding passages of the country

	[L _	1		,
		Extensive (e.g. no civilian jurisdiction over military actors in crisis managemen t) = 2			
3.3.3	Popular trust and support				
3.3.3.a	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to manage natural and man-made disasters?	Record the sum percentage for 'Agree' and 'Tend to agree'	56	Special Eurobarometer 371 (2011)	
3.3.3.b	Based on Eurobarometer data, what percentage of respondents feel that their country is doing enough to fight terrorism?	Record the sum percentage for 'Agree' and 'Tend to agree'	64	Special Eurobarometer 371 (2011)	
3.3.3.c	Do official actors maintain registers for volunteers in crisis management?	No = 0 Yes= 1	0	Exchange of notes with Regional Authorities	
3.3.3.d	If yes to above, list number if accessible	Register the number per 1000 capita for 2011	N/A		
3.3.3.e	If no to 3.3.3.c. or 3.3.3.d is unreliable, how many volunteers are estimated to be in the non-profit sector?	Register the number per 1000 capita for 2011.	N/A		The local authorities maintain registers of volunteers that can count upon for civil protection; however, the number varies according to the county. For British Red Cross, the number of volunteers is approximately 35,000.
4		Scoring	Score	Source	Comments (in case of specific problems with

		instruction			data)
4.a	How many times has your country activated the Commission's Monitoring and Information Centre (MIC) – 2007-2011?	Register the number for 2007-2011	To be comple ted by UI/IFHS	http://ec.europa.eu/echo /files/policies/disaster_res ponse/EUCPM_activations _since_01012007.pdf	1
4.b	How many times has your country contributed to a MIC request - 2007- 2011?	Register the number for 2007-2011	To be comple ted by UI/IFHS	http://ec.europa.eu/echo /files/policies/disaster_res ponse/EUCPM activations 	13
4.c	Does your country participate in the EU civil protection mechanism's training programme?	No = 0 Yes = 1	1	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.d	If yes to question 4.b, approximately how many practitioners participated in the EU civil protection mechanism's training programme in the 2009-2010 training cycle?	Register the number for the 2009- 2010 training cycle	43	Hollis, Simon (2010). National Participation in EU Civil Protection. Swedish National Defence College.	
4.e	How many EU-led civil protection simulation exercises did your country participate in between 2002- 12?	Register the number for 2002-2012	10	http://ec.europa.eu/echo /policies/prevention_prep aredness/preparedness_e n.htm	
4.f	How many times has the country received financial support through the EU's Solidarity Fund (SF) due to natural disasters (2002-Sept. 2012)?	Register the number for 2002-Sept 2012	1	http://ec.europa.eu/regio nal_policy/thefunds/doc/i nterventions_since_2002. doc	
4.g	How much aid has the country been granted through the SF due to natural disasters (2002-2012, Sept.)?	Register total financial assistance in million euro for 2002- Sept 2012	162.3	http://ec.europa.eu/regio nal_policy/thefunds/doc/i nterventions_since_2002. doc	

4.h	Based on	Register the	31	Special	Eurobarometer	
	Eurobarometer	percentage		383 (2012)	
	data, what				-	
	percentage of					
	respondents are					
	aware that the EU					
	coordinates civil					
	protection both					
	inside and outside					
	the EU? (Proxy for					
	awareness)					

Annex II: H1N1 in the UK⁷⁹⁹

In this section we briefly depict how the British civil security system prepared and reacted to the swine flu (H1N1) crisis. This subsection will describe how the crisis escalated and how the British civil security system reacted. We are arguing here that the country's civil security mechanism did not take into full consideration the crisis warnings of experts about preparing to face a public health emergency; thus, when swine flu began to spread, the British public administration could not easily deal with the outbreak.

Before proceeding, let us first notice that H1N1 was not the sole epidemic or public health crisis that the UK had to deal with in the first decade of the twenty-first century. Amongst others, we should mention avian flu, a smaller-scale crisis that challenged the official perception of public security, the Buncefield explosion (2005) and the fear it caused that the fumes would have a negative impact on public health, and the polonium 2010 incident (murder of Alexander Litvinenko) that provoked the examination of about a thousand contacts of the deceased. Admittedly, the swine flu crisis gained more public attention than these other emergencies related to public health.

Official numbers show that swine flu infected about 7,000 people in the UK. Probably many more cases were not declared. Deaths caused by H1N1 were estimated to be 362 (BBC, 2010).

Focusing primarily on the period before the crisis, after the spread of the disease in Mexico, the UK population was greatly alarmed. Yet, the government had already had notice well in advance of the contingency of an H1N1 epidemic. The health authorities talk about a 5-year period that the government had at its disposal to prepare its reaction to a crisis due to H1N1. However, national risk assessments were missing in the operational details of how to tackle an emergency of this kind. Even though at the local level, the LRFs included pandemics in their risk profiles, the central government did not take them into consideration when strategically designing the *National Risk Assessment*. Moreover, the government did not ask for specifications from the epidemiologists, allowing a considerable number of decisions to be taken by the local authorities when these should have been imposed by the Cabinet Office itself. The actual planning and consideration of how to tackle H1N1 started in 2006-2007 when it was known as a contingency from 2003 already. In a few words, until the outbreak in Mexico in 2009, little planning was undertaken.

⁷⁹⁹ This section is based upon data from Interviews 13 and 14, Essex, December 2012.

The first infections in the UK initiated the response to the swine flu crisis. Executive responsibility for emergency response rested with the secretary of state for health, as the Department of Health took the LGD role in crisis management. Unlike other crises where the police are often the key emergency responder, for swine flu it was the National Health Service (NHS) that took care of operations, supported by the HPA. Epidemiologists within HPA were responsible for 'contact tracing' of infected patients and were directly accountable to the secretary of state. During the peak of the crisis, when the NHS was overwhelmed due to the overwhelming numbers of patients, the local offices of the HPA were assisting with the delivery of the vaccine (Tamiflu). Overlaps between the activities of the public health actors created certain problems of coordination which reduced the effectiveness of their actions.

The effectiveness of crisis management was also reduced during the swine flu crisis because of the flow of information both between the different participants of the civil security mechanism and between public authorities and the population. The COBR was meeting every day of the crisis and was releasing press bulletins. At the same time, and on a daily basis, the HPA and the NHS were informing the Department of Health on the progress of the epidemic. The HPA website was frequently updated so as to keep the general public informed. The problem was that at the early stages, the provision of information was poor and then overwhelming, creating confusion for the citizens. New documents were appearing every thirty minutes. Different agencies were publishing information, creating not only overlaps but also multiple versions of the same piece of information. As if information from the Department of Health, the NHS, the HPA and the ambulance service was not already enough, the general public was bombarded by releases from international sources like the World Health Organisation (WHO). The perceptions and opinions coming from different health authorities were varying, only adding to the confusion of the citizens. Moreover, there was no vertical exchange of information between the Department of Health and the public health agencies of the country. The former was receiving information from the latter but would not relinquish information back to them (Interview 14, Essex, December 2012).

Providing some more concrete details on how the emergency responders handled the crisis, both HPA and NHS at local level were using spreadsheets as a web-based tool to inform their central administrators, who then would notify the Health Department, of deaths and infections. The flow of the Tamiflu vaccine was also monitored. Furthermore, the health authorities were endeavouring to monitor new incidents at the general practitioner (GP) level, obliging the latter to monitor patients potentially infected with H1N1. All this information was centrally registered, 'shipped' every night and analysed centrally by the Department of Health. Yet, it was unclear even for the HPA and the

NHS how the Department of Health would use this information to coordinate the emergency response. Moreover, vaccination was made available only post-epidemically, six months after the outbreak of the crisis, in autumn 2009. The government asked the private organisation manufacturing Tamiflu for a considerable stock of the vaccine to control the epidemic while anticipating the development of a more appropriate vaccination for swine flu. Interestingly, the British government purchased an extremely large stock of the vaccine, which was eventually left unused, thus depriving other countries that may have been in much need.

All these missteps in confronting swine flu did not escape public scrutiny, and especially that of the Parliament. The House of Lords issued a public report censuring the authorities (read the Cabinet Office here), for not having concentrated their efforts on the operational issues and for having been very poor on the procedural details of coping with H1N1 (House of Lords, 2009). Apart from the Parliamentary report, the HPA published a series of reports that mainly focus on the eventually successful taming of the epidemics (Health Protection Agency, undated 3). Yet, according to our interviewees, more light needs to be shed on unknown details and the responsibilities of the central government.

But how did the British public handle the swine flu crisis? Initially there was widespread approval of the alert of the country's civil security system, but towards the end of the crisis the necessity of such a large-scale mobilisation of resources started to be questioned. The authorities were able to deliver and contain the spread of the pandemic (Alleyne, 2009). Nevertheless, the government seemed to be unable to moderate the activated civil security mechanism when the measures against contamination should have commenced to decrease. Tamiflu was abundant in the British markets but at some point discussions started about its side-effects. On these matters, the general public proved to be uninformed (Interview 14, Essex, December 2012).

A few words now on the role of the EU in how the UK dealt with the swine flu crisis. In the view of the interviewees, EU institutions did not play a role in how the British civil security system managed the crisis. The British authorities were reporting to the EU and especially the European Parliament (EP). Yet, there was no involvement of the European Commission and the EU Civil Protection Mechanism. Neither did the UK government ask for vaccines from other EU member states (the UK acquired an abundant stock directly from the manufacturer). The British also liaised directly with the WHO while the latter was investigating the high mortality of the virus in Mexico.

Last but not least, some lessons can be learnt concerning the management of infectious diseases and epidemics from the experience with the swine flu. A first lesson, acknowledged by the practitioners

themselves, is that authorities should not have panicked when facing the contingency of a pandemic. A more moderate, cool-headed assessment of the challenges for public health is necessary. Secondly, governments should pay attention to integrating crises due to epidemics more coherently and more fully in the *National Risk Assessment*, a matter that has still not been addressed by the current government. Last but not least, updates concerning epidemics and infectious diseases should become more visible to the general public. For instance, since 2009 there have been updates concerning H1N1 and newer versions of the virus, yet they seem buried in the HPA website.

The case study clearly demonstrates some of the problems of the British civil security system. Even though it is well-based on crisis prevention, when it has to deal with sudden shifts in how crises develop, it needs considerable effort to adapt to the new landscape of crisis. This implies a certain inflexibility of the civil protection mechanism that the practitioners should review. Moreover, the problematic exchange of information between the different participants in the management of the swine flu crisis shows how a deeply hierarchical decision-making system, such as the British one, may cause problems of coordination because the different actors managing the crisis may have to deal eventually with either an inadequate or an overwhelming flow of information. It might have been a good option to compare the experience and share information with the other EU member states so as to develop a sharper understanding of the virus, yet the UK did not interact that much with the other affected EU countries in the swine flu crisis. To the government's defence, public health crises vary significantly from dealing with floods, transport accidents and terrorist attacks as the contingency of escalation and need for containment are much more imperative than in other crises. The British government can benefit from taking into consideration the experience with the swine flu crisis to better cope with public health emergencies in the future.

Annex III: Resources

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Interviews:

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Interview 2, Civil Security Expert, London, 3 July 2012

Interview 3, Civil Servant (Civil Contingencies Secretariat), London, 25 July 2012

Interview 4, Civil Servant (Civil Contingencies Secretariat), London, 25 July 2012

Interview 5, Regional Authorities, Essex, 7 November 2012

Interview 5, Regional Authorities, Essex, 7 November 2012

Interview 7, Civil Servant (Emergency Planning College), York, 21 November 2012

Interview 8, Civil Servant (British Parliament, House of Commons), London, 28 November 2012

Interview 9, Member of Parliament (British Parliament, House of Commons), London, 28 November 2012

Interview 10, Police Officer, Essex, 11 December 2012

Interview 11 (Skype interview), Policy Adviser (Institute of Civil Protection and Emergency Management), Essex, 17 December 2012

Interview 12 (Skype interview), Fire and Rescue Officer, Essex, 19 December 2012

Interview 13, Regional Authorities, Essex, 10 December 2012

Interview 14, Regional Authorities, Essex, 10 December 2012