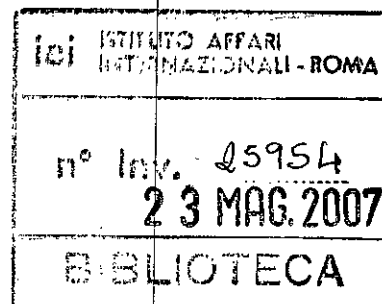


**THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION:  
ASSESSMENT AND PERSPECTIVES**

Ministero degli Affari esteri  
Istituto affari internazionali (IAI)  
Rome, 19/IV/2007

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1. La convenzione sulle armi chimiche: risultati della prima decade e sfide per i prossimi dieci anni / Elio Pacilio (4 p.)
  2. Presentation / Sergey Batsanov (15 p.)
  3. Verification of disarmament treaties / Michael Bothe (8 p.)
  4. Presentation / Daniel Nord (3 p.)
  5. The non-respect of the deadline for the chemical weapons destruction and its consequence for the credibility of CWC and the other disarmament treaties / Rein Müllerson (7 p.)
  6. From paper to reality: verification and cost issues / Alexander Kelle (7 p.)
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  7. [slides] / NBC Joint Logistic Technical Center [Antonello Massaro] (8 p.)
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  10. The problem of the universality of the WMD treaties / Mohamed I. Shaker (6 p.)
  11. Making progress in global chemical weapons destruction [slides] / Finn Torggrimsen Longinotto (24 p.)





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## INTERNATIONAL CONFERENCE

ORGANISED BY



*Ministero degli Affari Esteri*



*Istituto Affari Internazionali*

### THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION: ASSESSMENT AND PERSPECTIVES

ROME, 19 APRIL 2007

*Palazzo Rospigliosi  
Via XXIV Maggio, 43*

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*Special thanks to Green Cross Italia  
for contributing to the conference*



# PROGRAMME

## 09.15-10.45 OPENING SESSION

**Vittorio Michele Craxi**, Undersecretary of State,  
Italian Ministry of Foreign Affairs, Rome  
**Stefano Silvestri**, President, Istituto Affari  
Internazionali, Rome  
**Umberto Ranieri**, Chairman of the Foreign Affairs  
Committee, Italian Chamber of Deputies, Rome  
**Guido Pollice**, President, Green Cross Italia, Rome  
**Rogelio Pfirter**, Ambassador, Director -General,  
Organisation for the Prohibition of Chemical  
Weapons-OPCW, The Hague

## 10.45-12.45 ASSESSMENT OF THE CONVENTION

*Of all the disarmament and non-proliferation initiatives,  
the CWC seems to be the most effective.  
What is the legal and political assessment of the CWC?  
What is the relationship between the CWC and  
humanitarian law?  
What are the remaining, grey areas?  
What progress in achieving the goal of universality?*

**CHAIR:** **Elio Pacilio**, Vice-President Executive, Green Cross  
Italia, Rome  
**Sergey Batsanov**, Director, Geneva Office of  
International PUGWASH  
**Natalino Ronzitti**, Professor of International Law,  
Faculty of Law, LUISS University; Scientific Advisor,  
Istituto Affari Internazionali, Rome  
**Michael Bothe**, Professor of International Law, J.W.  
Goethe University, Wilhelm Merton Centre for  
European Integration and International Economic  
Order, Frankfurt  
**Daniel Nord**, Deputy Director, Stockholm Institute of  
Peace Research, Stockholm

## 12.45-14.00 Buffet-lunch

## 14.00-15.45 DISARMAMENT AND DESTRUCTION CHALLENGES

*Despite progress, actual implementation of the CWC  
is moving slower than expected; requests for extensions  
of the final date for the destruction of the declared  
chemical weapons stockpiles have been approved.  
Moreover, the disarmament pledge is not immune to  
verification discussion. Which are the technical,  
economic and political difficulties slowing down the  
process? Can the reliability of the verification  
mechanisms be enhanced?*

**CHAIR:** **Stefano Silvestri**, President, Istituto Affari  
Internazionali, Rome  
**Rein Müllerson**, Professor of International Law, School  
of Law, King's College of London, University of London  
**Alexander Kelle**, Lecturer in International Politics,  
School of Politics, International Studies and Philosophy,  
Queen's University of Belfast, UK  
**Antonello Massaro**, NBC Interforce  
Technical Logistic Centre, Civitavecchia  
**Miriam Ramella**, Representative of the Italian Ministry  
for Foreign Trade, Rome  
**Bruno Brianzoli**, Member of the Board, Federchimica,  
Milan

## 15.45-16.15 Coffee-break

## 16.15-18.00 DISARMAMENT AND FUTURE PROSPECTS

*Examining past experience might allow to draw  
meaningful lessons for the future, also in view of the  
next Review Conference.  
How to make the CWC fully successful? Is the CWC  
experience somehow applicable to other disarmament  
and non-proliferation regimes? Can the success of the  
CWC have an impact on similar initiatives in the  
Biological and Nuclear sector? What needs to be done  
to reduce significantly the risk of a spread of weapons  
of mass destruction?*

**CHAIR:** **Carlo Trezza**, Ambassador and Permanent  
Representative of Italy to the Conference on  
Disarmament, Geneva  
**Yoram Dinstein**, Professor Emeritus of International  
Law, Tel Aviv University  
**Mohamed Shaker**, Ambassador, Vice-chairman,  
Egyptian Council for Foreign Affairs, Cairo  
**Finn Longinotto**, Legacy Programme Fellow, Global  
Green USA, Washington

## 18.00-18.30 CONCLUDING REMARKS

**Giacomo Sanfelice di Monteforte**, Minister  
Plenipotentiary, Deputy Director General for  
Multilateral Political Affairs and Human Rights, Italian  
Ministry of Foreign Affairs, Rome



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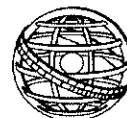
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PRESENTATION

by

**Elio Pacilio**

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**LA CONVENZIONE SULLE ARMI CHIMICHE:  
RISULTATI DELLA PRIMA DECADE  
E SFIDE PER I PROSSIMI DIECI ANNI**

Grazie, Signor Presidente. Sono onorato di poter parlare oggi a nome di Green Cross Italia e delle nostre filiali di Green Cross nel mondo, e di partecipare alla sessione sulla "Valutazione della Convenzione" con colleghi tanto illustri. Sono anche felice di dare il benvenuto ad un altro collega di Green Cross, Finn Linginotto, della filiale americana Global Green, che parlerà oggi in una successiva sessione.

Il decimo anniversario della Convenzione internazionale sulle Armi Chimiche – tra dieci giorni, il 29 aprile – è senza dubbio un momento storico che dovremmo essere tutti felici di celebrare. Il trattato, ad oggi firmato e ratificato da 182 nazioni, ha richiesto dodici o più anni di negoziazioni negli anni ottanta e nei primi anni novanta. La Convenzione è stata aperta alla firma il 13 gennaio 1993, in una cerimonia a Parigi, ospitata dal Presidente Francois Mitterand e con la presenza del Segretario Generale delle Nazioni Unite Boutros Boutros-Ghali. Dal 15 gennaio, due giorni più tardi, 130 Paesi hanno firmato il trattato – circa due terzi delle nazioni del mondo. L'Italia è stata una dei primi firmatari, il 13 gennaio 1993, e tre anni dopo, l'8 dicembre 1995 ha proceduto alla sua ratifica.

La Convenzione sulle Armi Chimiche è entrata in vigore il 29 aprile 1997, 180 giorni dopo il raggiungimento della 65<sup>a</sup> ratifica, così come era stabilito nell'articolo XXI.

Con questo importante documento, su cui oggi si trova d'accordo il 98% del mondo, per la prima volta un'intera classe di armi – le armi chimiche – è stata bandita e l'uso è stato dichiarato illecito; e questo divieto è rafforzato da un sistema comprensivo di verifica e di ispezione a livello internazionale.

Sono stati già raggiunti diversi risultati. Permettetemi di citarne solo alcuni che senza dubbio altri colleghi oggi possono indicare:

- Sei Stati Parte hanno dichiarato più di 71.000 tonnellate di agenti chimici (inclusi il gas mostarda, la lewisite, il fosgene, il sarin, il soman) in oltre 8 milioni di munizioni e contenitori.
- Di questi enormi depositi più del 25% è stato ora distrutto – circa 18.000 tonnellate e oltre 2 milioni di munizioni e contenitori.
- Dodici Stati Parte hanno dichiarato 65 ex stabilimenti di produzione di armi chimiche.
- Di questi, 58 sono stati distrutti o convertiti per scopi pacifici.
- Oltre 6.200 impianti industriali di stoccaggio e produzione di materiale chimico sono stati dichiarati soggetti alle ispezioni della OPCW
- L'Organizzazione per la Proibizione delle Armi Chimiche ad oggi ne ha ispezionati 2.800 in 77 paesi
- La OPCW ha organizzato 48 incontri del suo Consiglio Esecutivo, 11 Conferenze annuali degli Stati Parte, e una Conferenza con cadenza quinquennale (il prossimo anno ci sarà la seconda).

Una lista di risultati, per citarne solo alcuni, che impressiona se si pensa che tali risultati sono stati raggiunti dall'OPCW e dagli Stati Parte in solamente una decina di anni. Personalmente ritengo che il più importante risultato sia stato quello di rendere lo sviluppo, la produzione e l'utilizzo delle armi chimiche un tabù nel mondo.



E ancora molto deve essere fatto. Permettetemi di citare due delle maggiori sfide, senza dubbio altri colleghi ne faranno menzione.

La più importante, direi, è quella di mantenere alta la sicurezza sui depositi di armi chimiche esistenti e di continuare la distruzione nel modo più sicuro possibile. Seppure cinque dei sei Stati che hanno dichiarato di possedere armi chimiche hanno avviato la distruzione dei loro depositi – Albania, India, Russia, Corea del Sud e Stati Uniti –, ben oltre 50.000 tonnellate in sei milioni di munizioni e container devono ancora essere eliminate. Questo è un compito enorme, in particolar modo se si pensa che gli Stati Uniti hanno impiegato 17 anni e 15 miliardi di dollari per distruggere il 40% delle loro riserve. Sembra che sfortunatamente gli Stati Uniti non finiranno per il 2012, così come stabilito dal Trattato. Infatti, il governo statunitense ha pubblicamente dichiarato che possono occorrere altri 17 anni – fino al 2023 o anche più – per completare questo processo. Accelerare il processo di distruzione è possibile solo se vengono messi in funzione tutti gli impianti previsti.

La Russia, che ha iniziato molto più tardi degli Stati Uniti a distruggere le proprie riserve – il suo primo impianto a Gornyy è divenuto operativo nel 2002, laddove il primo impianto statunitense a Johnston Atoll fu avviato nel 1990 – al momento conferma che finirà entro il 2012, sebbene ancora non sia iniziata la distruzione prevista di quattro dei sette depositi.

Fino ad ora la Russia ha distrutto circa il 10% del suo stock di 40.000 tonnellate di armi chimiche.

La Russia afferma che costerà all'incirca 8 miliardi di dollari distruggere il suo stock di armi chimiche e per questo fa affidamento sui 2 miliardi o più che vengono dalla Global Partnership. Sono veramente dispiaciuto di dover dire che l'Italia, che ha impegnato circa 360 milioni di Euro per la distruzione delle armi chimiche in Russia, deve ancora rendere effettivo il suo impegno. Se la Russia ha una possibilità di rispettare la scadenza del 2012, e se noi vogliamo rendere sicuri e distruggere questi pericolosi arsenali prima che proliferino altrove, l'Italia e i Global Partners, inclusi sia Stati Uniti che Russia, devono rispettare i loro impegni finanziari e realizzare i loro progetti in tempo.

Superando di slancio e con una forte volontà politica quelli che sono stati indicati come “piccoli ostacoli interpretativi sulla convenzione bilaterale italo-russa”.

Sia la Russia che gli Stati Uniti possono non rispettare la data del 2012; ciò metterà di fronte al problema di come l'OPCW e gli Stati Parte possano al meglio gestire questa violazione da parte dei due maggiori Stati in possesso di armi chimiche. E' interessante notare che l'Albania, che ha il più piccolo stock dichiarato tra gli Stati, sarà la prima a non rientrare nella data termine – 29 aprile 2007 – per via di impreviste difficoltà tecniche nell'incenerimento delle sue 16 tonnellate di agente mostarda.

Sembra inevitabile che le difficoltà tecniche saltino fuori ora che, dopo tutti gli sforzi per la demilitarizzazione, sono partiti i programmi, cosa che non era stata prevista dai negozianti originari del CWC.

Oltre agli obiettivi di distruzione e al finanziamento della Global Partnership, vorrei ricordare una delle maggiori sfide – che è detta quella dell’“universalità” dall'OPCW, vale a dire, l'obiettivo di ottenere il 100% dei membri. Come ho affermato precedentemente gli Stati che rimangono fuori dal regime del trattato attualmente sono tredici. Sei di questi sono Stati firmatari che hanno firmato la Convenzione ma non l'hanno ancora ratificata. E altri sette Stati – inclusi cinque Stati del Medio Oriente – Egitto, Iraq, Libano, Somalia e Siria – così come la Corea del Nord – sono Stati non firmatari che non hanno né firmato né ratificato la Convenzione.

Mentre 182 dei 195 Paesi hanno preso parte a questo importante regime di controllo delle armi, quei Paesi che ne rimangono ancora fuori impediscono al trattato di divenire universale. Come molti di voi sanno, alcuni di questi Stati sono sospettati di mantenere stock di armi chimiche, è quindi cruciale convincerli ad entrare nel regime CWC in un futuro il più prossimo possibile. I politici del Medio Oriente e della penisola coreana ovviamente rendono questo compito impegnativo, ma l'abolizione



delle armi chimiche rappresenterebbe un primo passo logico verso l'abolizione totale di armi di distruzione di massa in quelle regioni.

Concludo dicendo che le armi chimiche hanno oggi, se lo hanno, un valore militare molto ridotto. Tuttavia, possono ancora essere usate come efficace strumento di terrore contro civili indifesi. E' perciò essenziale per la sicurezza globale che queste armi, e i mezzi che consentono il loro sviluppo e la loro produzione siano completamente vietati, controllati e ispezionati nel mondo per un tempo indeterminato. Grazie al finanziamento dell'OPCW dieci anni fa, abbiamo ottenuto che la Convenzione fosse applicativa e anche una reale base su cui costruire un sistema universale per le generazioni future.

Grazie per l'attenzione.



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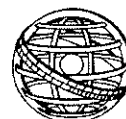
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PRESENTATION

by

**Sergey Batsanov**

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*Provisional version - not for quotation*

## INTRODUCTION

History often surprises us with coincidences. In this case, the end of 2006 marked the beginning of a whole series of anniversaries of various multilateral and bilateral treaties completely or partially dealing with security, non-proliferation and disarmament. Last September we were celebrating the 10<sup>th</sup> anniversary of the opening for signature of the CTBT (one may ask, how much is there to celebrate); this year we have the 40<sup>th</sup> anniversaries of both opening for signature and entry into force of the 1967 Outer Space Treaty; this summer there will be the 35<sup>th</sup> anniversary of the first agreement between the two major nuclear weapons states on the limitation of their strategic arsenals (SALT 1) and of the late ABM Treaty, limiting the missile defence systems in the two countries; and next year we would have celebrations around the 40<sup>th</sup> anniversary of the conclusion of the Nuclear Non-Proliferation Treaty – NPT. All of those treaties and agreements contributed to international security and helped avoid some of the worst manifestations of the arms race. However, on balance their record is rather mixed.

One anniversary, however, gives much more reason for celebration than for concerns (although there are some) and, certainly, not for condolences, and that is the anniversary of the Chemical Weapons Convention. In just a few days, on 29 April we would mark the 10<sup>th</sup> anniversary of its entry into force and of the establishment of the OPCW. Despite all the problems of the initial period, and the difficulties that transpired later on the road of the implementation, the CWC and its implementing organisation – OPCW – appear to be, so far, the most successful undertaking in the field of disarmament and non-proliferation, capable of withstanding the pressures of time and of global change. Just a few of examples – more detailed analysis will follow in the sections below.

CWC has been the fastest growing regime ever, achieving 182 states parties just 10 years after entry into force. No other regime can boast of such achievement. Only 13 states remain outside the regime, of which 6 are signatories and, hence, are under the obligation in accordance with the international law not to take actions contrary to the Convention – such as not to produce, develop, test, proliferate or use chemical weapons. Thus, an international legal norm against chemical weapons has already become a solid element of customary international law.

CWC/OPCW succeeded in launching, under severe time pressure, a most extensive and elaborate regime of verification and inspections, making an inventory of almost all CW stockpiles in the world, ensuring that the stocks are reasonably well secured and are gradually being eliminated – although not as fast as originally envisaged. To call a spade a spade, the dream of destroying all chemical weapons in 10 years did not materialise. But, at the same time, in combination with the cessation of production of CW, verified destruction or conversion of production facilities and consequential phasing out of qualified military and production cadres, as well as of CW capable means of delivery, this already resulted in the serious decrease of the military value of remaining stocks and the risk of their use, as well as of perceived utility of traditional CW in general. Thus, confidence in the regime and among states parties has grown significantly, and risk of CW proliferation has by and large diminished.

Another notable success of the regime was the establishment, in a number of states parties, of national implementation mechanisms, adoption of a number of laws and regulations to implement the treaty and setting the stage for close cooperation among states in various areas, involving government officials, military, parliamentarians, lawyers, scientists, private sector, and NGOs. As a result, strong pro-CWC communities came to life in a number of states parties, contributing immensely to transparency and confidence building and to the stability of the regime in general.

And, finally, the success of the CWC and the OPCW has provided the humankind with an inspiring example of how it may be possible not only to outlaw one particular category of weapons of mass



destruction, but to gradually move towards its complete elimination. It is good to remember this today, also because finally we are seeing signs of the revitalisation of the Conference of Disarmament – the Mother of almost all multilateral treaties on arms control and non-proliferation and a renewed hope that the conference will again become a busily working body, as in the times of the CWC and CTBT negotiations.

It is therefore hardly surprising that the 10<sup>th</sup> anniversary of the OPCW is being widely celebrated throughout the world. There have been meetings in Europe, United States, Latin America, with more to come. They are not just mere, but also, and perhaps, more importantly, political will builders, because all the very well deserved praise notwithstanding, much remains to be done, and the treaty, together with the OPCW, should be nurtured by their owners – member states – in a careful and forward looking way.

This meeting in Rome is also very important – both from the symbolic and practical points of view. Italy played a very important and difficult role at the crucial stage of negotiations in Geneva, being the coordinator of not so easy to manage Western Group. It was one of the first to ratify the CWC and to adopt national implementing legislation, and then amending it in line with the requirements of the Convention. Italy has been displaying a lot of transparency and good will in opening up its chemical industry for verification, being ready to go further than many other countries. Italy has contributed a lot to the building and maintaining up to date the OPCW, including through a series of inspector training sessions at its facilities. The most recent course took place just a month ago in Civitavecchia for newly recruited OPCW inspectors.

#### **OPCW - REASONS FOR SUCCESS**

There are several important ingredients for the success of the Chemical Weapons Conventions and the OPCW.

The CWC is, probably, the most “democratic” disarmament regime. It is “non-discriminatory” in that it treats all member states equally, regardless of whether or not they possess chemical weapons, and it explicitly combines disarmament and non-proliferation functions. In contrast, the Nuclear Non-Proliferation Treaty (NPT), concluded in 1968, created two categories of states - “nuclear weapons states” and “non-nuclear weapons states”. This distinction was further reinforced in 1995 by the indefinite extension of the NPT (originally concluded for a period of 25 years to deal with the newly emerged possessors of nuclear weapons, like India and Pakistan. Furthermore, CWC is different from its predecessor treaties, as well as from the later produced CTBT in that it does not give special rights to any individual parties, including the conditions for the entry into force or the permanent seats on the executive body. Of course, more powerful nations have a bigger say, but this right is not legally guaranteed for them.

The CWC regime is “reasonably” verifiable, with verification system covering both weapons with their related facilities and legitimate chemical activities, whereas the BWC has only embryonic verification measures, subject to a decision by the UN Security Council. OPCW on-site inspection procedures monitor the elimination of all inventories of chemical weapons and former CW production facilities, and include routine inspections of a large number of commercial chemical facilities. These inspection activities are far more intensive and diversified than those conducted by the IAEA, whose verification mandate covers, as noted above, only safeguards and not other aspects of NPT compliance.

The CWC is the only treaty with the “matching” implementation and verification mechanism - the OPCW, which is responsible, at least in theory, for all aspects of compliance with and implementation of the CWC. The 1972 Convention on the Prohibition of Biological and Toxin Weapons (BWC), in contrast, lacks any formal mechanisms for implementation or compliance, and the International Atomic Energy Agency (IAEA) is responsible only for safeguards on nuclear materials but not for



compliance with the other elements of the Nuclear Non-Proliferation Treaty (NPT) or with the treaty as a whole. This last point is of particular importance since it makes the CWC "a living organism", and gives it a variety of tools to adjust to new geopolitical realities and to deal with inevitable implementation problems.

Many, if not all the basic provisions of the CWC are built around, often explicitly, sometimes implicitly, on the idea of cooperation among parties. This message is clearly visible in verification and compliance provisions, and, as the first decade of implementation shows so well, was applied by states parties to a range of other activities, from national implementation to the destruction of chemical weapons, even though the latter is defined by the CWC as the responsibility of respective possessor states.

The provisions of the Convention, detailed as they are, give significant powers to the Executive Council and to the Conference of States Parties – the main organs of the OPCW with regard to specific implementation situations. That, in turn, involves a number of states parties in the decision-making process on the regular basis, and thus reinforces their attention to the CWC and their political will to make it work.

These features definitely helped the CWC and the OPCW to manage better in a turbulent period of transition from a bi-polar world to a new, yet to be defined system of international relations, which at present can be characterised as a strange mix of unipolarity and multipolarity.

#### **CWC AND CHANGING GLOBAL ENVIRONMENT**

The CWC and the OPCW were products of the final phase of the Cold War and could not have emerged in a different historic environment, either several years earlier or later. Since then, the global political environment has undergone rapid and profound changes which are illustrated, inter alia, by the fact that the Comprehensive Test Ban Treaty, negotiated in the mid-1990s, still cannot be brought into force 10 years after being opened for signature, by the crisis of the nuclear non-proliferation regime, by the collapse of negotiations on the BWC verification protocol and by the decade of continued hibernation of the Conference on Disarmament in Geneva.

The current phase in international relations is a transitional one, with the intensive processes of geopolitical reconfiguration, emergence of new centres of power gravity and the consequential crisis of traditional international institutions and erosion, or, perhaps, evolution of norms of international law. Globalisation, and more specifically, gradual re-distribution of the powers of nation-states in favour of super-state and sub-state (or non-state) actors adds to an increased sense of insecurity, as does the emergence of new threats, including that of terrorism.

As a result, more and more states, large and small, are manoeuvring to secure or improve their geopolitical situation, obtain or preserve access to vital natural resources and look for better protection against external influences or pressures. Regrettably, despite the mounting evidence that military power cannot solve today's problems, the complexity and the unpredictability of the present world pushes many political leaders in the direction of military build-up and often makes them reluctant to consider limitations on existing and potential military programmes. Among many political victims of these dangerous tendencies are often arms control, non-proliferation and disarmament, as well as multilateralism in general.

The CWC was lucky to be affected less than other regimes, but it is not immune to these challenges, and many specific problems of chemical disarmament, such as insufficient funding for CW destruction resulting in a slower than expected pace of chemical disarmament, can be partially explained by the lack of political will or attention, stemming from the general malaise in the area of disarmament (see the section on CW destruction).



There are no treaty-specific remedies for this category of challenges, at least in the direct sense. Two points should be made, however. The first is that CWC/OPCW remains a bright spot on the otherwise grim map of multilateral disarmament, and so far the problems of chemical disarmament have not become insurmountable; the only requirement is to identify them in time and deal with them in an open, cooperative manner, without losing sight of the fact that much more than narrow technical issues are at stake. The second is that the synergy between the Convention and the OPCW is in itself a powerful antidote against the general deterioration of the state of affairs in disarmament, since the organisation, which brings together states parties and the secretariat, is capable of generating many new ideas and collective political will.

### **ADJUSTING TO NEW REALITIES**

The specific circumstances, concerns, and perceptions that made it possible for the CWC to be born and start functioning more or less successfully, also imposed certain limitations on the organisation and its operations. It was simply not feasible at the time of the CWC negotiations to anticipate certain aspects of today's world to which the OPCW must respond. One example is the treaty's excessive emphasis on the verification of CW destruction at the expense of certain types of industry inspections, the explanation being extreme mutual mistrust between the two superpowers and the lack of reliable information about the respective stockpiles, which prevailed in the 1980s. Other examples of the changed circumstances include a noticeable evolution of the perception and prioritization of major threats. Although the threat posed by WMD has not gone away, its perceived importance has diminished relative to other threats, such as the spread of communicable diseases. The perception of the nature of the chemical threat is also different today: it's not being seen that much as coming from the superpowers' arsenals as from terrorists and from a small number of states which refuse to join the CWC. But, it may well be argued, the latter is also largely a result of the CWC.

Equally, the provisions of the Chemical Weapons Convention regarding assistance and protection against the use of chemical weapons, earlier perceived as a means of assuring non-chemical weapons states against possible attack by CW possessors, may be losing some of their relevance with the dramatic growth of the number of CWC States Parties and the gradual reduction of existing arsenals; yet other threats, including those of chemical terrorism and chemical calamities, are growing in relative importance. At the same time, the chemical industry and science have been undergoing important changes, including the introduction of new technologies, equipment and processes, as well as new business and organisational approaches; the trade in chemicals has grown considerably; new chemical compounds and mixtures, some of them of potential relevance to the CWC, have become available, both for industrial and counter-terrorism purposes, and, especially during the last several years, there has been a real revolution in the means of protection against and detection of chemical agents.

It is also noteworthy that, while in the past it was considered more effective to treat different types of WMD separately from one another, in today's world many of those issues have become much more interrelated and interdependent. While the technical differences remain strong, political problems of WMD proliferation often overlap; and the new risks, such as terrorism with WMD cannot be handled by any state or even any intergovernmental organisation single-handedly.

Finally, the over-all success story of the CWC highlighted a certain number of miscalculations or imbalances, built into the treaty due to insufficient information available during negotiations or simply with the intention of papering over difficult issues that had been delaying the conclusion of the treaty. Today, some of the problems that had been "put aside", are coming to the surface and need to be addressed by the organisation, that in the meantime has proven its problem-solving capability.

More importantly, the new realities, together with the progress in the CWC implementation, underline the need to identify new security interests of states parties that the CWC and the OPCW should be able



to take care of. In other words, it's now the right time to start asking questions about what is there in the Convention to guarantee its attractiveness to states parties in future, and how the OPCW should look in a chemical weapons-free world.

## IMPLEMENTATION PROBLEMS

The most immediate challenges to the well-being of the Convention and to the future of chemical disarmament in general are related to the slow or, otherwise, insufficient progress in the achievement of what the vast majority, if not all of the states parties still believe to be the priority implementation tasks of the CWC. These include the destruction of chemical weapons, achievement of the universal participation in the Convention and its proper implementation on the national and international levels. There are some lingering, but not really acute concerns about compliance with the CWC by some of the States Parties, occasional complaints about what some nations believe to be less than satisfactory implementations of certain articles, such as Article VI (Activities, not Prohibited by the Convention) and Article XI (Economic and Technological Development), differences in interpretation of certain provisions, as well as some of not so serious house-keeping difficulties that are normally found, in one form or another, in any international institution.

## CW DESTRUCTION

As the CWC is approaching the 10<sup>th</sup> anniversary since its entry into force, both the achievements and difficulties in this area are becoming increasingly evident, especially in the light of the fact that most of the CW possessor states will not be able to comply with the 10-year deadline, established in the Convention for the final destruction of their stockpiles. It is clear now that the CWC deadlines turned out to be unrealistic, and procedures for their modification – too rigid. Of course, the main difficulties emerged with chemical warfare agents, and not with munitions. On the other hand, the world has witnessed new and very positive examples of international cooperation in the area of destruction, not envisaged in the convention. Although the treaty states clearly that the costs of destroying CW and of related verification must be borne by the possessor states, in fact more than one of them has asked for and received financial or technical assistance with CW destruction (and, in the case of Albania, with meeting verification costs as well).

At the beginning, it seemed that Russia would be the only possessor state having difficulties with the timely destruction of its chemical arsenals. Russia's problems became obvious even before the conclusion of negotiations on the CWC, when at Moscow's request the already agreed treaty provision, requiring complete destruction of CW stocks in ten years, was reopened and renegotiated in 1992, so as to allow for the 5-year extension of the final deadline.

For most of the first decade after the entry into force, the delays with the CW destruction in Russia, caused by insufficient funding, was, perhaps, the only disquieting signal of what may happen when the destruction deadline approaches. But once the financing of the Russian destruction program improved, both due to national funding and international assistance, things started to improve. The destruction rate is rapidly increasing. While it took Russia 9 years to destroy the first 10 per cent of its 40 thousand agent tons stockpile, the second 10 per cent was done just in a bit more than half a year – between August 2006 and April 2007. As of today, Russia has surpassed an important 20 per cent benchmark.

The opposite tendency has manifested itself in the US – the second largest possessor of chemical weapons. The US had started destruction before the CWC entered into force, and until recently was running ahead of the CWC schedule. But this initial success created a sense of complacency and, together with the general atmosphere of indifference towards disarmament, led to a situation where military and technical experts were left alone to deal with constantly emerging problems, often of a political nature, without the proper oversight. As a result, the construction of several destruction



facilities suffered long delays. In April 2006 the United States not only requested the maximum extension of five years, but announced that it might fail to complete destruction even by the 2012 deadline. Moreover, according to some reports, it may take the US as long as 11 more years - until 2023 - to complete the destruction<sup>1</sup>.

Against this background, the difficulties of lesser magnitude, experienced by other possessor states with smaller arsenals, could not significantly affect the general situation. The fact remains, however, that the CWC negotiators had seriously underestimated the technological complexity, huge financial burden and the whole bunch of other issues (environmental regulations, evolving by their own logic, local concerns and politics, etc), associated with CW destruction.

The XI Conference of States Parties, the highest policy-making body of the OPCW, which met on 5-8 December 2006, adopted several decisions, extending the final destruction deadlines for 5 out of the 6 possessor states<sup>2</sup>. The United States and the Russian Federation were given the maximum extension possible under the CWC – until 29 April 2012. Libya (which joined the convention at a very late stage) was given until the end of 2010 to complete its destructions program, while India was granted a reprieve till the end of April 2009. The fifth possessor state, which prefers not to be named publicly as such, will have to destroy its last weapons by the end of 2008. Only Albania, which was also late to start its destruction, declared its intention to do the job by April 2007, although it asked for and received extensions of the intermediate deadlines.

Under the circumstances it would be premature to discuss now, what would happen if one or more CW possessor states fail to meet the April 2012 deadline, but in reality this debate has already begun. Some experts contend that an amendment to the CWC (and hence the convening of a formal Amendment Conference) will be necessary. Others believe that this approach would be disruptive, as it could open the treaty to attempts to renegotiate other important provisions, and hence hope to resolve such a fundamental issue through some sort of a “technical amendment”.

Another, more elegant approach would be to make use of a series of provisions of the CWC, regarding consultation, cooperation and fact-finding, as well as measures to redress a situation and ensure compliance (Article IX, paragraphs 1-7, and Article XII). The authors of the Convention have deliberately put emphasis on the need for the Executive Council and the Conference of States Parties to decide first on measures, necessary to remedy, within a specified time, a situation that contravenes the provisions of the Convention, while avoiding hasty rulings on compliance and punitive actions. Perhaps, on this basis a more workable legal solution, short of amending the treaty (even in the form of a technical change), could be found. That said, the worst case scenarios for 2012 can be only speculative, and at this point efforts should be concentrated on ensuring compliance with the new deadlines just approved by the OPCW.

It is therefore of utmost importance to ensure that the CW possessors, and in particular the two biggest ones, display the necessary political will and high-level attention to this problem, needed to ensure adequate funding, effective inter-agency coordination and an imaginative search for solutions to remaining technological and local political issues.

From the technical point of view it might be attractive to concentrate efforts on degrading the CW agents, rendering them militarily useless and economically unattractive for reconversion into CW agents (chemically that would always be possible, but at a great cost, and with unproven technologies). The contentious issue of determining the end-point of chemical weapons destruction would come into play here. Greater flexibility on this and other technical issues might make it possible to accept the completion of destruction at an earlier stage and thus meet the extended deadlines. After all, according

<sup>1</sup> (Global Security Newswire, 22 November 2006)

<sup>2</sup> (OPCW Press Release 11 December 2006)



to the CWC, the destruction is understood to be a process by which chemicals are converted in an essentially irreversible way to a form unsuitable for the production of chemical weapons. If any toxic waste still remains by the expiry of the final deadline in 2012, it would be much easier to deal with it both from the political and legal points of view.

Finally, it appears necessary to proceed with the development of the new vision of the OPCW in the chemical weapons free world – not only because such a vision is needed to address new challenges, but also because it would help build both the conviction that chemical weapons would soon disappear from earth, and the political will to make that happen.

## UNIVERSALITY AND NATIONAL IMPLEMENTATION

To make a chemical weapons-free world a reality, one very important condition must be met – the achievement of the universal participation in the CWC. Universality is both one of the best OPCW success stories and a challenge. Much has been done in this direction; in fact, so far the CWC has been that fastest growing global disarmament treaty, as far as its membership is concerned. With 182 states parties, the CWC encompasses over 90% of the world's population. The comprehensive, non-discriminatory nature of the CWC has played a positive role in promoting its international acceptance. Another significant factor has been the mutually reinforcing relationship between the CWC and the OPCW. The organisation has played an important role in supporting the treaty by convincing non-parties to join and applying pressure on states that are already parties to behave better than they otherwise would have. Other global WMD treaties do not enjoy comparable institutional support. In a departure from the experience of "older" multilateral arms control treaties, and having overcome the initial criticism for that, the OPCW has played a highly proactive role in persuading new states to join and helping them to develop domestic implementing legislation and regulations, while taking into account their specific political, legal, and economic conditions. These achievements have been the result of long-term planning, analysis, non-traditional diplomacy (including coalition-building), effective adaptation to changing circumstances, and continuity of effort—a combination that individual states with their diverse foreign policy priorities usually cannot not sustain. It goes without saying that assuming this role, earlier reserved for governments, OPCW had to play skilfully and with at least the tacit support of important member states – something which should not always be taken for granted and, on occasions, has to be convincingly engineered.

In the course of this work, the OPCW has also overcome the conventional wisdom that a state's decision to join a security-related treaty is strictly an internal, sovereign matter. Instead, the OPCW has worked proactively to influence internal governmental decision-making. Specific achievements in this area include the decisions to join the CWC by Sudan, Serbia and Montenegro, Afghanistan, Libya, and several of the former Soviet republics, particularly in Central Asia.

Today only two geographical areas remain of serious concern with respect to the universality and non-proliferation value of the CWC, namely North Korea and a few countries in the Middle East, in particular, Syria, Egypt, Lebanon and Israel (the latter signed the CWC, but is showing little willingness to ratify it). Given the difficulty of these hold-out cases, however, creative political strategies and strong support by major world powers will be necessary to gain their adherence.

Having as many countries is important, but clearly insufficient if many parties are not implementing complicated requirements of the treaty. Moreover, a well-organised and transparent system of national implementation strongly reinforces the CWC compliance mechanism and provides an additional level of assurance to other parties regarding the compliance of the country in question. In fact, the above observations are not only applicable to the chemical weapons ban but also to other



weapons of mass destruction (WMD), counter terrorism, environmental protection, human rights, and post-conflict reconstruction.

The OPCW has pioneered in providing assistance to member states with national implementation, including the preparation and adoption of domestic legislation and administrative regulations and setting up functional National Authorities. Once again, an old assumption had to be tactfully overcome, namely that law-making is strictly the internal business of individual states.

Despite serious progress in CWC national implementation still leaves much to be desired. This disappointing result can be attributed in part to the complexity of the subject and the slow pace of work of many parliaments. It would also be useful to work closer together with other international organisations that help with the national implementation of other relevant regimes or arrangements (such as IAEA, for example), and regional bodies like the African Union. A very useful initiative, both in terms of universality and national implementation, was the adoption by the European Council in December 2005 of the Joint Action on support for the OPCW activities in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction.

## **VERIFICATION AND COMPLIANCE**

On balance, the system of routine on-site inspections of treaty-relevant military and commercial facilities has worked quite well. By the end of 2006 the OPCW had conducted more than 2500 inspections at almost 1000 sites in 70-plus countries. Over time, imbalances in the design of the verification regime have come to light, such as the extremely heavy emphasis on the verification of CW destruction (85% of all inspector-days) at the expense of certain types of industry inspections. These imbalances resulted in some cases from lingering Cold War assumptions and in other cases from the absence, at the time of negotiations, of correct information about relevant facilities. For example, it turned out that most of the declared Schedule 1 facilities were, in fact, small laboratories that did not warrant the heavy verification regime prescribed by the CWC. Conversely, a large number of industrial plant-sites producing discrete organic chemicals (DOCs) remain practically untouched by routine visits. OPCW is taking steps to address these imbalances, such as efforts to reduce the number of inspectors at CW destruction facilities in the United States, Russia, and—to a lesser extent—India. As noted above, the current level of confidence, coupled with the experience accumulated during numerous CW inspections over almost ten years have eased security concerns about declared and slated for destruction chemical weapons. This, in turn, reduces the need to spend the lion's share of the OPCW inspector resources on the verification of CW destruction.

But whether this should automatically lead to increased intensity of industry verification is a totally different question. This question must be addressed not in isolation but rather in the context of the rapid managerial, organisational, and technological changes taking place in the chemical industry today. Mobility and flexibility in production techniques, nanotechnology and micro-reactors, the shrinking size of production and business units, new capabilities to produce an ever-wider range of toxic chemicals and blurred boundaries between chemistry and biology - all of these developments will undoubtedly affect the future of industry inspections.

There is probably not much that needs to be done to improve the effectiveness of verification at Schedule 1 and Schedule 2 facilities. The intensity of such inspections has been adequate; moreover, given the actual global inventory of Schedule 1 facilities, which turned out to be less dangerous than it was assumed during negotiations, the OPCW decision in favour of a modest reduction of inspections there was quite appropriate, as was the introduction, in 2006, of on-site sampling and analysis at Schedule 2 facilities – an important procedure which had been envisaged by the CWC but for several reasons not initially applied.

The opposite picture has emerged with regard to inspections at plant sites producing Discrete Organic Chemicals, alias Other Chemical Production Facilities. While the chemicals themselves are of little



danger to the convention, the plant sites are normally huge, often multi-functional especially with the modern technology, are packed with easily re-adjustable equipment. States parties are required by the CWC to provide very limited information about these sites; moreover, they themselves are often having difficulties identifying such sites on their own territory for the purposes of reporting to the OPCW. In 1998 (the first full year after the entry into force) about 3300 such sites have been identified; in 2006 this number increased to more than 5000, largely as a result of a special assistance program to member states, run by the OPCW. In the meantime the intensity of inspections at the OCPF sites was running between 1 and 2,5% per year, thus offering no real deterrent value, no accumulation of experience and practically guaranteeing that most of the sites would not be inspected for decades. The selection criteria for inspections have not been adopted either, while several states parties still feel uncomfortable about even modest increases in the number of such inspections. Some of these problems also apply to Schedule 3 inspection, but a lesser degree. There is no short magic formula to correct the situation, but its preservation would keep undermining the credibility of the CWC industry verification regime. It is clear, however, that a lot of work is needed to be done by the OPCW, its member states and, last but not least, by the chemical industry, in order to find the way forward.

Besides routine inspections, the CWC has created the most radical verification tool — the right to request a “challenge” inspection of any facility suspected of violating the treaty, without right of refusal, which is available to any state party. Although this powerful instrument has not yet been used, the OPCW Director-General and relevant parts of the OPCW Technical Secretariat are preparing the inspectorate to mount a challenge inspection as soon as a request is received. There exists a body of opinion that the absence of a challenge inspection so far is another sign of weakness of the CWC verification system.

This view, however, does not take into account the fundamental difference between the challenge inspection and other means of verification envisaged by the CWC. The former was designed both as a deterrence and as an ultimate guarantee for a state party having serious concerns about compliance by another state, that even if it is not a member of a powerful coalition, it could still have means at its disposal to have its concerns addressed. On the other hand, the challenge inspection procedures have been carefully calibrated to contain a complex mix of checks and balances, and, indeed, represent a double-edge sword that must be used very carefully to avoid major political embarrassment for a requesting party. So, the absence of challenge inspection requests rather demonstrates that no state party had such serious suspicions, that it would feel compelled to resort to challenge.

Another aspect of compliance is the fact that the CWC verification mechanism is spread rather unevenly among the various prohibitions and obligations. Major elements of the treaty that have a direct impact on its non-proliferation potential, such as the prohibitions on assisting or encouraging other states to acquire chemical weapons, as well as not transferring such weapons to anyone, have been largely neglected. In theory, the absence of specific verification provisions in the CWC for monitoring these obligations does not preclude the OPCW from developing additional procedures to address the problem (similar to how the IAEA is regularly enhancing and broadening the safeguards system), but the political will has been lacking. As a result, this lacuna in the CWC regime is now being filled by ad hoc measures outside the treaty framework, such as the Proliferation Security Initiative (PSI).

The OPCW should also have greater flexibility to make improvements in the verification system consistent with the treaty, either through targeted decision-making by the Conference of States Parties or, in specific cases, through the budgetary process. For example, CWC provisions designed to prevent the proliferation of chemical weapons and related technologies, such as export controls, could be strengthened. To start with, one should return to the pending issue of applying export control to Schedule 3 chemicals (if not outright prohibition, then at least reporting requirements). Some thought could be given to developing non-obligatory guidelines on national measures to implement the non-



transfer and non-assistance obligations under Article I of the convention. It would be of interest to know how Parties are implementing these obligations, which legal basis exists for that and whether any of the best practices could be identified. Possibility of voluntary visits to facilities that play an important role in preventing illegal shipments of weapons and technology, like major sea ports, may also be an option – perhaps, one or another Party can consider hosting such a visit. Further down the road a need for a more formal document could be examined.

## NEWLY EMERGING RISKS AND CHALLENGES

In the new global situation, problems related to different types of WMD and their proliferation have become much more interdependent. Despite the specificity of the chemical, biological, nuclear, and missile control regimes, new forms of combating the spread of WMD have sought to address these various categories of weapons under the same framework (again, PSI is a good example). This interrelation was not envisaged when the CWC was being negotiated.

Also unexpected at the time of the CWC's adoption was the growing threat of terrorist use of WMD. Even when this risk became more obvious, many governments were reluctant to explore the potential of the OPCW and similar organizations to combat WMD terrorism. Just as in the area of non-proliferation, efforts to prevent the terrorist use of WMD cannot be effective if governments continue to maintain firewalls between the various types of WMD.

There is a dilemma here: on the one hand, the OPCW can hardly count on maintaining its relevance and "market value" indefinitely if it stays away from these new cross-boundary problems; on the other hand, it cannot pretend it can address such problems in their entirety. Hence, the question before the CWC states parties is about properly defining the role and place of the new and very capable mechanism they have created in the global efforts to address these new problems and phenomena.

In the case of terrorism, it is not enough to say that the OPCW role is limited to destruction of chemical weapons so that the terrorists could no longer be able to steal them (stealing chemical weapons for terrorist purposes is an unlikely proposition in any case). Yet, the role of the organisation can be only limited. Despite the fact that chemical terrorism is a threat, not to be ignored, there are no terrorist organisations or groups which are specifically "chemical"; and the OPCW should not be in the job of fighting terrorism as a whole. But it has enough intellectual and material capacity to contribute to better definition of the threat, to assess the relative risks presented by certain chemicals and processes in this context and serve as a forum of consultation and cooperation among states parties on a wider range of issues of chemical security, an issue that has an important development dimension and, thus, could be of interest to a majority of the CWC parties. There are no reasons why the OPCW should not look at expanding international cooperation in the peaceful uses of chemistry in a way that does not create new proliferation risks, as well as improving the safety of chemical industry against terrorist attacks and natural disasters. The final document of the First Review Conference included some rather modest remarks on the protection of chemical industry facilities against terrorist attacks. Since then, the United States and other Western countries have made efforts to improve the physical security of their chemical plant sites. One should give serious thought to how this experience can be shared to benefit the safe development of the chemical industry in the developing world. In other words, how can we find synergies between Article X (on protection against chemical weapons) and Article XI (on international cooperation in the peaceful uses of chemical technology)?

A further factor affecting the health of the CWC regime is the potential risk associated with the research and development of new chemicals and production processes. Although a good deal of such R&D will lead to innovations unrelated to the object and purpose of the CWC, a relatively small segment of such activities might affect the treaty. A good example is the area of "non-lethal" incapacitants, which are of growing interest to several countries for counterterrorism operations. Although such developments exploit the "law enforcement" exemption in the CWC, they are increasingly being applied for paramilitary purposes. In theory, the OPCW has the necessary



instruments to address this problem, such as the Scientific Advisory Board, yet this topic has been considered too sensitive even to be raised in meetings of the organization.

Sooner or later, an in-depth review of the implications for the CWC of advances in chemical science and technology will be in order. As to the problem of "non-lethal agents" one should recall that the CWC covers incapacitating agents (non-lethal agents) and not just agents designed to kill. According to Art. II, para 2, "Toxic Chemical means... any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans and animals..." If a state has riot-control agents, it must declare the types and may not use them as a method of warfare. In that sense, despite deliberately vague language defining non-prohibited purposes ("law enforcement, including domestic riot control". Thanks to the General Purpose Criterion, there seems to be no gap in the CWC coverage of various chemicals. Since September 11, however, the fight against terrorism has led to intensified research on new chemical compounds with very rapid incapacitating or irritant effects, along with the development of new means of delivery and dispersal. According to press accounts, in several instances same delivery systems have been designed in different versions for law-enforcement and battlefield use. Such development work is eroding the boundary between the permitted use of riot-control agents for law enforcement purposes and the CWC's prohibition on their use as a method of warfare.

At the same time, a frontal at the "non-lethal problem" may not be productive. One should bear in mind that the negotiators of the CWC deliberately created ambiguity in the treaty text about the meaning of the term "law enforcement, including domestic riot control." It is therefore important to develop greater understanding of the issue and explore ways of providing greater transparency. As a first step, one could explore the possible exchange of information about national legal and administrative norms governing research and development in the area of incapacitating agents to ensure that the integrity of the CWC is not at risk. National implementation, an important safeguard against abuse, is very relevant in this case as well. Indeed, Article VI.2 requirement that "Each State Party shall adopt the necessary measures to ensure that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred or used within its territory or in any other place under its jurisdiction or control for purposes not prohibited under this Convention.", if properly complied with, will take care of much of the problem.

## **SECOND CWC REVIEW CONFERENCE - THE FORUM TO ADDRESS CHALLENGES AND A CHALLENGE ITSELF**

A good opportunity to address future challenges to the CWC and the OPCW will come at the Second Review Conference, which has been scheduled for April 2008. The Executive Council of the OPCW has already set up an open-ended working group (OEWG) under UK chairmanship to prepare for the review conference. The OPCW established a similar OEWG before the First Review Conference, and the decision to do so again reflects the organisation's special role and comprehensive mandate for treaty implementation.

The Second Review Conference will be an important event that, ideally, will contribute to strengthening the CWC regime and the political commitment of the states parties. Nevertheless, the nature of several problems of treaty implementation requires that they be worked on before, during, and after the Review Conference, so limiting analysis to what should happen at the conference itself might leave a number of important questions unanswered.

The preferred outcome would be a short, dynamic political declaration expressing strong support for the CWC and its effective implementation, supported by a longer text that addresses various important issues, including the progress in CW destruction, verification and compliance, universality and national implementation, counter-terrorism, economic and technological development and chemical security. Without necessarily trying to resolve all these issues for once and for all, the Review Conference



should chart the course of work over the next five-year inter-sessional period and, wherever possible, introduce the required innovations.

Hopefully, the Conference would be able to send around a convincing message that chemical disarmament is well on track and that states parties feel assured of its ultimate success. To reinforce this message, the Review Conference would be well advised to develop a preliminary vision of the OPCW in the chemical weapons free world. To this end, the conference should address future priorities and structural reforms that will be needed once all of the declared CW stockpiles have been destroyed. Even if no detailed or final decisions can be taken at that early stage, the Review Conference could still instruct the Executive Council to begin systematic work on those issues.

### **CAN THE CWC STILL BE A TRAILBLAZING TREATY?**

The relevance and the future of international agreements depend, to some degree, not only on the difference they make in the specific areas they are supposed to regulate, but also on their impact on activities and processes in other fields. When the Chemical Weapons Convention was adopted by the Conference on Disarmament in 1992, it was often hailed as an example for future agreements on arms control and disarmament. Indeed, in the 1990s it served as at least an inspiration for the 1997 Model Additional Protocol to the IAEA Safeguards Agreements (INFCIRC 540), which significantly improved the safeguards system, and - in a much more direct way - as a model for negotiations on the verification provisions of the Comprehensive Test Ban Treaty (CTBT) and on the Protocol to the Biological and Toxin Weapons Convention.

Attempts to use CWC as a model were not entirely successful. In 2007, the CTBT, concluded in 1996, is still very far from entering into force, although for reasons that have little to do with verification. All that notwithstanding, it may be claimed that the CWC has already played an important role in disarmament areas, beyond its "direct sphere of responsibility", and that the problems encountered in the cases of the CTBT and the BWC have more to do with the general attitudes towards disarmaments, rather than with the deficiencies of the CWC model.

So, the question remains - can the CWC or, rather, the approaches built into it, provide an example to follow for other arms control areas? The response, it seems, could be cautiously positive, with the understanding that under no circumstances can a treaty, or its individual provisions, be automatically copied to resolve issues for which this treaty was not intended.

Perhaps, the most promising in this sense could be a set of approaches that the CWC offers in the area of verification and compliance (barring, of course, technicalities that are very specific to chemical weapons or chemical industry and certain implementation aspects where the OPCW performance leaves something to be desired). Among these approaches the following are of particular relevance:

- a) almost comprehensive coverage by the verification system, coupled with an international mechanism (organisation with both political and technical arms) responsible for the whole range of compliance issues;
- b) a mix of cooperative and more forceful verification techniques, with the general emphasis on the former;
- c) diversity of tools available to initiate inspections, depending on the degree of sensitivity - from the Technical Secretariat to individual member states;
- d) diversity of the types of inspections with varying intrusiveness, depending on the risk posed to the CWC regime by respective chemicals, facilities and activities, as well as on the need to reduce as much as possible inconveniences to legitimate activities and to insure protection of confidential information;
- e) combination of routine inspections with a potential threat of challenge inspections, the latter representing a politically charged double-edge sword and a powerful deterrent, realistically available to any state party, but with a set of disincentives against abusive or irresponsible use and, in terms of



implementation procedures, relying on the managed access to help the inspected party in demonstrating its compliance without compromising unrelated sensitive information;

f) important role in ensuring compliance and in building over-all transparency and confidence, assigned to procedures, other than inspections, including assistance to member states in compiling correct and comprehensive declarations, intensive cooperation with national authorities which are responsible for the CWC implementation on the national level (including training of national authorities' personnel), and to putting in place comprehensive systems of national legislation to empower respective governments to police the CWC on a national level, to deter and punish not only the violators, but also those who, by omission or intentionally complicate the verification activities by the OPCW;

g) and, finally, a very innovative, multi-optional approach to dealing with suspected or presumed violations, which is focused, in the first place, on the need to guarantee compliance and reverse the negative situation, rather than on labelling and punishing suspected violators in situations that may not be crystal clear. In other words the logic of the CWC compliance provisions is first to impose on a suspected violator very specific measures it should perform in order to return to the state of compliance (e.g. declare a certain facility, accept a special investigative visit there, remove certain elements of the facility or close it down – all depending on the circumstance of the case). And only if the prescribed measures are not carried out within certain time frames, will a judgement on non-compliance will be passed.

Apart from the above mentioned approaches, which could be applicable, with necessary tuning, to a number of arms control and disarmament measures, there are some less obvious features of the CWC regime that can be of some relevance as well. For example, the gradual introduction of the verification measures (not immediately after the entry into force). In the CWC this approach is used in relation to inspections of the OCPFs on the assumption that the first step had to be the establishment of some sort of a database of inspectable facilities. This element is somewhat obscured by the fact that in general the CWC verification and implementation regime, as negotiated in Geneva, turned out to be excessively "front-loaded" – that is to say that too many activities were expected both from the individual member states and from the OPCW immediately after the entry into force of the Convention. (In reality this front-loading resulted in a number of cases of "technical non-compliance", due to the fact that many states were simply not able to adopt in time complicated legislation, necessary to implement correctly all the provisions, especially with regard to industry verification.) This incremental approach to verification may prove useful with regard to a number of possible arms reduction steps, where immediate full compliance may be a difficult objective to achieve. Retrospectively, it might have been wiser to use this approach also with regard to some other types of the CWC inspections, including challenge inspections.

In short, there are a number of lessons, both from the negotiations and from the implementation of the CWC that have a significant value for other arms control, disarmament and non-proliferation efforts, including even nuclear disarmament. However, the main question is, whether the international community is able to overcome its current nihilistic attitude towards serious disarmament measure – something which must be done sooner or later in order to prevent not just a bilateral arms race of the kind we had been observing during the cold war, but a multiple, not always symmetrical, arms race with several protagonists, which would be much more difficult to bring under control.



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### THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION: ASSESSMENT AND PERSPECTIVES

**ROME, 19 APRIL 2007**

*Palazzo Rospigliosi  
Via XXIV Maggio, 43*

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PRESENTATION  
by  
**Michael Bothe**

*Special thanks to Green Cross Italia  
for contributing to the conference*



*Provisional version - not for quotation*

## VERIFICATION OF DISARMAMENT TREATIES

### 1. Introduction

On the occasion of the 10th anniversary of the entry into force of the CWC, it is appropriate to analyse one special characteristic of the treaty, namely its elaborate compliance system. The core of this system are various fact-finding procedures, called verification. Any evaluation of the performance of the CWC regime has to address this issue of verification. This paper proposes to do so in a comparative perspective, i.e. analyse CWC verification together with other compliance systems in the field of arms control and disarmament. There is an even broader perspective behind this approach as compliance systems are nowadays an important part of other treaty regimes as well, in particular in the field of international environmental law. Modern procedures to ensure compliance with international law owe their progress mainly to two fields: international environmental law and the law of arms control and disarmament. Although the safeguards system developed under the NPT has in many respects set the example, it is the CWC with its comprehensive verification approach which has established the standards, at least in the field of arms control, but perhaps also in other fields. The arms control verification systems which have been negotiated but not put into practice (the BWC Verification Protocol – not adopted; the Comprehensive Test Ban Treaty [CTBT] – not ratified) clearly owe very much to the CWC system, despite all the differences which will be addressed. This paper tries to analyse the design of this system as a tool to deal with security concerns.

The CWC establishes verification systems in relation to four different obligations, namely the obligation to:

- to destroy chemical weapons in the possession of a country;
- to destroy abandoned chemical weapons;
- to destroy chemical weapons production facilities;
- to ensure that toxic chemicals and their precursors are only used for purposes not prohibited by the Convention, i.e. are not diverted to weapons purposes.

The first three obligations are disarmament obligations. The latter one is an arms control obligation, it is designed to prevent new armaments. It is in particular that latter aspect which invites a comparison with other treaty regimes. The other treaties to be considered are the NPT, the BWC (including its Draft Verification Protocol) and the CTBT. The NPT and the CTBT are arms control, not disarmament treaties. The BWC has originally been, like the CWC which was adopted much later, a combined disarmament and arms control treaty. But the negotiated verification system only addresses the arms control aspect.

A basic difference between the four treaty regimes is that the NPT, the CWC and the CTBT establish an elaborate compliance system, while the BWC as it stands just provides for a complaint to the Security Council. While the compliance system of the NPT, the CWC and the CTBT could also end with the Security Council, seizing the Council is only a means of last resort. It is preceded by an elaborate fact-finding system which normally would make recourse to the Council unnecessary. As to the BWC, the creation of such a system has been rendered impossible by the adamant resistance of the U.S. against a draft Verification Protocol which was very close to being adopted by the Fifth Review Conference in 2001/2002. Nevertheless, the provisions of the draft Protocol will be included in the following comparative analysis of the design arms control mechanisms.



## 2. The quest for efficiency: the reliability of measures to ensure compliance

In order to evaluate the verification systems in question, it is useful to recall the fundamental conflict of interest which they have to solve. There is a fundamental contradiction between the States' interests. On the one hand, the system must be reliable in order to provide security. Thus, it must be possible to ascertain all facts relevant in respect of compliance. This requires a certain intrusiveness of the system. On the other hand, States have interests in not being exposed to intrusive scrutiny. At least some of these interests are legitimate. They start with the safety of the processes where relevant materials are handled, the maintenance of commercial and industrial secrets and end with military security interests. These conflicting interests must be balanced in the design of the fact-finding procedures.

The major elements of this balance will be described in the following section.

The legal basis for the fact-finding procedures are somewhat different. The NPT (Art. III) only provides for a duty of the non-nuclear weapons states (NNWS) to conclude an agreement with the IAEA for the purpose of verifying their compliance with the treaty obligation. Although the IAEA already conducted some supervision of nuclear activities before the conclusion of the NPT based on guidelines published in the Information Circular (INFCIRC) 66/Rev.2, a new system was designed for the safeguards under the NPT in the form of a model agreement (INFCIRC 153). The latter system was developed in a substantial way through a Model Additional Protocol in 1997. These model agreements do shape the system, but the legal basis for each state remains the individual bilateral agreement. In the case of the CWC and of the CTBT, on the other hand, the essential content of the verification system is regulated in the multilateral treaty itself and in its annexes. The same would apply for the BWC Verification Protocol.

## 3. The accommodation of conflicting interests in compliance regimes: intrusiveness v. secrecy

The balance between the interests just described is reflected in the design, i.e. in a number of details of the inspection regimes. They are all different. It has to be recalled that the content of any verification system first depends on the content of the relevant obligation. The CTBT relates to a particular activity, namely explosions which may constitute a nuclear weapons test. This has a definite impact on the design of the verification system. The other three regimes are rather concerned with diverting materials or facilities from a legitimate civilian to a prohibited military use. But as the materials and facilities are different, the verification systems must also be different.

For obvious practical reasons, the CTBT can to a large extent rely on a non-intrusive verification method, which is long-distance monitoring, e.g. through the collection of seismic data. The other systems essentially rely on on-site verification.

In this respect, one basic distinction is the difference between routine inspections on the one hand and ad hoc (challenge) inspections on the other. In respect of the former, the general framework of the inspections is known beforehand. It is thus relatively easy to design a sophisticated system drawing a fine balance. That being so, the basic problem of a system limited to routine inspections is what happens in those facilities which are outside the scope of these inspections. The NPT, the CWC and the BWC Verification Protocol use routine inspections, the CTBT does not. It only provides for ad hoc on-site inspections.

There are four key elements in the verification regimes which are crucial for the balance of interests:

- scope of access;
- scope of fact-finding



- confidentiality;
- reactions to stated or alleged violations.

As to the first element, the controlled access, it is essential that on-site verification activities are possible only in relation to certain defined places. It is only at these places that the State is subject to the intrusive control of on site inspections. As to the scope of fact-finding, the essential point is that information relevant for the purpose of the verification process is targeted, but only to the extent that it is really necessary. That information must not become known to persons outside the circle of those who really need to know. This has to be ensured by appropriate guarantees. The fact-finding ends with a statement of facts by the inspecting body. The question what happens if that statement points to some irregularity is the most delicate one in the system.

### 3.1 Routine inspections

#### 3.1.1 Controlling access

##### 3.1.1.1 Declarations

The routine verification process of the CWC is designed to find out whether certain chemicals which have a potential of being used for weapons purposes (but which also have peaceful applications) are diverted from civilian to forbidden military uses. For this purpose, the States are obliged to declare all facilities where specific chemicals are handled in specific quantities. It is in relation to these sites that routine verification takes place. This gives the State a certain factual control over what is subject to the verification process and what not, and it makes the sites to be inspected known beforehand.

The draft BWC Verification Protocol also relies on an elaborate system of declarations. But as the scope of the facilities to be declared is quite extensive, the ensuing verification only covers a selected part of the facilities. There are randomly selected transparency visits, voluntary assistance visits and voluntary clarification visits.

In the case of the NPT safeguards according to INFCIRC 153, the inspections also take place in certain declared facilities at certain strategic points only. After the experience with Iraq and North Korea which had promoted their weapons' programs outside these declared facilities, the declaration duties and the rights of access were expanded in the Additional Protocol. Under certain conditions, a right of access exists even in relation to undeclared facilities.

##### 3.1.1.2 Key data

Another element limiting the verification process is its content. The fact-finding is limited to certain key data. In the case of the CWC, the point of departure for determining what are the key data are lists of chemicals which are known to possess a weapons potential. The routine on site inspections are designed to ascertain the balance (input, consumption, output) of these relevant chemical substances handled in a particular facility. This is thought to be the decisive indicator by which any diversion to prohibited purposes can be detected or excluded.

The concept of the NPT safeguards is based on similar considerations: the diversion of materiel used for peaceful purposes to weapons purposes should be excluded by controlling the materiel balances of the nuclear fuel cycle. This is the core element of the INFCIRC 153 verification system. As it became clear that the assumption underlying the system, i.e. that the verification of materiel balance sheets was



reliable enough as an indicator of compliance, was not quite true, the scope of fact-finding was substantially expanded by the Additional Protocol.

One of the difficult problems of the BWC is the fact that the relevant materials are not really known. Technologically, the field of biological warfare is much more open to new developments. Nevertheless, the draft BWC Protocol defines controlled substances and facilities in a very elaborate way.

### 3.1.2 Limited publicity

The process of verification is strictly confidential. Confidentiality is indeed a crucial issue of all verification systems. As a matter of principle, the data remain in the Secretariat which is obliged to guarantee their confidentiality.

### 3.1.3 Reactions

The CWC and NPT verification systems are in a way designed as a self-fulfilling prophecy: their very existence should induce States to comply and not to cheat. The fact that indeed on site inspections are performed considerably increases the political cost of non-compliance as the possibility to pass through unnoticed decreases. Nevertheless, the issue of reactions to non-compliance remains a serious one.

The path from the verification system to reaction to non-compliance is somewhat different under the different treaty regimes.

Under the CWC, the inspections are a task of the Technical Secretariat (TS). The results, in the absence of any general reporting duties, thus remain within the ambit of the Secretariat. Where the TS, however, has, as a result of the verification activities, "doubts, ambiguities or uncertainties about compliance", it shall inform the Executive Council (EC). The EC, then, may inter alia "request the State Party to take measures to redress the situation". If this request is not met, it may, inter alia, bring the matter to the attention of the Conference of the States Parties (CSP). The CSP shall "take the necessary measure to ensure compliance" with the Convention. For that purpose, the CSP has three options:

- It may suspend the State's "rights and privileges under this Convention";
- It may "recommend" "collective measures ... in conformity with international law";
- It may bring the issue "to the attention of" the UNGA and the UNSC.

What the GA and/or the SC can do is a matter of their general powers, it is not determined by the CWC. All in all, this is not really a tough looking system of enforcement, except for the fact that behind all this, there is the Security Council entitled to take enforcement action under the Charter.

In the case of the NPT, the technical evaluation of the information received through the verification process is performed by the Secretariat. If a positive finding of compliance by the Secretariat is not possible, the Director General reports to the Board of Governors. The latter may request the state, by a binding decision, to remedy the situation. In the case of persistent non-compliance, the Board of Governors, according to Art. XIII.C of the IAEA Statute,

"shall report the non-compliance to all members and to the Security Council and General Assembly of the United Nations ..."

As in the case of the CWC, their powers concerning further action depend on the Charter of the United Nations.



### 3.2 Challenge inspections

The possibility of challenge inspections, i.e. on site inspections performed on the request of a State which doubts whether another State complies with its obligations, exists in the case of the CWC the BWC draft Protocol and the CTBT. Under the NPT, their role is to a certain extent fulfilled by special inspections which may, after consultations between the Secretariat and the State concerned, be decided by the Board of Governors.

#### 3.2.1 The obligation to submit to challenge inspections

Under the CWC and the CTBT, the obligation to submit to challenge inspections is rather strict. Under the CWC, there is only a limited control against abuse exercised by the Executive Council. Under the CTBT, the consideration of the Executive council in admitting a request is a rather formal one. In the case of the BWC draft Protocol, the screening of a request for an "investigation" is more complex.

#### 3.2.2 Measures of protection

On the other hand, the State which is subject to these inspections may take certain measure to protect data. The rules concerning access to the inspected sites are very detailed. The inspected State may limit access in certain cases (managed access) (Part X of the Verification Annex, nos. 46 et seq). A similar regime applies to investigations pursuant to the CTBT and the BWC draft Protocol.

#### 3.2.3 Limited publicity

As in the case of routine inspections, the process is strictly confidential.

#### 3.2.4 Reactions

The challenge inspection under the CWC ends with the final report of the inspection team which goes to the EC. The Convention does not say that the EC has the formal power to state in any binding way whether there is compliance or not. Where it "reaches the conclusion ... that further action may be necessary ... it may take the appropriate measures to redress the situation and to ensure compliance with this Convention". The following steps are the same as in the case of routine inspections.

In this respect, the systems established by the CTBT and the BWC draft Protocol are very similar.

### 3.3 The special case of Iraq

In contradistinction to the treaty regimes just described, the inspection system imposed upon Iraq by the armistice resolution of the Security Council in 1991 was unlimited in law, limited in practice only by the lack of co-operation of the "host" State. After many had assumed that it was a failure and that Iraq still had weapons of mass destruction and a nuclear weapons programme, it was found out that the system was indeed effective and had discovered everything there was.

The supervision system was established and modified by a series of UNSC resolutions, beginning with resolution 687 (1991), and then continued in particular by resolutions 1284 (1999) and 1441 (2002). The legal basis for these resolutions is Art. 41 (non-military enforcement measures), based on the



assumption that the suspected presence of WMD in the possession of Iraq constituted a threat to the peace.

### 3.4 Evaluation

As to the treaty regimes, they serve two different functions. The first one is verification as a means of confidence building. Both the CTBT and the BWC draft Protocol provide for particular confidence building measures in connection with verification. Participation in the system instils confidence and gives assurances of security. In this respect, the systems can be considered as successful. The CWC system works quietly and smoothly, the problems being in details, not in fundamental issues. The safeguards system of the NPT covers all NNWS. It is significant for the acceptance of the system that Brazil, Argentina and South Africa have joined it after having renounced to their nuclear option. The members of the former Soviet Union, i.e. of a NWS, also gave up nuclear armament and joined the NPT as NNWS. This would not have been possible had the safeguards system not fulfilled its confidence building function, at least grosso modo. The question mark thus left brings us to the second function.

The second function is the prevention of cheating. In the light of the compromise character of the systems which has been stressed above, one could not expect them to be absolutely fool-proof. There have been two cases of cheating – one can say too much and conclude that the NPT safeguards system has not been successful enough. North Korea started cheating while it still was a party to the NPT. Iraq cheated, too, and for a while successfully. It is only after the general Security Council verification system was imposed on Iraq that the programme had to be discontinued. This shows the pros and cons of the current situation: the existing verification systems are no absolute guarantee against cheating, but the establishment of a system as intrusive as the measures against Iraq is completely unacceptable as a general principle.

### 4. Conclusions

How effective are the legal restraints on unlawful armaments and in particular on the proliferation of weapons of mass destruction? The answer seems to be the usual optimism/pessimism paradigm: Is the glass half full or half empty?

The C-weapons disarmament and arms control system seems to be in a relatively stable condition. The safe destruction of the existing stocks proceeds, not without problems, but it works. The inspection system designed to prevent diversion of chemical substances from peaceful to military purposes has started functioning. No major problems are reported.

The B-weapons system, on the other hand, for the time being relies exclusively on the principle of hope. In the absence of anything like a serious system to ensure compliance, the treaty remains symbolic rather than a real factor restraining proliferation.

The NPT is a doubtful design. One may conclude that it has not contained the circle of nuclear powers, but restrained its growth. Although it is one of the multilateral treaties enjoying the major participation, it lacks the necessary universality because of the factual importance of the absentees. Its compliance system has worked reasonably well, but timely discovery of non-compliance has not always been possible. The problem of governments pursuing a nuclear option remains and may even become more acute. And whether the treaty can really prevent nuclear weapons from getting into private hands also remains to be seen. The fact that the NPT Review Conference held in 2005 was unable to take any substantive decision on the various problems of the NPT shows that this treaty regime is in crisis.



Even when and to the extent that verification system work, reaction to non-compliance or to armament by non-participants remains an open issue. Legally speaking, it is in the hands of the Security Council – with all the problems that entails. The unilateral option has also been used, and it remains a threat in the background.

The CWC in a way still stands alone as a model. It creates a non-discriminatory disarmament regime (a neglected distant goal of the NPT) strictly controlled by an on-site verification system, and an arms control measures equally under strict on-site control using both routine and ad hoc inspections. And the system works, despite the technical difficulties and the transaction costs involved.



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### THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION: ASSESSMENT AND PERSPECTIVES

ROME, 19 APRIL 2007

*Palazzo Rospigliosi  
Via XXIV Maggio, 43*

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PRESENTATION

by

**Daniel Nord**

*Special thanks to Green Cross Italia  
for contributing to the conference*



Ladies and Gentlemen, distinguished guests and delegates. On behalf of the Stockholm International Peace Research Institute – SIPRI – I would like to thank the organizers for arranging this meeting and providing me with the opportunity for making this statement. The title of the statement is slightly misleading, “WMD – still a dangerous threat” indicates that I will cover all types of WMD and analyze the situation and give possible recommendations. However, given the fact that this session is specifically about the CWC and since Dr Hans Blix and other participants will deal with the broader WMD picture later this day, I will instead focus on the CWC.

SIPRI of course attaches great importance to the CWC. We believe that multilateral arms control and disarmament regimes have a useful and necessary role in the international security environment. The continued active and constructive engagement by States Parties is imperative in order to ensure the treaty's continued relevance and effective implementation in future.

We are now not only 10 years into the treaty's existence, but also only one year from the Second Review Conference and this is therefore an excellent moment to try to look at the challenges ahead and what should be done to keep the CWC relevant in the future.

Before going into the challenges and the recommendations, allow me a few brief observations:

First, every CWC issue is informed by political considerations and even technical and scientific points are affected by them.

Second, CWC issues are generally informed by the cost, scope and level of intrusiveness that the States Parties believe are necessary.

Third, all CWC implementation issues have, as a rule, been quite extensively considered since at least the time of the 1993-97 Preparatory Commission period.

If, we go back to the first observation – all CWC issues being informed by political considerations, this is not necessarily a bad thing, since even some seemingly purely technical questions, such as whether a scientific distinction can be drawn between chemical, and biological and biologically mediated processes, actually may have significant political and financial implications.

At the same time, sometimes it appears that issues are politicized for all the wrong reasons and the implementation and development of the treaty is hindered. How do we overcome this challenge?

If States Parties could devise a mechanism whereby parties agree to consider a basket of selected, operational-level matters that are more of an administrative, technical or scientific nature, rather than of a political nature in a manner which does not necessitate consensus, they would save the organization and themselves some valuable time and resources and help making the treaty regime more cost effective and more effective in terms of verification and compliance.

SIPRI proposed this at the 2003 First Review Conference but the recommendation is still a valid point.

Possible items in such a basket could include:

1. the collection and reporting methodologies for Aggregate National Data, and
2. final agreement on low concentration thresholds.

Another challenge will be what to do once one of the main goals of the treaty, the eradication of existing chemical weapons, will have been accomplished. It remains to be seen if the USA and Russia will meet the deadlines set for destruction, but there is no doubt that the destruction process is proceeding and that the end goal will be reached, hopefully before the Third Review Conference. When that happens there will have to be a shift of the Organisation's full focus to maintaining the ban and



assuring that chemical weapons are not produced again. At the same time, to be absolutely honest, we must also recognize that chemical weapons is not put on the highest place by states when assessing threats from WMD and therefore the resources – political, financial and technical, allocated to this will be lower, than compared with resources allocated to meet the threat from proliferation of nuclear weapons.

So, how to ensure that the treaty is relevant and the organization continues to be effective

A) Consider whether and how to develop institutional mechanisms for using open-source information to support verification activities. The OPCW is moving to a position where the IAEA was in the 1980s and early 1990s. It is dependent on what states say, it may not officially take any real initiatives with regard to the on going verification (although, the Director could of course informally decide to carry out an inspection at a specific facility). Some of you may say that this goes counter to the first observation and that it will not be politically possible to do this, but if it is part of an effort to streamline verification of non-production of chemical weapons by the chemical industry, then it would mean less work for the industry, for states parties and this a financial gain (and I might add, a more cost efficient organization), i.e. would be in line with the second observation.

B) Consider extending the 7-year tenure exemption to those with specialized technical or scientific expertise, particularly those in the Verification Division and the Inspectorate Division. If the organization lose this expertise in the manner possible, or even probable, now, then a core function of the OPCW will be weakened. The main reason behind the 7-tenure rule is to make sure that an international organization is not turned into a “safe haven” for staff and that all organizations will be better from fresh blood being injected every now and then. However, to implement the rule in a way which endanger the very reason why the organization was set up is counter productive. Currently the exemption exists for local staff and translators and interpreters and we think it needs to be extended.

C) The current development in chemical and also biological research and industry is very impressing. However, this also means that the convention, or the implementation of the convention, will need to develop to keep abreast of developments.

Here the GPC is of critical importance with regard to the expansion of scope of the CWC to scientific and technological innovation, and states should consider the political and technical circumstances surrounding the desirability of modifying the Annex on Chemicals partly in order to try to better operationalize the GPC. Also to ensure that the norm is accompanied by suitable legislation on national level, including criminal legislation, will be important.

With one year left for the Second Review Conference, what needs to be done in preparation:

The TS should prepare a document for the Conference that indicates the extent to which the final documents agreed at the First Review Conference have been implemented. This should also be a frank analysis of the underlying reasons for how this has been achieved or not achieved. In view of the fact that the TS will have difficulties in producing certain types of analysis, all of the constituent organs of the OPCW should support the OPCW Academic Forum and OPCW Industry and Protection Forum and any other similar processes to help fill this gap. This implies that individual researchers and research institutions should be allowed access to relevant information and SIPRI would be more than willing to be part of such an exercise.

The last observation indicated that much of the necessary expertise and knowledge is ready available. Now it is up to State Parties to meet their responsibility to ensure the continued relevance of the CWC.

With that I would like to end my statement and thank you for your attention.



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PRESENTATION  
by  
**Rein Müllerson\***

*Special thanks to Green Cross Italia  
for contributing to the conference*



*Provisional version - not for quotation*

## **THE NON-RESPECT OF THE DEADLINE FOR THE CHEMICAL WEAPONS DESTRUCTION AND ITS CONSEQUENCE FOR THE CREDIBILITY OF CWC AND THE OTHER DISARMAMENT TREATIES.**

The Convention on the Prohibition of the development, Production, Stockpiling and Use of Chemical Weapons and their Destruction (CWC) of 1993 that entered into force in 1997, i. e. exactly ten years ago, is one of the most, if not the most, advanced, mature and successful of international disarmament treaties.<sup>1</sup> Before turning to challenges and problems related to delays in the process of destruction of CW arsenals, which is the topic of my presentation, it is necessary (and not only because today we are celebrating the 10<sup>th</sup> anniversary of the CWC but also due to the need to strike a right balance) to mention, if only briefly, some of the achievements that indeed are quite impressive.

According to the OPCW (Organization for the Prohibition of Chemical Weapons) 100% of the declared chemical weapons production facilities have been inactivated (this, of course, does not mean that there may not be any undeclared facilities or sites). These declared facilities are all, as the OPCW says, subject to a verification regime of unprecedented stringency. 100% of the declared chemical weapons stockpiles have been inventoried and verified. Almost 90%, or 58, of the 65 chemical weapons production facilities declared to the Organization by 12 States Parties, have been either destroyed or converted for peaceful purposes. Over 30% of the 8.6 million chemical munitions and containers covered by the Convention have also been verifiably destroyed. Almost 1/4 of the world's declared stockpiles of approximately 71,000 metric tonnes of chemical agents have been verifiably destroyed.<sup>2</sup>

However, notwithstanding these and other achievements (e.g., the adoption of national laws and programmes in accordance with the Convention-requirements), today the CWC nevertheless faces several challenges. The CWC has, in principle, two main pillars – the disarmament or destruction pillar, under which states party to the Convention have to declare and destroy their CW, and the non-proliferation pillar that should prevent the emergence of new weapons. These pillars are covered by a single roof, which is verification carried out by the OPCW. These pillars are interlinked, inter alia, through to this common roof. If one pillar (say, the disarmament one) faces problems and therefore calls for more attention and resources, this means that the other pillar (the non-proliferation one) receives less attention and also fewer of the always-limited resources. As the Report of the Vertic, a British verification NGO, has remarked, 'not only are existing chemical weapons stockpiles being destroyed at a much slower rate than required by the treaty, but verification has been skewed towards monitoring this process. This has been at the expense of verifying that illicit production of new chemical weapons is not occurring, including in the chemical industry'.<sup>3</sup>

The CWC member states must declare chemical weapons stockpiles and production facilities, relevant chemical industry facilities, and other related information such as chemical exports and imports. According to the Convention member states that possess CW and production facilities must destroy them by April 2007. There are six states party to the CWC – Albania, India, Libya, the Russian Federation, the United States and A State Party (widely known to be South Korea) – that have declared their CW stockpiles. They are considered to be possessor states.

<sup>1</sup> Kim Howells, Minister of State, FCO, stated in March 2007: 'In my view, the convention is one of the most successful disarmament treaties in force today' (10th Anniversary Seminar on the Chemical Weapons Convention 26 March, FCO).

<sup>2</sup> OPCW, The Chemical Weapons Ban: Facts and Figures, 13 April, 2007.

<sup>3</sup> Getting Verification Right. Proposals for Enhancing Implementation of the Chemical Weapons Convention, Vertic, 2002, p. 3.



In addition, 12 parties have declared a total of 65 former chemical weapons production facilities, all of which must be dismantled or converted to peaceful purposes.<sup>4</sup> States Parties that have declared Chemical Weapons Production Facilities (CWPFs) include Bosnia and Herzegovina, China, France, India, the Islamic Republic of Iran, Japan, the Libyan Arab Jamahiriya, the Russian Federation, Serbia, the United Kingdom of Great Britain and Northern Ireland, the United States of America, and A State Party. Of the 65 declared CWPFs, 58 have been certified as destroyed or converted for peaceful purposes.

During the negotiation of the CWC it was clear that most of the chemical weapons to be destroyed would be the Cold War stocks of the United States and the former Soviet Union. US and Russian stockpiles do make up the bulk of the weapons now being destroyed, but other members have also declared holdings of chemical weapons. In 2003, for example, Libya confirmed its intention to give up its Weapons of Mass Destruction and join the OPCW. It disclosed to the British and American Governments quantities of chemical agents and bombs designed to be filled with chemical agents. These weapons are now being destroyed, and their destruction verified, under the terms of the CWC.

Although the US has now destroyed over 40% of its stockpile, and Russia has started to make significant progress towards destroying 20% of its CW arsenal, both face major challenges in meeting the final deadline of 2012. This notwithstanding that many states are working with the Russian Government to help the Russians to destroy weapons at their seven destruction sites. In September 2006 Russia opened near Maradikovsky in the Kirov Region (300 miles NE of Moscow) its third major facility for the destruction of its CW stockpiles, which is the first to destroy nerve agents. Paul Walker, Legacy Program Director at Global Green USA, then commented: "Global Green USA congratulates the Russian Federation on destroying over 2,200 tons of deadly chemical agents over the past four years. The start-up of a third destruction facility this month will now help Russia to accelerate their CW stockpile destruction and potentially meet the April 2007 deadline of the Chemical Weapons Convention for 20% stockpile elimination. However, deadlines must not trump safety and protection of public health, and we urge Russia to be extremely cautious as they move forward with this dangerous process."<sup>5</sup>

Special attention of the organizers of this Conference to the issue of deadlines and extensions may have caused also by the fact that on 8 December 2006 the Conference of the State Parties granted extensions for practically all states that had requested extensions and all of the possessor states had done it. The Conference extended the deadline for A State Party (South Korea) until 31 December 2008; it set 31 December 2009 as the date for completion of the destruction by the Russian Federation of 45% of its Category 1 chemical weapons stockpiles; established for the Libyan Arab Jamahiriya the following dates for the intermediate deadlines for the destruction by of its Category 1 chemical weapons stockpiles: phase 1 (1%), to be completed by 1 May 2010, phase 2 (20%), to be completed by 1 July 2010, and phase 3 (45%), to be completed by 1 November 2010 (on the understanding that, up until 29 April 2007, the Libyan Arab Jamahiriya shall keep the Council informed, at each alternate regular session and with supporting documentation, of the status of its plans to implement its destruction obligations); the Conference also called upon the Libyan Arab Jamahiriya to complete the destruction of its Category 2 chemical weapons as soon as possible, but in any case no later than 31 December 2011; it granted an extension of the deadline by which India must destroy all of its Category 1 chemical weapons stockpiles, subject to the several conditions, including that India complete the destruction of its Category 1 chemical weapons no later than 28 April 2009; the Conference established 29 April 2012 as the date by which the United States of America must destroy all of its Category 1

<sup>4</sup> The 12 CWC states-parties that have declared former chemical weapons production facilities are Bosnia and Herzegovina, China, France, India, Iran, Japan, Libya, the Russian Federation, Serbia, South Korea, the United Kingdom, and the United States. Of 65 declared former production facilities, 57 have been certified as destroyed or converted to civilian use.

<sup>5</sup> 'Global Green USA Welcomes Start-up of New Russian Chemical Weapons Destruction Facility, Urges Safety and Transparency, News Center, CommonDreams.org, September 7, 2006.



chemical weapons, subject to certain conditions; it set 29 April 2012 as the date for completion of the destruction by the Russian Federation of 100% of its chemical weapons stockpiles; the Conference granted Albania extensions of the phase 1, 2, and 3 intermediate deadlines for the destruction of its Category 1 chemical weapons, and established the following new interim deadlines for the destruction by Albania of its Category 1 chemical weapons: phase 1 (1%), to be completed by 15 January 2007; phase 2 (20%), to be completed by 31 January 2007; and phase 3 (45%), to be completed by 28 February 2007.

What are the reasons for delays? Insufficient financing has caused delays with the Russian CW destruction programme, especially at the earlier stages of its implementation. To a great extent they were specifically related to the 1998 financial crises in Russia. Financial woes have been a major obstacle for Russia. As the title 'It is cheaper to produce than to destroy'<sup>6</sup> of an article by two Russian experts indicates, destruction, especially destruction which is environmentally safe, verifiable and without delays (and these are all interrelated and important conditions), of CW stockpiles is indeed a very expensive business. The country has redesigned its chemical weapons destruction programme in the hope of destroying its entire 40,000-metric-ton stockpile by April 2012. By April 2006, however, it had destroyed less than three percent. Russian officials have said they will need international financial assistance to meet their goal. Yet, even with international aid, it is unclear whether Russia will be able to destroy its stockpiles by the 2012 deadline. Today destruction of CW arsenals looks like a hangover that today's generation is suffering after the Cold War arms race led by the US and the USSR. Of course, earlier generations had made their own contribution.

Washington also faces its share of setbacks that include financial constraints, political resistance, as well as technical challenges. Like Russia, the United States seems unlikely to meet the new extended deadline. One of the most pessimistic estimates is that the United States will be not be able to get rid of the its CW arsenal, which still totals some 28,000 metric tons, until 2023. To date, destruction has been completed at only two of seven storage depots. Efforts to destroy the chemical weapons stockpiles have been stymied by technical problems, such as unanticipated heavy-metal contamination and fires at destruction sites. Political resistance at the state and local level also has slowed progress, with local communities raising concerns about health and safety. Finally, limited funding has contributed to slowing down of destruction at US Army CW disposal sites in Pueblo, Colorado, and Blue Grass, Kentucky.

Taking this all into account, the Conference of Member States of the Organization for the Prohibition of Chemical Weapons in December 2006 in The Hague granted both the United States and Russia a five-year extension to a 2007 deadline for destroying their chemical weapons stockpiles. However, it is widely believed that both countries will likely need even more time and therefore one cannot exclude further requests for deadline extension.

At the beginning of my presentation I already mentioned one of the of negative consequences of delays in the destruction of existing CW arsenals – other purposes of the CWC, such as verifying that new weapons are not produced, new facilities opened, receive less attention and resources. Another threat that delays of destruction of stockpiles of CW increases is the danger that terrorists may get hold of some of the most deadly weapons that today are possessed only by some states. Recent developments in several parts of the world manifest that terrorists of different kinds actively seek and do not hesitate to use chemical weapons, at least until nuclear weapons become available. Finally, delays of destruction of CW may increase threats to environment; though, it is necessary to acknowledge that environmental concerns are one of the factors that cause at least some of the delays. In that respect too, the two pillars of the CWC are interlinked. It has to be emphasized

<sup>6</sup> O. Lisov, N. Krasov, 'It is cheaper to produce than to destroy', *Military-Political Problems. Observer* (in Russian), 2003, No. 11.



that though environmental concerns are one of the factors that cause some delays in destruction of CW, they are weightier than deadlines. Although keeping deadlines is important, safety, both human and environmental, should prevail over the need to meet deadlines.

So, how to be with deadlines and with potential need to consider further extensions?

When the text of the CWC was negotiated and then in 1993 adopted, the state parties already envisaged that there may be difficulties with meeting the deadlines established by the Convention. Therefore, in Annex on Implementation and Verification (Verification Annex, Part IV) they provided that 'if a State Party, due to exceptional circumstances beyond its control, believes that it cannot achieve the level of destruction specified for Phase 1, Phase 2 or Phase 3 of the order of destruction of Category 1 chemical weapons, it may propose changes in those levels' (para. 21) and that 'if a State Party believes that it will be unable to ensure the destruction of all Category 1 chemical weapons not later than 10 years after the entry into force this Convention, it may submit a request to the Executive Council for an extension of the deadline for completing the destruction of such chemical weapons' (para. 24). Notwithstanding these escape clauses, today it is clear that initial deadlines for the destruction of CW arsenals of all states that possessed them and especially those of the two biggest possessor states – the Russian Federation and the United States, foreseen in the 1990s, were unrealistic and expectations were too high.

Should the Conference of the State Parties or individual states parties take any measures against those who will not keep these new extended deadlines? This is as much legal as it is a political question. Article XII of the CWC provides for measures to ensure compliance, including sanctions. In cases of serious damage to the object and purpose of the Convention or in cases of particular gravity of breaches of the Convention the Conference of the State Parties may bring the issue to the attention of the UN General Assembly or the Security Council.

Under international law measures or sanctions should depend on the nature of non-compliance, i.e. the principle of proportionality applies, though one cannot completely exclude even Chapter VII sanctions in cases when the Security Council finds that non-compliance constitutes a threat to international peace and security. However, such extreme measures are hardly practicable in cases of a state missing deadlines, even if such a miss were due to the state not making all the efforts to meet the deadline. Something else has to be present, e.g., *dolus malus* to hide and keep parts of one's chemical arsenal.

In contradistinction to nuclear weapons CW have a stigma; it is difficult to imagine a state, whether we call it a part of the axis of evil or a pariah state, which would proudly declare its chemical weapons programmes. The West has succeeded in outlawing 'poor man's WMD', while trying to keep up respect for 'rich man's weapons' – nuclear weapons. This may not be very nice but such a general revulsion towards CW as poisons, treacherous means of warfare means that the implementation of the CWC, including the non-observance of destruction deadlines, especially if such non-observance is due to the lack of political will, is dependent on the transparency of the process of implementation of the CWC. This means that one has to resort to the force of public opinion to move towards a non-chemical-weapons world. Cooperation and engagement are more effective means of achieving the objectives of the Convention than sanctions; this may be true in many other areas of international law and politics and it's certainly true in creating a CW-free world.

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### THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION: ASSESSMENT AND PERSPECTIVES

**ROME, 19 APRIL 2007**

*Palazzo Rospigliosi  
Via XXIV Maggio, 43*

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PRESENTATION

by

**A. Kelle**

*Special thanks to Green Cross Italia  
for contributing to the conference*



*Provisional version - not for quotation*

## FROM PAPER TO REALITY: VERIFICATION AND COST ISSUES

### Verification Put to Paper – CWC Provisions on Disarmament and Its Verification

The destruction of all chemical weapons (CW) stockpiles as well as CW production facilities are among the key obligations contained in the Chemical Weapons Convention (CWC). They are mandated by Article I, paragraph 2 and paragraph 4, respectively. In order to allow for the verification of these destruction activities, Article III, paragraph 1 (a) of the CWC requires CW possessor states to *inter alia* declare their CW stockpiles and provide a general plan for destruction. Similar provisions apply to CW production facilities.

Articles IV and V, together with Parts IV (a) and V of the Verification Annex, deal systematically with the rules applying and procedures to be followed by states parties possessing either CW or CW production facilities. Chemical weapons stockpiles must be destroyed and CWPf's must be either destroyed or converted to be used for activities not prohibited under the Convention. Importantly, Articles IV and V provide for on-site inspection and monitoring of all locations at which chemical weapons are stored or destroyed. This provision mandates the OPCW to be present whenever and wherever chemical weapons are being destroyed. Furthermore, the movement and storage of chemical weapons cannot be undertaken without informing the Organization.

According to Article IV, paragraph 6, CW must be destroyed within 10 years of the entry into force (EIF) of the Convention—by 29 April 2007—and this destruction must begin within two years of the Convention entering into force for a given state party. Destruction or conversion activities at CW production facilities must begin within one year of the Convention entering into force for a state party, and be completed within 10 years. On the way towards the total destruction of all CW holdings, intermediate destruction targets are established in Part IV (a), paragraph 17 of the Verification Annex to be achieved three, five and seven years after the CWC's EIF. In case a state party is unable to meet either any of the intermediate destruction deadlines or the 10-year deadline for complete CW destruction, the Verification Annex in Part IV (a), paragraphs 20 to 23 and 24 to 28, respectively, spells out the procedures to be followed for deciding on an extension of the original CW destruction deadlines. In case of complete CW destruction a maximum extension of up to five years—until April 2012—can be granted by the Conference of States Parties of the Organisation for the Prohibition of Chemical Weapons (OPCW).

Lastly, Article IV, paragraph 16 and Article V, paragraph 19 stipulate that the cost of destruction of both CW and CW production facilities, as well as monitoring and inspection must be met by the CW possessor state itself. This is accomplished in part by reimbursing the OPCW for the costs incurred during on-site monitoring and inspections.

### CW Destruction and Its Verification in Practice

*Teething Problems: Just What is an Inspector's Salary ...*

The exact meaning of this latter provision of the Verification Annex was contested during the initial phase of CWC implementation. The bone of contention in this context was the question what



exactly constitutes an inspector's salary. Notwithstanding a provisional compromise that was found during the first CSP in May 1997 in the absence of the Russian Federation, the debate on the reimbursable part of an inspector's salary was kept alive during the intersessional period.<sup>1</sup> In order to overcome the impasse during the second session of the Conference, a temporary solution for the 1998 OPCW budget was negotiated - leaving an ever wider margin for Member States' interpretations.<sup>2</sup>

What became increasingly clear during these debates was the desire of the big CW possessor states to keep the reimbursable part of verification costs for the destruction of CW and CW production facilities as small as possible. Thus, after the second session of the CSP there was considerable concern that the wording agreed to might allow an interpretation by the Russian government that salaries of inspectors do not have to be reimbursed and only the "operational" verification cost would have to be covered. This Russian approach to cost of verification was fully consistent with a distinction introduced by the then Soviet representative to the CD during the negotiation of the CWC. In a statement the budget of the future organization was divided in two categories: administrative expenses which cover personnel, administrative activities, meetings, and the like. Operational expenses, to the contrary are those "expenses required for systematic international verification *on the territory of that State party*".<sup>3</sup> According to the compromise that was eventually reached during the ninth meeting of the Executive Council "a daily salary will be calculated by dividing an annual base salary by 365 days;" in competing calculation schemes it was proposed to divide the annual base salary by smaller numbers of actual working days or even working days minus vacation periods and the like. Yet, since these alternative models for calculating the daily salary of an inspector would have resulted in higher figures for reimbursements to the Organization they proved unacceptable to the larger CW possessor states. In a similar vein the Executive Council recommended to the Third Session of the CSP "to include reimbursement for the involvement of members of an inspection team in inspection planning before and inspection report generation after an inspection."<sup>4</sup> According to the compromise eventually reached, for CW storage and production facilities the inspected states parties will have to reimburse 10 inspector-days in addition to the duration of the inspection and 8 inspector-days for CW destruction facilities. Furthermore, the Council recommended that the CSP task the Technical Secretariat to apply and develop further cost saving methods in its verification activities under Articles IV and V.<sup>5</sup>

In sum, these debates surrounding the organization's miscellaneous income, with particular reference to cost of verification under Articles IV and V of the Convention was occupying the first three Sessions of the Conference of States Parties, the Executive Council and a facilitator in between these CSP sessions. The fact that CW possessor states - from the point of view of other member states - were on the verge of violating the "possessor pays"-principle enshrined in the Convention in relation to the cost of verification for CW destruction related activities did not prevent both the United States and Russia from attempting to keep the reimbursable part of verification costs as small as possible. The less CW possessor states were willing to pay for verification of their CW-related storage and destruction activities, the bigger was the portion of these costs that had to be covered by all States Parties through the regular budget of the Organisation. With the benefit of hindsight and in relation to the overall

<sup>1</sup> See the decision of the First Session of the Conference of State Parties contained in *Decision. Programme and Budget and Working Capital Fund*, document C-I/DEC.73, The Hague, 23 May 1997.

<sup>2</sup> See the decision of the Second Session of the Conference of State Parties contained in *Decision. Programme and Budget for 1998 and Working Capital Fund*, document C-II/DEC.17, The Hague, 5 December 1997.

<sup>3</sup> See the plenary statement of the Soviet representative Nazarkin, reprinted in Document CD/PV.473, Geneva, 11 August 1988, pp.8-12; quote on p.10, emphasis added.

<sup>4</sup> See the decision of the Executive Council as contained in Document EC-XI/DEC.1 of 4 September 1998.

<sup>5</sup> See the decision of the Third Session of the Conference of State Parties contained in *Decision. Cost of Verification Under Articles IV and V*, document C-III/DEC.8, The Hague, 17 November 1998.



effort required to destroy all CW stockpiles, the figures being discussed in this context are almost negligible.

*Continued Challenges: Growing Numbers, Slipping Deadlines*

Initially four states parties—India, Russia, South Korea, and the United States—declared the possession of CW stockpiles, which were stored at 33 locations in the four countries.<sup>6</sup> These countries have declared a total of nearly 70,000 metric tons of chemical agents and about 8.6 million munitions and containers.<sup>7</sup> Of these 70,000 tons the Russian federation had declared some 40,000 metric tonnes, the US 28,575 metric tons, India around 1,000 metric tons and South Korea around 600 metric tons. In 2003 the number of CW possessor states increased to 5 when Albania declared in April of that year that it had discovered some 16 tons of CW agents on its territory. In early 2004 Libya acceded to the CWC and became the 6<sup>th</sup> CW possessor state when it declared possession of 23.62 tons of CW agents.<sup>8</sup> Due to the late discovery of CW stocks in Albania and the late accession of Libya to the CWC, both states had to apply for an extension of the intermediate destruction deadlines as stipulated in the Verification Annex to the CWC. Such decisions to extend in principle the phase 1, 2, and 3 destruction deadlines were taken by the Conference of States Parties at its Ninth Session in November/December 2004.<sup>9</sup>

Already well before these requests had to be dealt with, because of a delay in commencing the CW destruction process, the Russian Federation was unable to meet the first intermediate deadline for destroying one percent of its highest-risk (Category 1) chemical weapons stocks three years after the CWC's EIF.<sup>10</sup> In November 1999, as permitted under the Convention, Russia asked the Executive Council to extend the intermediate destruction deadline.<sup>11</sup> The Russian Federation argued that although the construction of CW destruction facilities had been impeded by economic difficulties, she intended to meet the next intermediate destruction deadline on 29 April 2002, when 20 percent of the Category 1 chemical weapons had to be destroyed.<sup>12</sup> The Conference of the States Parties, in addition to retaining the 10-year deadline for destruction of the entire stockpile, requested the Russian Federation to submit a revised destruction plan as early as possible. Moscow fulfilled this request in October 2000.<sup>13</sup> In 2001, the Russian government re-assessed its plan for the destruction of its chemical weapons stockpiles. The plan approved by the Russian government in July 2001 included significant changes, intended in part to comply with conditions set down by the U.S. Congress for the reinstatement of U.S. contributions to the Russian destruction programme. In addition, the plan expected completion of the destruction effort in 2012. The new plan was formally presented to the OPCW Executive Council in September 2001, and, in November, Russia submitted the required request for an extension of both the intermediate and final deadlines for the destruction of its Category 1 chemical weapons. Under the plan, 1 percent will be destroyed by 2003, 20 percent by 2007, 45 percent by 2009, and 100 percent by 2012. The request for the extension of the 1 per cent deadline was approved by the Conference of States Parties at its 7<sup>th</sup>

<sup>6</sup> OPCW, *Annual Report 1999*, July 2000, p. 20.

<sup>7</sup> Mills, "Progress in The Hague: Quarterly Review no. 35," p. 13.

<sup>8</sup> See John Hart and Shannon N. Kile, 'Libya's renunciation of nuclear, biological and chemical weapons and ballistic missiles' in *SIPRI Yearbook 2005: Armaments, Disarmament and International Security*, Oxford: Oxford University Press, pp.629-648.

<sup>9</sup> See *Decision. Request by the Libyan Arab Jamahiriya for Extension of the Intermediate Deadlines for the Destruction of Its Category 1 Chemical Weapons Stockpiles*, document C-9/DEC.7, The Hague, 30 November 2004; *Decision. Request by Albania for Extensions of the Intermediate Deadlines for the Destruction of Its Category 1 Chemical Weapons Stockpiles*, document C-9/DEC.8, The Hague, 30 November 2004.

<sup>10</sup> The intermediate deadline is specified in paragraph 17 of Part IV (A) of the Verification Annex to the CWC, Document C-V/DEC/CRP.12, May 2, 2000.

<sup>11</sup> According to paragraph 22 of Part IV (A). See Document C-V/3, p. 11.

<sup>12</sup> *CBW Conventions Bulletin*, no. 46, December 1999, p. 13.

<sup>13</sup> Mills, "Progress in The Hague: Quarterly Review no. 32," p. 9.



Session in November 2002, as was the in principle extension of the 20 per cent intermediate deadline.<sup>14</sup> The revised phase 2 deadline was set for 29 April 2007 by the subsequent 8<sup>th</sup> Session of the Conference of States Parties, which also agreed in principle to extend the 45 and 100 per cent deadlines for destruction of the Russian CW stockpiles.<sup>15</sup> The date for the destruction of 45 per cent of Russian CW stockpiles was set by the 11<sup>th</sup> Session of the Conference of States Parties for 31 December 2009.<sup>16</sup>

It had become clear in the meantime that not only the Russian Federation, but also most other CW possessor states would not be able to meet the April 2007 deadline for the complete destruction of their CW stockpiles. According to one estimate, in late 2006 the US had destroyed somewhat in excess of 40 per cent of its category 1 CW, India around 70 per cent, South Korea more than 80 per cent, and the Russian Federation around 16 per cent. This last figure has been somewhat controversial in so far as it relies on an accounting point at the end of first phase of the destruction process – which is the way Russian authorities prefer to account for their progress in CW destruction – and not at its end point – which would be in line with existing facility agreements. However, there seems to be a consensus emerging that the Russian way of accounting for its CW destruction is acceptable, as this is likely to allow Russia to meet the interim deadline for the destruction of 20 per cent of its category 1 CW on 29 April 2007. It also seems that the Russian willingness to accept verification measures for phase 2 destruction activities has been conducive to reaching this consensus. Destruction in Libya has not yet begun. These delays required the extension of the final destruction deadline for practically all CW possessor states. In the case of India, the extension granted calls for all CW stockpiles to be destroyed by 28 April 2009<sup>17</sup>, for South Korea the CSP set the deadline at 31 December 2008<sup>18</sup>, and for both the Russian Federation and the US the deadline has been set at the latest possible date allowed under the CWC, i.e. 29 April 2012.<sup>19</sup> A similar decision was made for Libya with the deadline set for completion of destruction of its CW arsenal at 31 December 2010. This decision of the Conference also specifies the intermediate deadlines for Libyan CW destruction for earlier in 2010.<sup>20</sup> Practically all of these decisions require the CW possessor states to report every 90 days on the progress made in the destruction process, as well as the continued submission of annual plans of destruction and annual reports on the destruction activities on their territories.

In the case of Albania, which at the end of 2006 had destroyed around 20 per cent of its category 1 CW stockpiles, no extension request had been put forward. Here, completion of the destruction process is expected sometime in May or June 2007. However, as it is the prerogative of the Conference of States Parties to decide on such requests and the next Session of the Conference takes

<sup>14</sup> See *Decision. Request of the Russian Federation for an Extension of the Intermediate and Final Deadlines for the Destruction of its Category 1 Chemical Weapons*, document C-7/DEC.19, The Hague, 11 October 2002.

<sup>15</sup> See *Decision. Extension of the Intermediate and Final Deadlines for the Destruction by the Russian Federation of its Category 1 Chemical Weapons*, document C-8/DEC.13, The Hague, 24 October 2003.

<sup>16</sup> See *Decision. Proposal for a Date for the Completion of Phase 3 of the Destruction by the Russian Federation of its Category 1 Chemical Weapons*, document C-11/DEC.14, The Hague, 8 December 2006.

<sup>17</sup> See *Decision. Request by India for an Extension of the Deadline for Destroying all of its Category 1 Chemical Weapons*, document C-11/DEC.16, The Hague, 8 December 2006.

<sup>18</sup> See *Decision. Request by a State Party for an Extension of the Final Deadline for Destroying all of its Category 1 Chemical Weapons*, document C-11/DEC.12, The Hague, 8 December 2006.

<sup>19</sup> See *Decision. Request by the United States of America for Establishment of a Revised Date for the Final Deadline for Destroying all of its Category 1 Chemical Weapons*, document C-11/DEC.17, and *Decision. Proposal by the Russian Federation on Setting of a Specific Date for Completion of Destruction of its Stockpiles of Category 1 Chemical Weapons*, document C-11/DEC.18, The Hague, 8 December 2006.

<sup>20</sup> For the details see *Decision. Proposal by the Libyan Arab Jamahiriya for the Establishment of Specific Dates for Intermediate Destruction Deadlines, and its Request for an Extension of the Final Deadline for the Destruction of its Category 1 Chemical Weapons*, document C-11/DEC.15, The Hague, 8 December 2006.



place only towards the end of 2007, such a request would have been overtaken by events, i.e. the completion of CW destruction. Instead, Albania has been found to be in technical non-compliance and was tasked by the Executive Council at its 48<sup>th</sup> session in March to redress the situation and report back to the Council meeting at the end of June 2007.

#### **Addressing Challenges of Verification and Cost Issues Related to CW Destruction**

In addition to the CW destruction activities to be undertaken by CW possessor states and the verification activities to be conducted by the OPCW's Technical Secretariat, the Executive Council has been tasked by the Conference of States Parties at its 11<sup>th</sup> Session in December 2006 to conduct additional visits in two of the CW possessor states, i.e. the Russian Federation and the United States. In addition, a number of financial support measures have been undertaken by several CWC states parties in the framework of the so-called G8 Global Partnership. The first of these two sets of activities will be briefly discussed in the following section.

#### *Executive Council Activities 2008 – 2012*

It is noteworthy that the decision taken by the 11<sup>th</sup> Session of the Conference of States Parties to conduct visits by representatives of the Executive Council to CW destruction facilities in Russia and the US, or the construction sites of such destruction facilities, heavily emphasize the obligation of those two CWC states parties to complete the destruction of their category 1 CW stockpiles by 29 April 2012 at the latest. This follows similar reminders contained in the abovementioned decisions to extend the final destruction deadline for the US and Russia to the said date and has to be seen in the context of 1) statements by former high-ranking members of the US government, according to which the destruction of US CW stocks might only be two thirds accomplished by 2012 and take several more years to be completed,<sup>21</sup> and; 2) the fact that the construction of some of the Russian CW destruction facilities is not making the progress that would be required to meet the 2012 deadline. In line with this assessment, the decision stresses the “need for States Parties to take measures to overcome the problems in their chemical weapons destruction programmes”.<sup>22</sup>

It also has to be emphasized that these visits are not part of the regular verification system applied by the OPCW's Technical Secretariat. In contrast, the decision document points out that these “visits to consider progress and efforts to meet an extended deadline established in accordance with the provisions of the Convention” are intended as an “additional transparency and confidence building measure”.<sup>23</sup> It is on the basis of such an understanding that the US and the Russian Federation are offering to host such visits beginning in 2008 with a view to having “each relevant facility ... visited at least once during the extension period.” The details of the visits are to be worked out between the Chair of the Executive Council and the State Party concerned, visits are to be carried out in a way that they do not disrupt the destruction activities or their preparations and should “include discussions with senior representatives of relevant government authorities as identified by the State party hosting the visit”.<sup>24</sup> The decision by the Conference of States Parties furthermore specifies the composition of the visiting group, requests the drafting of a factual report on each visit – on which the State Party hosting the visit is allowed to comment – and addresses the financial implications of the visits.

In sum, this decision sets out to accomplish three goals: first, it serves as an additional reminder to the US and the Russian Federation of their obligation under the Convention to completely destroy

<sup>21</sup> See for example the letter by former US Secretary of Defense Donald Rumsfeld quoted in “Rumsfeld: U.S. will miss chemical weapons disposal deadline”, in *Army Times*, 13 April 2006.

<sup>22</sup> *Decision. Visits by Representatives of the Executive Council*, document C-11/DEC.20, The Hague, 8 December 2006, p.1.

<sup>23</sup> *Ibid.*, p.2

<sup>24</sup> *Ibid.*



their category 1 CW stockpiles by 29 April 2012; second, it allows the OPCW's Executive Council to closely monitor the progress made by these two states in their destruction efforts and thereby to ascertain that all possible efforts are being undertaken to meet the extended deadline. This could thirdly provide the basis for a way out of the dilemma the OPCW will find itself in, should one or both of the States Parties of concern be unable to meet the extended CW destruction deadline in 2012. In such a scenario, and if the remaining time needed to complete the destruction process is measurable in months, not years, this decision and the resulting visits process might serve as the basis for the argument that both the US and Russia have undertaken everything possible to meet the destruction deadline – which can be confirmed by the visits process established – but due to factors beyond their control have been unable to achieve the goal. In such a scenario the state(s) of concern might be found to be in technical non-compliance with the provisions of the CWC and be tasked to redress the situation as quickly as possible.

It needs to be emphasised, though, that this scenario is something most, if not all CWC states parties would like to see avoided. It is for this reason that the monitoring arrangement by the Executive Council has been drawn up in the first place.



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# From Paper to Reality – Verification and Cost Issues

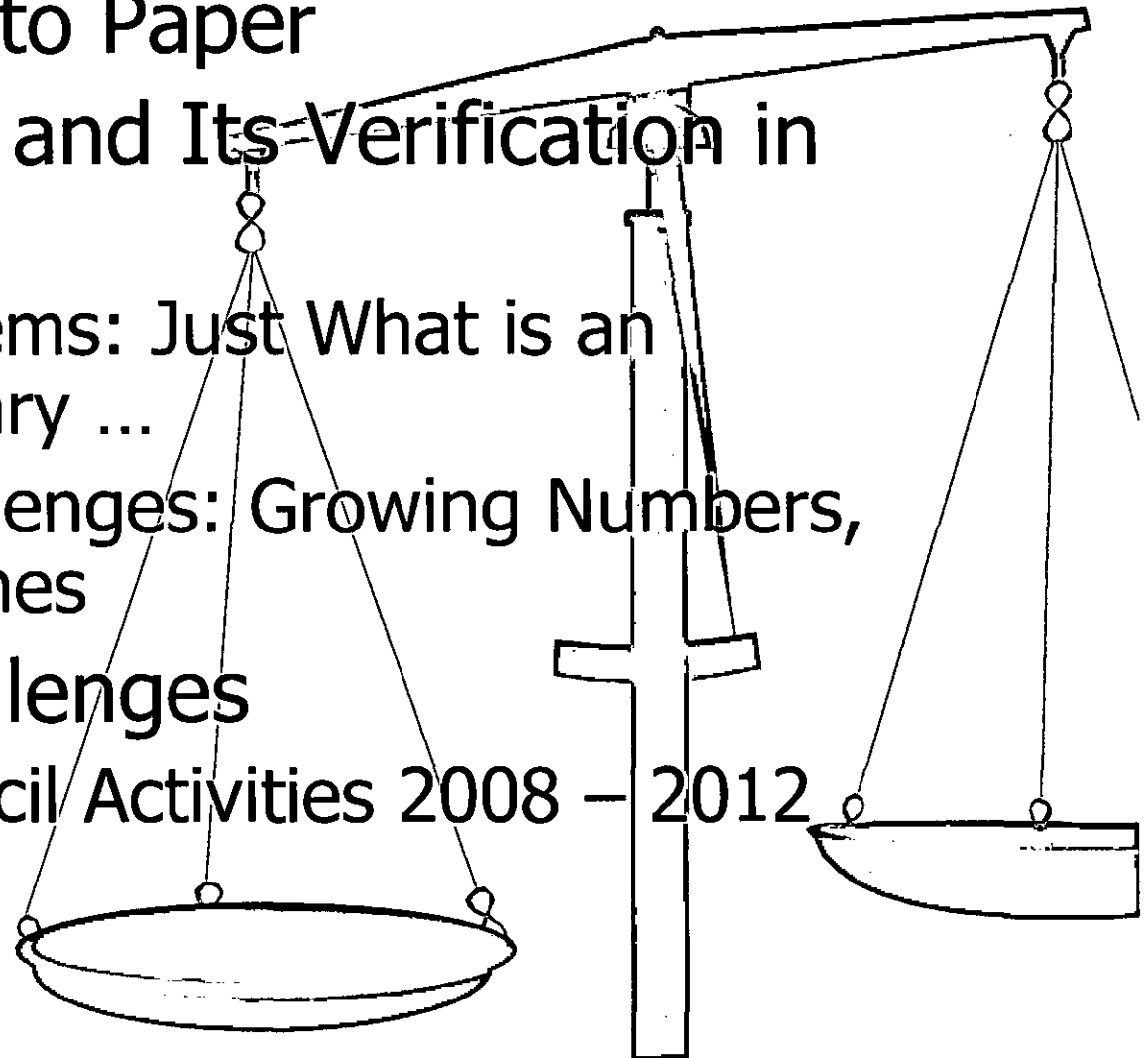
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# Overview

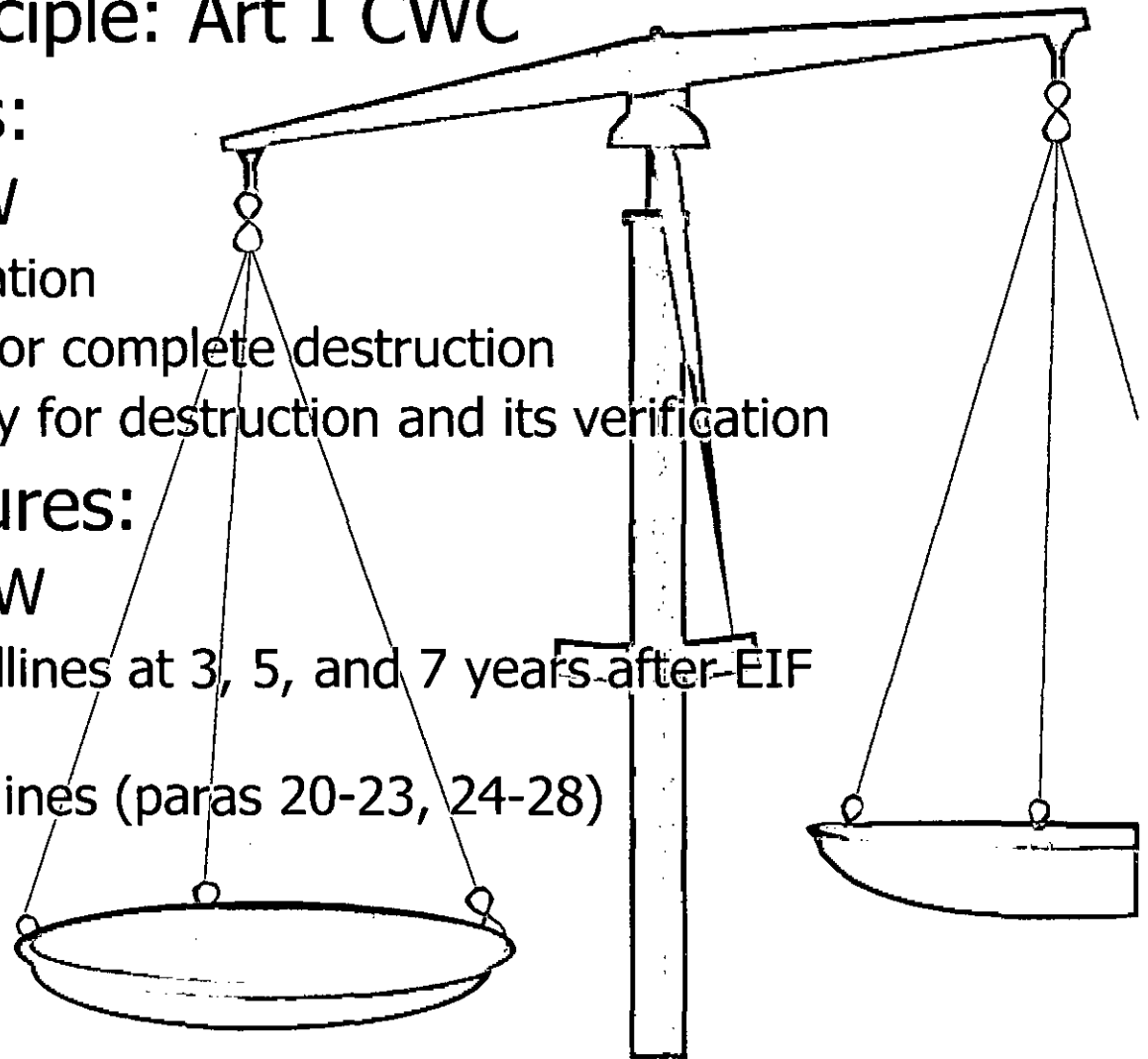
- Verification Put to Paper
- CW Destruction and Its Verification in Practice
  - Teething Problems: Just What is an Inspector's Salary ...
  - Continued Challenges: Growing Numbers, Slipping Deadlines
- Addressing Challenges
  - Executive Council Activities 2008 – 2012





# Verification Put to Paper

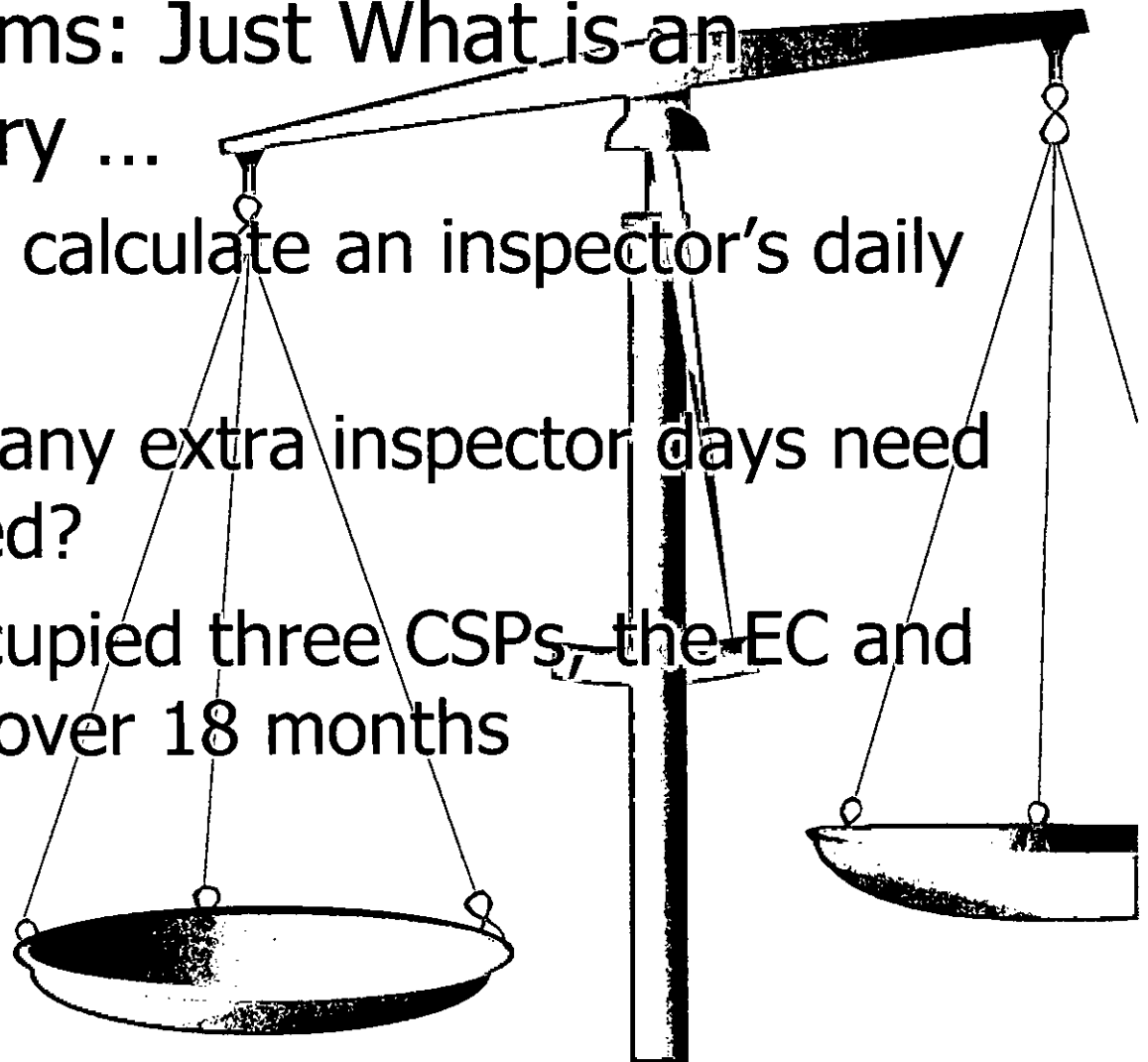
- Disarmament principle: Art I CWC
- Destruction norms:
  - Art IV CWC for CW
    - Systematic verification
    - 10-year deadline for complete destruction
    - CW possessors pay for destruction and its verification
- Rules and procedures:
  - Part IV a VA for CW
    - Intermediate deadlines at 3, 5, and 7 years after EIF (paragraph 17)
    - Extension of deadlines (paras 20-23, 24-28)





# CW Destruction and Its Verification in Practice – I

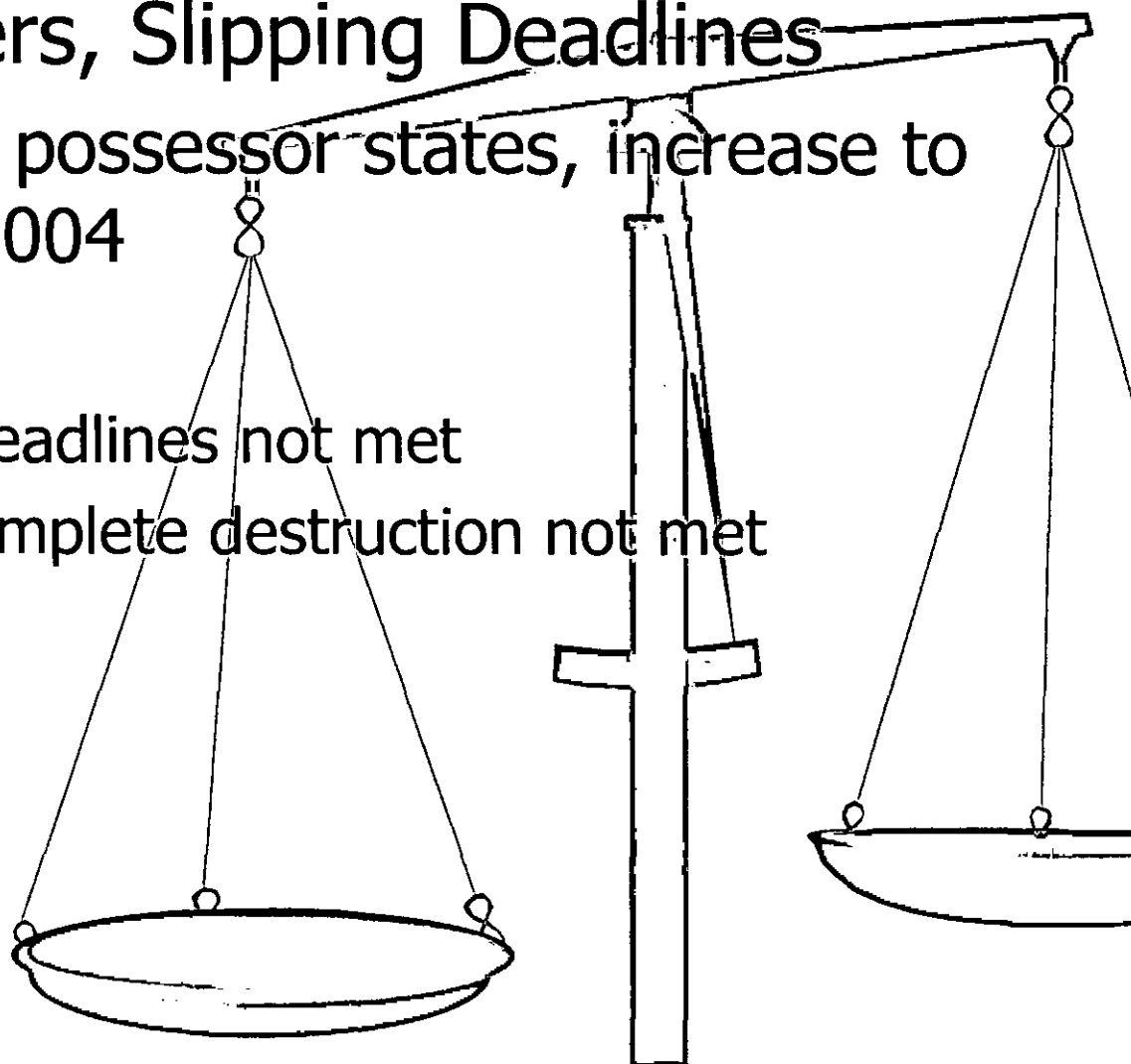
- Teething Problems: Just What is an Inspector's Salary ...
  - Issue 1: how to calculate an inspector's daily salary?;
  - Issue 2: how many extra inspector days need to be reimbursed?
  - Process has occupied three CSPs, the EC and a facilitator for over 18 months





# CW Destruction and Its Verification in Practice – II

- Growing Numbers, Slipping Deadlines
  - Originally 4 CW possessor states, increase to 6 in 2003 and 2004
  - Issues:
    - Intermediate deadlines not met
    - Deadline for complete destruction not met





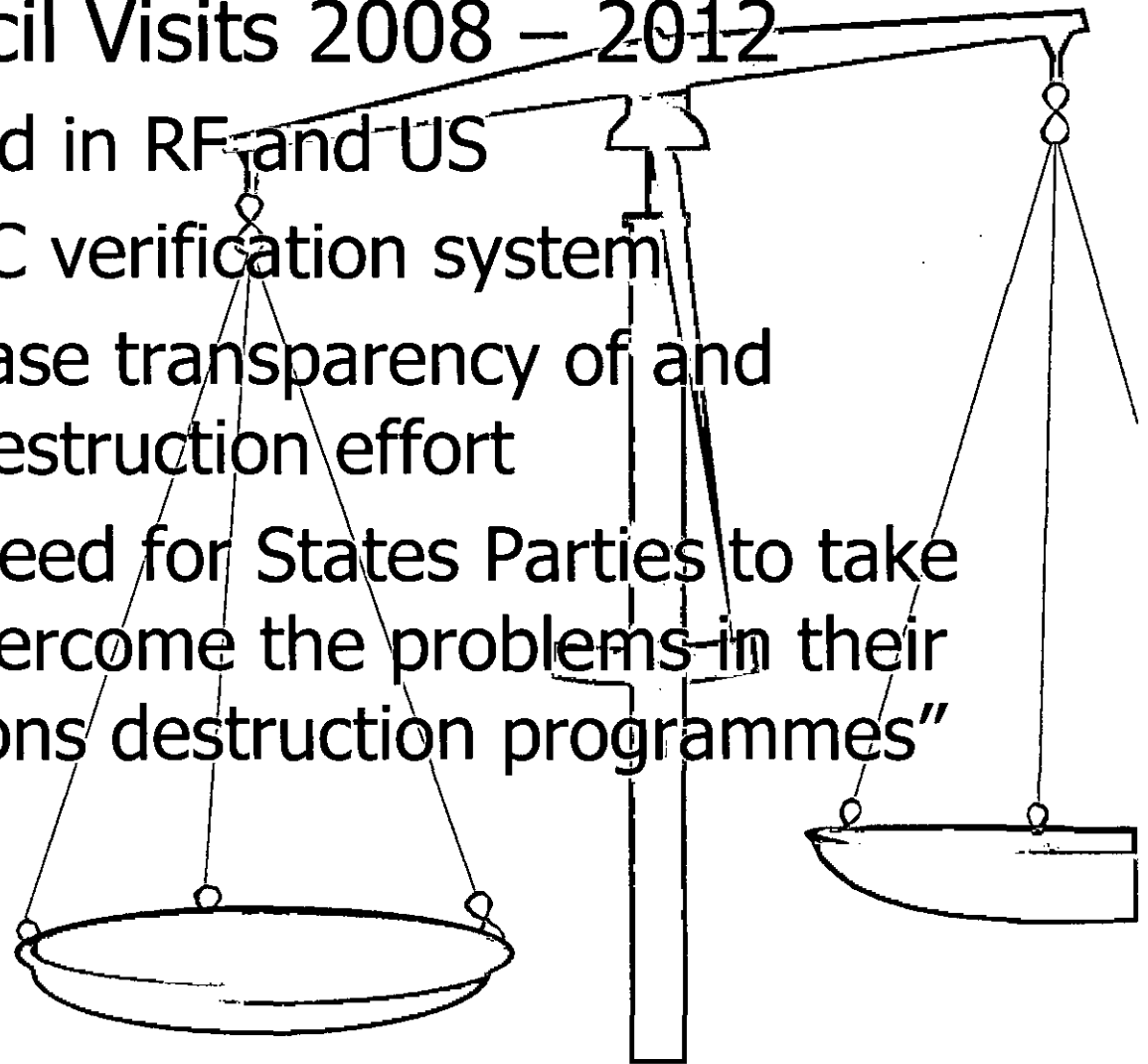
# CW Destruction and Its Verification in Practice – III

State Party	% destroyed	Completion of destruction
Albania	22	May/June 2007
India	~70	28 Apr 2009
Libya	Not yet begun	31 Dec 2010
ROK	80+	31 Dec 2008
Russia	16	29 Apr 2012
USA	40+	29 Apr 2012



# Addressing Challenges

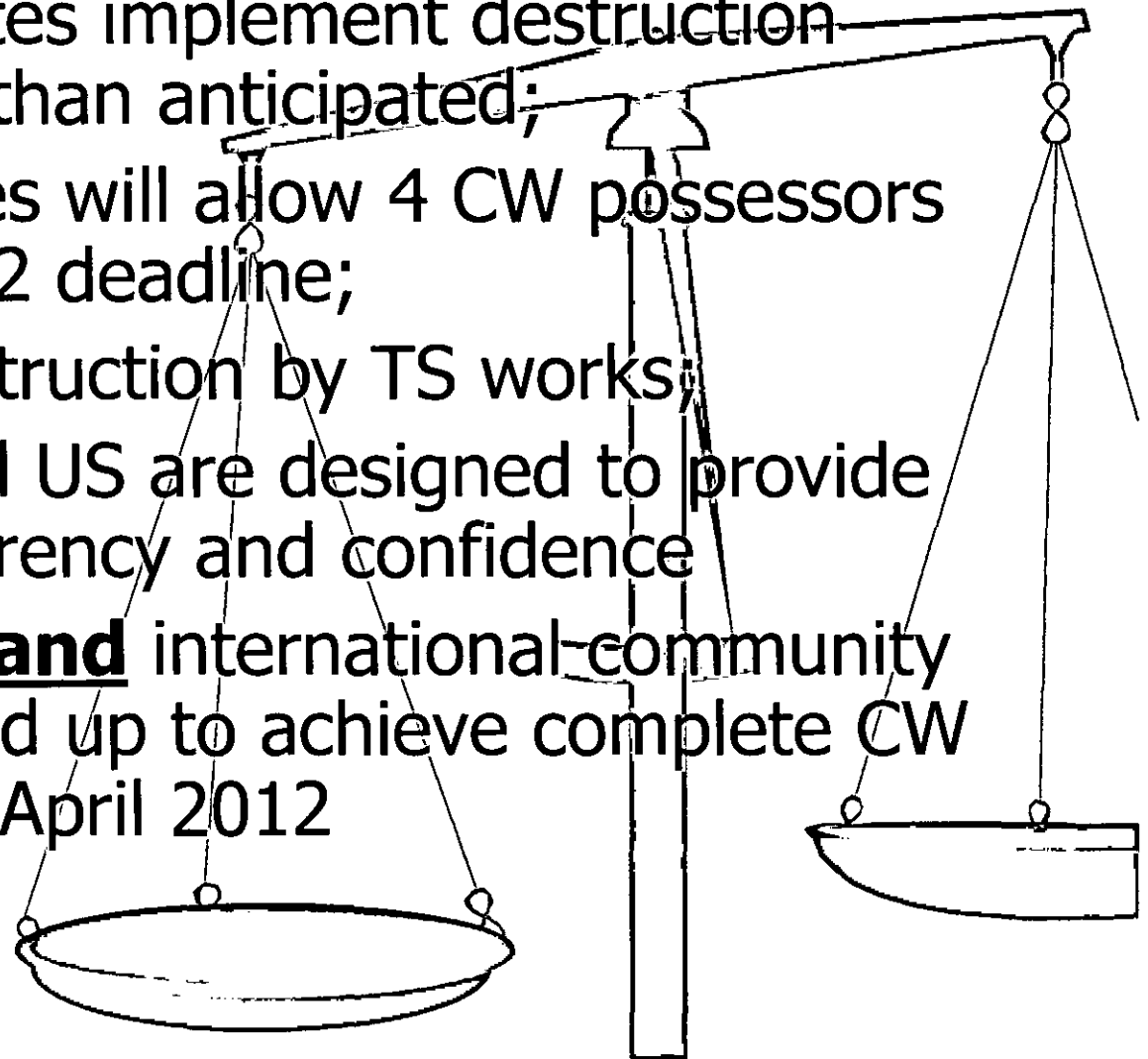
- Executive Council Visits 2008 – 2012
  - To be conducted in RF and US
  - Not part of CWC verification system
  - Goal is to increase transparency of and confidence in destruction effort
  - Emphasis on “need for States Parties to take measures to overcome the problems in their chemical weapons destruction programmes”





# Concluding remarks

- CW possessor states implement destruction norm, but slower than anticipated;
- Extended deadlines will allow 4 CW possessors to stay within 2012 deadline;
- Verification of destruction by TS works;
- EC visits in RF and US are designed to provide additional transparency and confidence
- Efforts by RF, US **and** international community need to be stepped up to achieve complete CW destruction by 29 April 2012





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ASSESSMENT AND PERSPECTIVES**





## HISTORYCAL ACCOUNTS

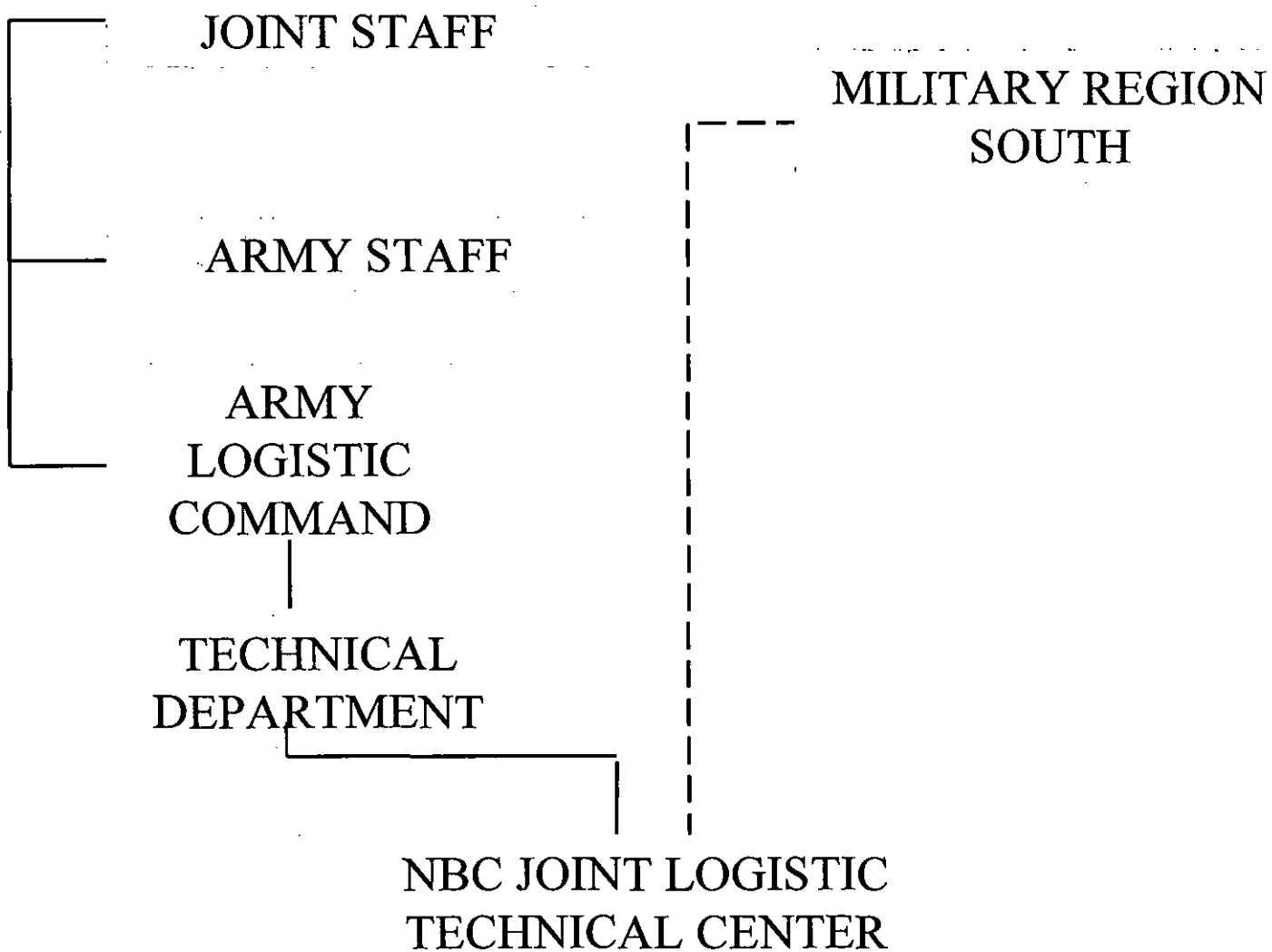


- **Origins:** During the 1st WW Technical Organisms operate under the “War Chemical Material Service”
- **Until 1945:** Military chemical service with offensive purposes (20 Chemical Material Depots and 12 plants for the preparation of chemical weapon and smoke dischargers )
- **After II WW:** The riorganization led to Atomic, Biological and Chemical Defence
- **In 1984:** Tasks of “NBC Establishment” and “Chemical&Biological Technical Center” are fixed. The two bodies are dipendent from “Land Armament Direction”
- **In 2001:** The 2 bodies are moved under the Army Staff
- **In 2004:** Decree of unification of the two Agencies in CETLI NBC and definition of the new tasks





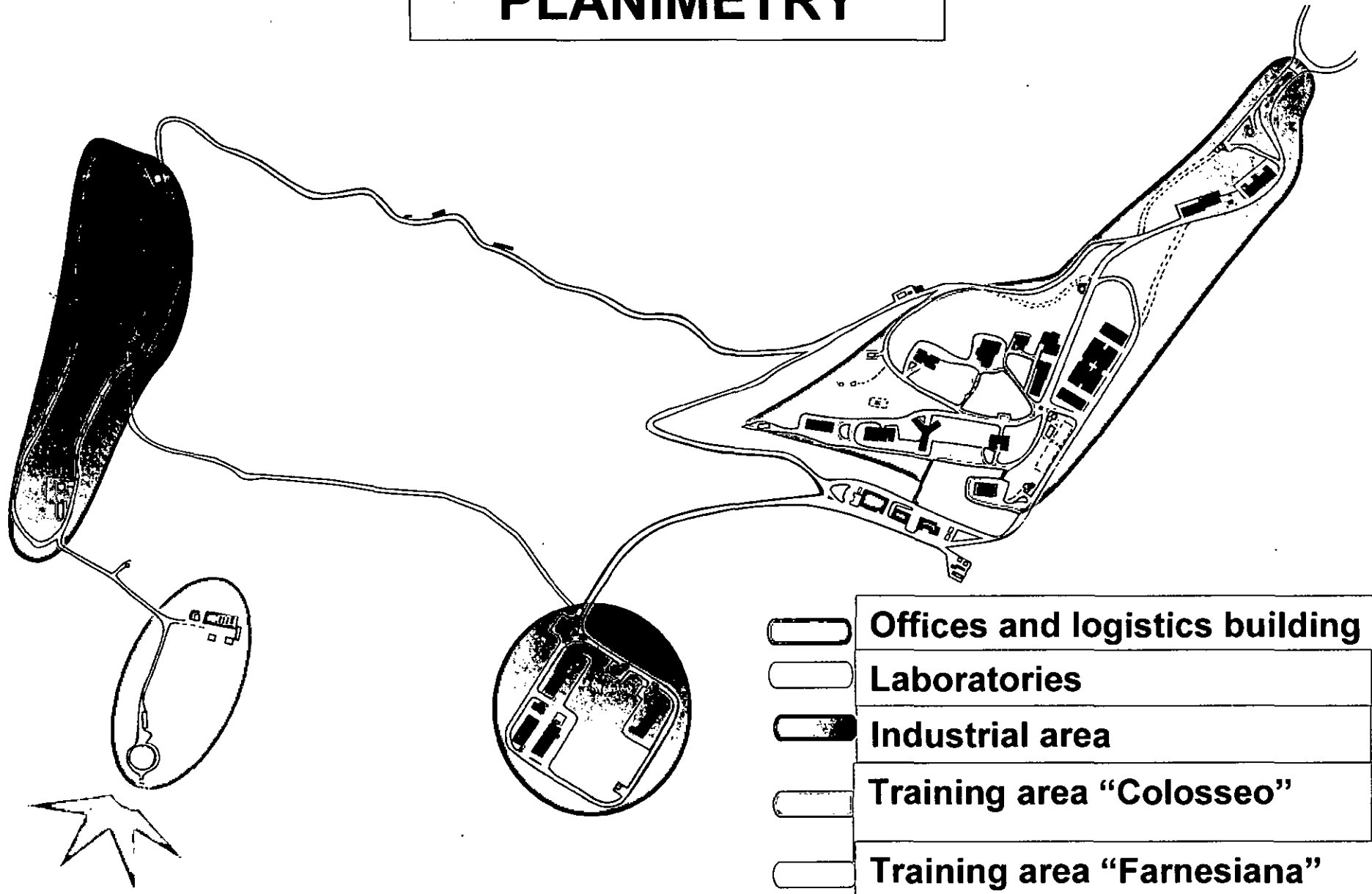
# COMMAND LINE







# PLANIMETRY







**NBC JOINT LOGISTIC TECHNICAL CENTER**

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## **INSTITUTIONAL TASKS**

**IDENTIFICATION, RECOVERING, STORAGE  
AND DESTRUCTION OF OLD/ABANDONED  
CHEMICAL WEAPONS DISCOVERED IN  
NATIONAL TERRITORY**





# **OCW DEMILITARIZATION PLANTS**

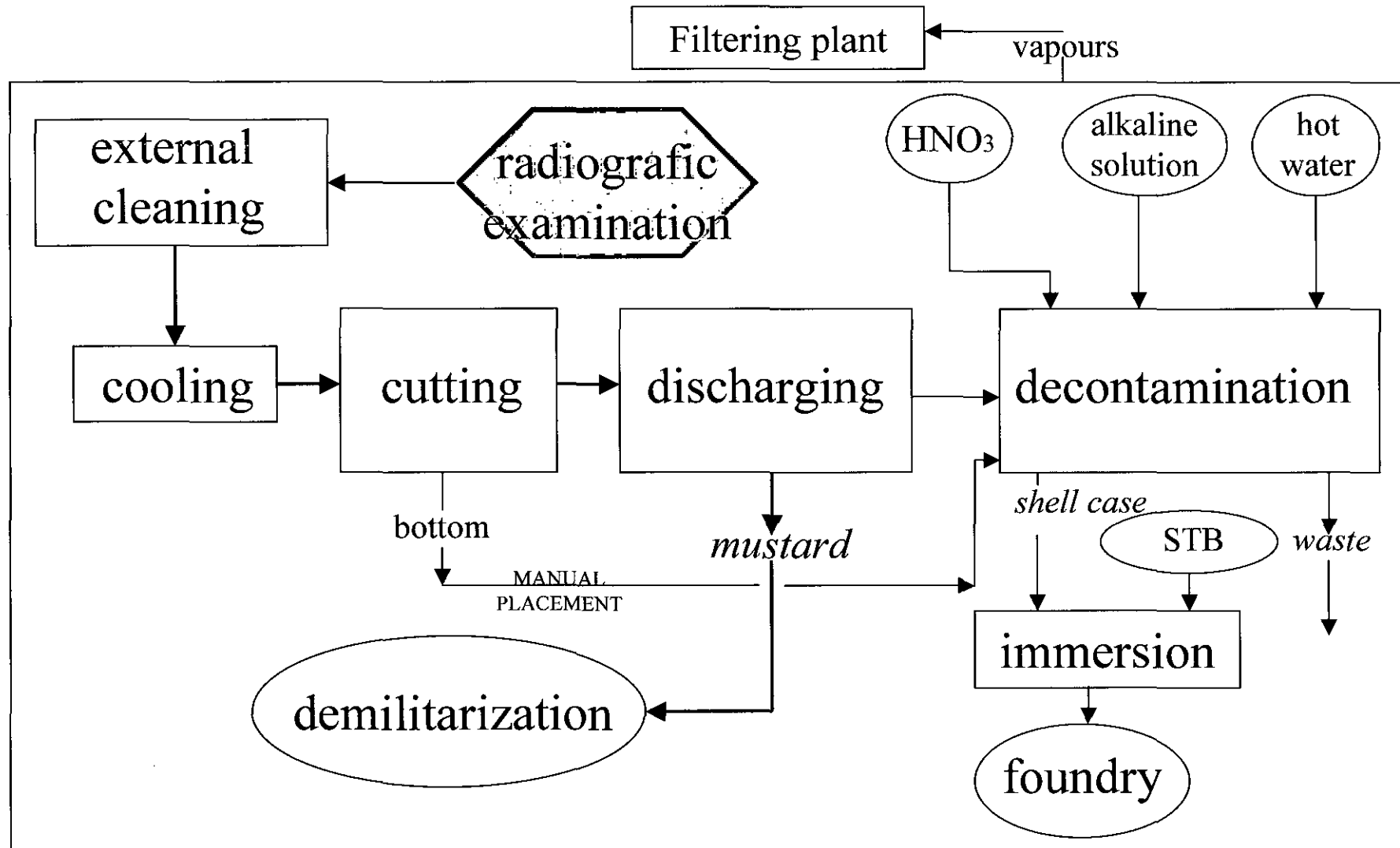


- **Y-FDA MIX**
- **ADAMSITE**
- **DRUMS**
- **MUNITIONS:**
  - **60-105 mm (fused and unfused);**
  - **< 305 mm;**

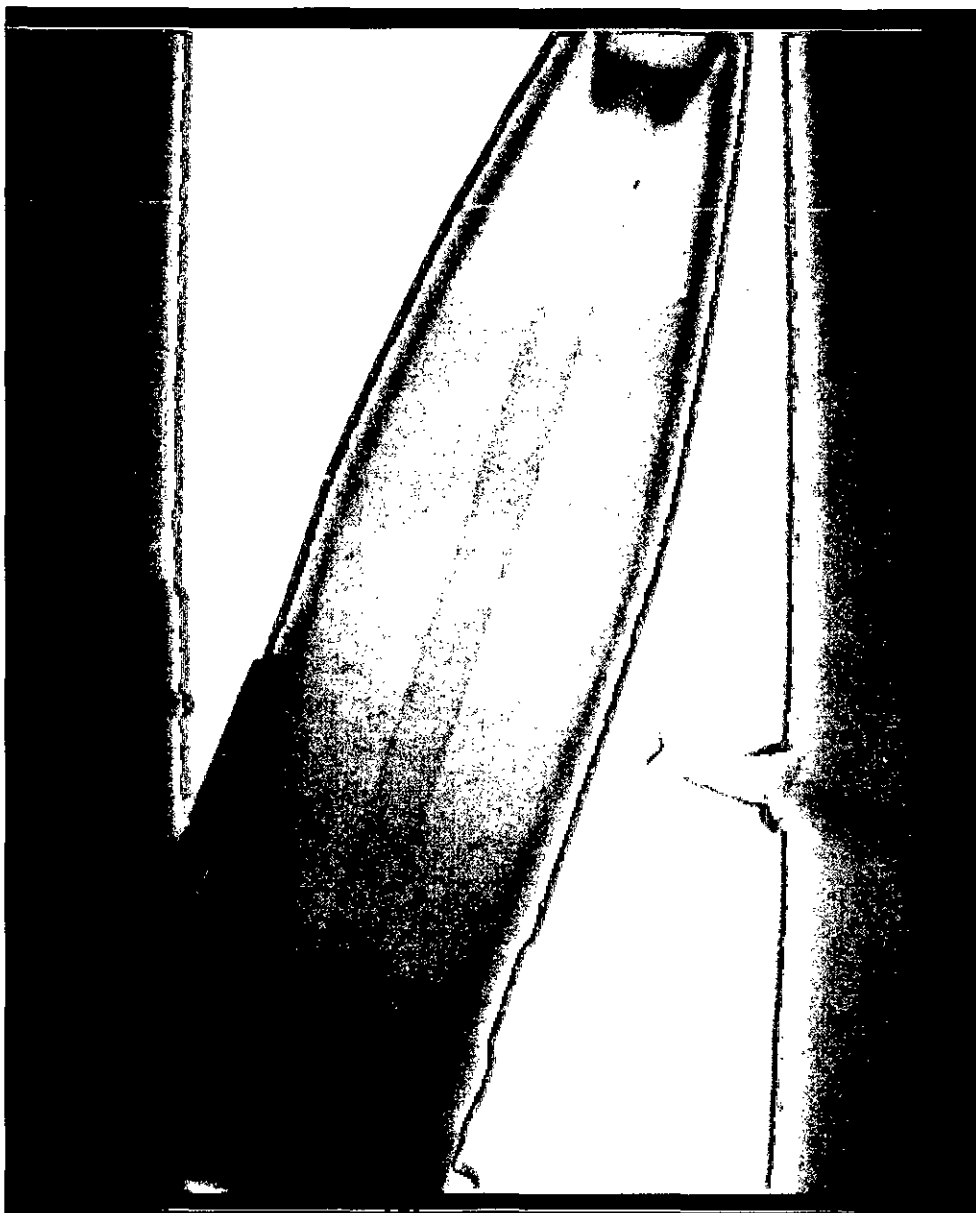


deactivation plant for shells

# Automatic cutting plant







*U.S. 155-millimetre  
Howitzer Chemical Shell  
M105B1 filled with  
mustard.*



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# ***Federchimica's collaboration for the CWC implementation***

***Bruno Brianzoli***

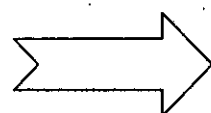
***Rome, 19 April 2007***

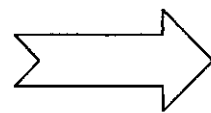


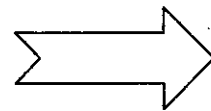
# Something about Federchimica

- ☐ **Federchimica is the Italian Federation of Chemical Industry**
- ☐ **About 1.350 Associated Enterprises. In total more than 100.000 employers.**
- ☐ **Objectives:**
  - coordination and protection of the Chemical Enterprises operating in Italy
  - Sustainable Development promotion
- ☐ **In particular, in the Safety, Health and Environmental protection areas, Federchimica manages for Italy:**
  - "Responsible Care" Programme actually shared from 170 Associated Enterprises;
  - "Emergency Transport" Service, actually shared from 41 Associated Enterprises, interested in the cooperation with Public Authorities, for the prevention and the control of possible accident connected with dangerous substances and preparation transportation.



 **Meaningful data about Italian Enterprises in the application of the CWC.**

 **How Federchimica supports its Associated Enterprises in the CWC management.**

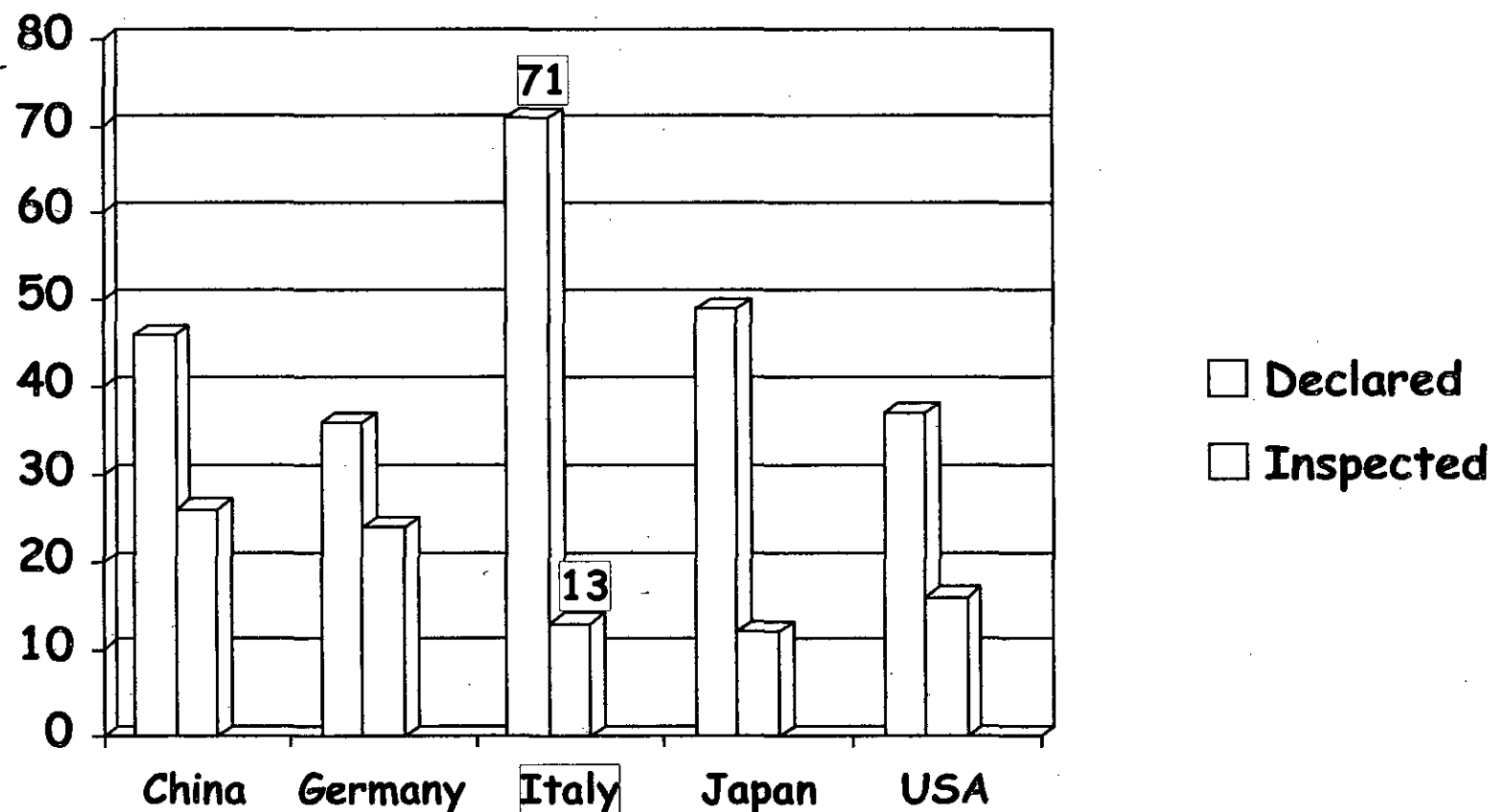
 **The cooperation between Federchimica and the Ministry of Foreign Affairs.**

 **Conclusion**



# Declarations

Some declared and inspectable Schedule 2 facilities as at 31.12.05

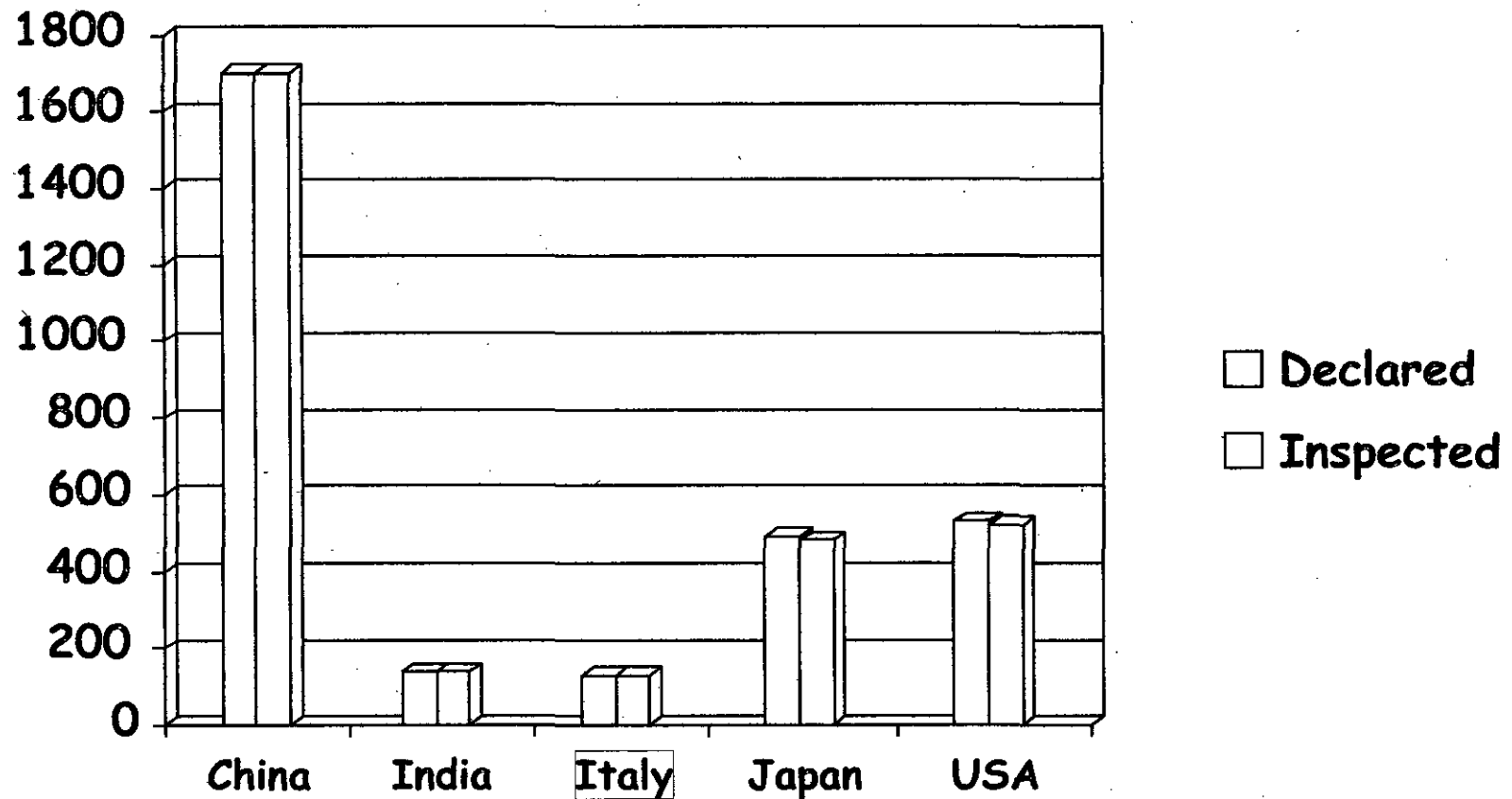


Source: OPCW "Annual Report 2005" - Draft



# Declarations

Some declared and inspectable DOC/PSF facilities as at 31.12.05



Source: OPCW "Annual Report 2005" - Draft



# Inspections

**(1996)**    **2 Trial Inspection:**  
- Mag Laboratories (BZ)  
- Ausimont (PFIB)

**(1997)**    **1st Inspection to an industrial plant for  
CWC Schedule 2 chemicals:**  
- Mag Laboratories

<u>Year</u>	<u>Number</u>
1997	2
1998	10
1999	6
2000	6
2001	4
2002	5
2003	8
2004	7
2005	9

## **Period 1997-2005:**

Total Inspections:	57
Enterprises with 1 Inspection:	47
Enterprises with 2 Inspections:	8
Enterprises with 3 Inspections:	2

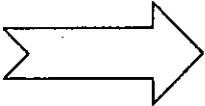
Source: Ministry of Foreign Affairs (2005)




## Participation in the "OPCW Associate Programme"

- ❑ Italy is the 2nd Member State (after NL) for number of Enterprises adhesion to the "OPCW Associate Programme".
- ❑ Altogether (2000-2005) 7 Enterprises have given hospitality to 14 Technicians, coming from Developing Countries, for a 3 weeks training period.
- ❑ Enterprises involved:
  - Ausimont SpA,
  - Bracco SpA,
  - Bristol-Myers Squibb Srl,
  - Enichem SpA,
  - Polimeri Europa SpA,
  - Syndial SpA,
  - Vinavil SpA.



 **Meaningful data about Italian Enterprises in the application of the CWC.**

 **How Federchimica supports its Associated Enterprises in the CWC management.**

 **The cooperation between Federchimica and the Ministry of Foreign Affairs.**

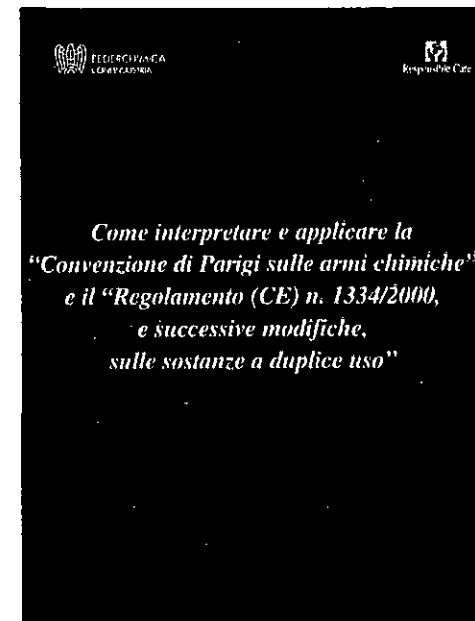
 **Conclusion**



# Federchimica's activities


- ☐ Organization of several formation and information meetings in collaboration with the Authorities;
- ☐ Assistance for the presentation of the Declarations
- ☐ Redaction of a Technical Guide Line:


*"How to interpret and implement  
CWC and Regulation n. 1334/2000  
on dual use products"*

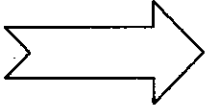


- ☐ Participation in the National Consultive Committee, with the Ministry of Foreign Affairs and the other Authorities and Associations involved, for the resolution of problems emerging from the CWC implementation.



 **Meaningful data about Italian Enterprises in the application of the CWC.**

 **How Federchimica supports its Associated Enterprises in the CWC management.**

 **The cooperation between Federchimica and the Ministry of Foreign Affairs.**

 **Conclusion**



## **4 areas for the cooperation**

### **1. To improve the presence of Italian Experts in the OPCW:**

- Selection of CV and signaling for vacant positions
- Training

### **2. To encourage the "OPCW Associate Programme":**

- Already 7 positive experiences
- The transfer of Italian "know-how" and technologies in the Developing Countries could be also an opportunity to establish new business relations



## **4 areas for the cooperation**

### **3. To individuate a Laboratory for CW analysis for OPCW accreditation:**

- It could be selected between the 60 National R&D Laboratories in phase of evaluation for REACH Regulation requirements

### **4. To realize "Prevention and Control Best Practices", in Italy and abroad:**

- CWC implementation as an example of Corporate Social Responsibility in Italy to develop prevention and risk-management culture
- Possibility to have funds from the European Union within the 7th Framework Programme for Research and Technological Development



## 2 Federchimica's examples on how to convert legislative requirements into Sustainable Development



### *Guida per la Protezione delle Unità Produttive e Logistiche Chimiche da Pericoli e Minacce ("Security")*



*uno strumento per l'eccellenza  
nella gestione della  
"Security" dell'impresa.*

Technical Guide Line  
for the  
"Security Management"



## 2 Federchimica's examples on how to convert legislative requirements into Sustainable Development



*Una crisi può avvenire ...  
... in ogni momento ...  
... ovunque ...  
... e a chiunque ...*



*Il "Corso di  
Crisis Management"  
ti può essere di aiuto!*

Luglio 2004

**Course for  
"Crisis Management"**



# Simulation of a Terroristic Attack in the Solvay Solexis plant of Spinetta Marengo






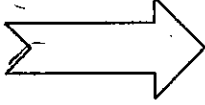
# 150 operators involved in the crisis simulation





 **Meaningful data about Italian Enterprises in the application of the CWC.**

 **How Federchimica supports its Associated Enterprises in the CWC management.**

 **The cooperation between Federchimica and the Ministry of Foreign Affairs.**

 **Conclusion**



# Conclusion

- ❑ Italian Chemical Industry has increased its knowledge and experience on the CWC management during this years.
- ❑ It is necessary to capitalize the results obtained by integrating Science, Industry, Management and Public Institutions.
- ❑ Federchimica supports its Associated Enterprise in order to convert legislative requirements into opportunities of sustainable grown for our Country.



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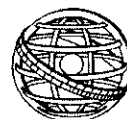
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## THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION: ASSESSMENT AND PERSPECTIVES

**ROME, 19 APRIL 2007**

*Palazzo Rospigliosi  
Via XXIV Maggio, 43*

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**PRESENTATION**

by

**Yoram Dinstein**

*Special thanks to Green Cross Italia  
for contributing to the conference*



*Provisional version - not for quotation*

## **CUSTOMARY INTERNATIONAL LAW AND WMD**

### **1. Nuclear Weapons**

- (a) The legality of the use of nuclear weapons in some circumstances cannot, in principle, be denied. But what are these circumstances? The 1996 ICJ Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons left the question unanswered.
- (b) The fact that nuclear weapons have been left on the shelf since Hiroshima and Nagasaki does not create a prohibition under customary international law.
- (c) The confusion in the Advisory Opinion between the *jus in bello* and the *jus ad bellum*.
- (d) The use of nuclear weapons is clearly subject to the general principles of the *jus in bello*. Ergo, nuclear weapons cannot be used against civilians or indiscriminately.
- (e) Still, that leaves the possibility of the use of "clean" nuclear weapons, say, in the middle of the ocean.

### **2. Biological weapons**

- (a) The illegality of the use of biological weapons is beyond dispute.
- (b) Under the 1971 Convention, not only the use of these weapons is interdicted, but even their possession.
- (c) The problem: verification.

### **3. Chemical Weapons**

- (a) The illegality of the use of gas warfare is beyond dispute since the Geneva Protocol of 1925 (the Protocol has generated customary international law).
- (b) Under the CWC of 1993, not only the use of chemical weapons is interdicted, but even their possession.
- (c) Verification is the keystone of the CWC.
- d) Legal problem 1: The definition of chemical weapons relates only to toxic agents that can cause harm to humans or animals. What about herbicides? The "package deal" with the US (recognition of the prohibition removed from the operative clauses but inserted in the Preamble).



- (e) Legal problem 2: non-lethal agents (can be used for riot control but not as a means of warfare).
- (f) Practical problem areas: (i) deadlines for destruction of existing stockpiles; (b) advanced verification methods; (iii) ocean dumped weapons.

#### **4. Conclusion**

- (a) The CWC regime is the most advanced.
- (b) Yet, the 2008 Review Conference needs to face a host of issues.



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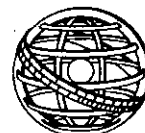
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### THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION: ASSESSMENT AND PERSPECTIVES

**ROME, 19 APRIL 2007**

*Palazzo Rospigliosi  
Via XXIV Maggio, 43*

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PRESENTATION  
by  
**Mohamed I. Shaker**

*Special thanks to Green Cross Italia  
for contributing to the conference*



*Provisional version - not for quotation*

## THE PROBLEM OF THE UNIVERSALITY OF THE WMD TREATIES

On Tuesday 17 April 2007, my colleagues and I at the Egyptian Council for Foreign Affairs (ECFA), a think-tank, had the privilege of receiving Ambassador Rogelio Pfrter, Director-General of the Organization for the Prohibition of Chemical Weapons (OPCW). It was a pleasure to see him then and to see him again here in Rome. We were both representing our countries to the UK in the 1990s and we were both on the Advisory Board of the UN Secretary-General on Disarmament Matters, also in the 1990s. In Cairo we had a good and frank exchange of views and we greatly appreciated his coming in the context of his attempts to persuade the countries outside the convention to join in. We understand that Ambassador Pfrter's task is to achieve the universality or at least near universality of the convention. As a non-governmental think-tank, ECFA believes very much in universality but universality has to be seen in a wider context linking treaties concerned with WMDs. That is why my paper is on the problem of achieving universality by the major treaties dealing with weapons of mass destruction and related instruments, UN resolutions and export control regimes.

Since the 1950s, a number of treaties and multilateral regimes have been established with the objective of preventing the proliferation and elimination of weapons of mass destruction. In this paper, we shall concentrate on the universality of three major treaties: the Nuclear non-Proliferation Treaty (NPT) signed in 1968 and entered into force in 1970, The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (biological) and Toxin Weapons and on their Destruction (BTWC) signed in 1972 and entered into force in 1975,<sup>1</sup> and the Chemical Weapons Convention (CWC), the tenth anniversary of which will be celebrated this month (April 2007). In the course of our analysis of we shall discuss also the entry into force of the Comprehensive Test Ban Treaty (CTBT), Security Council Resolution 1540 of 2004 on WMD terrorism and the export control regimes, and more particularly the Nuclear Suppliers Group (NSG) with regard to the NPT and the Australian Group (AG) with regard to the BTWC and CWC. It is obvious that the Security Council resolution and these regimes are closely linked with the implementation of the three major treaties. In this paper we are not only concerned with the state of adherence to the treaties, but also with the state of implementation of these treaties which aims at making them real universal instruments.

### The NPT

The NPT today is adhered to by all nations of the world with the exception of India, Israel, Pakistan as well as the Democratic People's Republic of Korea (DPRK). The latter withdrew finally from the Treaty in 2003, although there are signs that it may re-adhere to the NPT in the light of the latest developments concerning its nuclear weapons programme and its readiness to dismantle it and to bring its nuclear activities under IAEA safeguards. It is a matter which needs to be watched carefully in the coming months.

As a result of the non-adherence of these four States to the NPT, its universality has been seriously affected. Their absence has also affected the security of their respective regions, and has been a great source of instability. These States are not expected to give up their nuclear capabilities except may be

<sup>1</sup>Closely linked with the BTWC is the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and Bacteriological Methods of Warfare (The Geneva Protocol signed in 1925 and entered into force in 1928). The Protocol banned the use but not the production, stockpiling or deployment of such weapons.



in the case of the DPRK. Therefore, their adherence to the NPT in the future is a far-fetched possibility.

In order to turn around this dilemma, two trends emerged supported by Israeli scholars and others. One suggests inviting Israel, India and Pakistan to accede to an Additional Protocol to the NPT, obliging them to behave "as if" they were members to the treaty.<sup>2</sup> Such a protocol would permit the three States to retain their programmes, but inhibit further development.<sup>3</sup> The second trend advocates a new regime that would replace the NPT and would include also the NPT States. The latter would only subject fissile material produced for peaceful purposes to international safeguards.<sup>4</sup>

Without going into details of these proposals it is clear that the three States would continue with their nuclear-weapons capabilities unabated. They would merely undertake to abide by certain provisions of the NPT that would not affect their nuclear-weapon status, or they will abide by a new regime that would bring them closer to or on par with the acknowledged five NPT nuclear-weapon States. In other words nuclear-weapon status would be conferred upon them or endorsed by either the present or the new "non-proliferation regime". In the case of Israel, a country that has stated that it would not be the first to introduce nuclear weapons into the region, would find itself being forced to accept a status implicitly or explicitly, that it has so far hesitated to recognize. It must be said, however, that recent statements by Israeli officials may give the impression that Israel is about to do away with the uncertainty and secrecy of its nuclear programme.

Accommodating the three countries, whether within the NPT regime or a "new regime" may also encourage further proliferation from within the NPT regime itself. Non-compliance and violations have already beleaguered the regime. The suggested accommodation may exacerbate the worries. In such an atmosphere the disarmament process, in compliance with Article VI of the NPT may be further weakened or disregarded.

Moreover, a protocol attached to the NPT would be tantamount to the amendment of the treaty, whose parties have agreed to follow certain procedures and conditions prescribed by the Treaty that seem to be rather difficult, if not impossible, to fulfill. In the past, additional protocols to the NPT were suggested with regard to other issues but were quickly discarded or withdrawn because of the aforementioned considerations.

In the particular case of Israel, the way is quite open for it to adhere to the NPT and abide by its provisions as a non-nuclear-weapon State. A unilateral declaration of behaviour as if it were a party to the NPT, an alternate proposal as suggested by some is meaningless if Israel's status remains ambivalent and if its nuclear activities have not been subjected to the verification system of the IAEA. There is a clear route to impress on non-parties to abide by the NPT regime, simply adhering to the Treaty. Why invent other routes that would in fact legitimize the present status quo and appear to Israel's neighbours as sheer appeasement? Israel's nuclear programme is a source of great anxiety in the Middle East. Security cannot prevail in the region in the shadow of Israel's growing nuclear-weapon capabilities.

As to South Asia, the agreement reached by India and the United States in the field of nuclear cooperation has weakened, in our view, the NPT, and the nuclear non-proliferation regime in general. The argument that this agreement may bring India closer to the regime may seem plausible. But an in-

<sup>2</sup>Sverre Lodgaard, "Making the Non-Proliferation Universal", *WMD Papers*, No. 7, 2004. A shortened version of the paper was presented at the 54<sup>th</sup> Pugwash Annual Conference, Seoul, South Korea, 4-9 October 2004.

<sup>3</sup>Avner Cohen and Thomas Graham, Jr., "WMD in the Middle East: A Diminishing Currency", *Disarmament Diplomacy*, No. 76, March/April 2004, pp. 22-25.

<sup>4</sup>Ephraim Asculai, *Rethinking the Nuclear Non-Proliferation Regime* (Tel Aviv: The Jaffee Center for Strategic Studies, Memorandum No. 70, 2004).



depth analysis of this agreement and its repercussions worldwide would indicate a double standard that would favour those outside the Treaty and those who have managed to reach a nuclear-weapon capability.<sup>5</sup>

Closely linked with the universality of the NPT, is the establishment of nuclear-weapon-free zones or zones free of weapons of mass destruction around the world. With regard to nuclear weapons, such zones would further enhance the universality of the NPT. They have the additional advantage of preventing the deployment of nuclear weapons on the territories of the zones and provide negative nuclear guarantees to the benefit of the parties to such zones. The zones free of weapons of mass destruction have for the first time been suggested by Egypt in 1990, a proposal that coincided that year with worrying reports and actions indicating that Iraq was attempting to acquire equipment and materials relating to weapons of mass destruction. President Mubarak of Egypt emphasized that all weapons of mass destruction, without exception, should be prohibited in the Middle East and that all States of the region without exception should make equal commitments in this regard and that verification matters and modalities should be established to ascertain full compliance by all States of the region to the full scope of the prohibitions without exceptions.<sup>6</sup>

The 1990 Egyptian initiative went beyond the 1974 initiative on establishing a zone free of nuclear weapons. In fact, it was the first time that all weapons of mass destruction were linked with each other in one basket. Without exaggeration, this paved the way later to the adoption of Resolution 1540 on WMD terrorism and the valuable study undertaken by a commission established by the Swedish government on WMD which was dubbed as "weapons of terror".<sup>7</sup>

Closely linked with the NPT is the CTBT, which is also open to all States to join. But its entry into force has been delayed as a result of the required ratification for the entry into force, as well as the refusal of the US Senate to ratify the Treaty.

The Treaty will not enter into force until it has been signed and ratified by the 44 States listed in Annex 2 to the Treaty. This list comprises the States that formally participated in the 1996 session of the Conference on Disarmament, and that appear in table 1 of the December 1995 edition of "Nuclear Research Reactors in the World" and table 1 of the April 1996 edition of "Nuclear Power Reactors in the World", both compiled by the International Atomic Energy Agency.

However, the significant aspect of the CTBT is that an implementing organization is already in place in Vienna and the International Monitoring System (IMS) is already operating to the extent that this system has registered the nuclear-weapon test that the DPRK carried out this year. These are unique features of a treaty that has not yet entered into force. It's a good omen for the future of this Treaty.

The success of the CTBT should be an incentive for the nuclear-weapon States to implement more fully Article VI of the NPT, especially in the field of nuclear disarmament. As I said earlier, the problem of universality is not in adherence but in implementing fully the provisions of the relevant treaties of weapons of mass destruction and this would take me now to the CWC.

<sup>5</sup>For the US-India Agreement see remarks made by US Secretary of State Condoleezza Rice at the Senate Foreign Relations Committee as well as at the House International Relations Committee. Both were made on 5 April 2006. The house approved it overwhelmingly in July 2006 with minimal restrictions, whereas the Senate approved it in September. . See also *International Herald Tribune* editorial "Still a Bad Deal", July 29-30, 2006.

<sup>6</sup>See UN Docs. A/45/219 and S/21252, 18 April 1990.

<sup>7</sup>WMD Commission, *Weapons of Terror. Freeing the World of Nuclear, Biological and Chemical Arms*, Stockholm: Fritzes, 2006. For the state of adherence to the CWC, BTWC see pp. 131 and 117 respectively.



## The CWC

There are 178 parties to the CWC as of April 2006. Unlike the NPT, all provisions in the CWC are non-discriminatory. Also, CWC established well-defined mechanisms that do not exist with regard to the NPT. A number of States have not yet adhered to the Treaty. The States that has signed but not yet ratified are the Bahamas, Central African Republic, Comoros, Congo, Dominican Republic, Guinea-Bissau, Israel and Myanmar. The non-signatory States are Angola, Barbados, Egypt, Iraq, Lebanon, DPRK, Somalia and Syria. Here if I may speak on behalf of one country among the non-signatures, and that is Egypt, and may be also on behalf of Syria and Lebanon not represented here, their reluctance to sign is very much linked to the non-adherence of Israel to the NPT.

I believe it is difficult, if not impossible for Egypt to adhere to the CWC in these circumstances. But Egypt is not passive on this issue because it has been and still is very much involved in aiming at establishing a zone free of weapons of mass destruction in the region. The idea of the zone received a new boost in the latest Arab Summit in Riyadh last March when the leaders have agreed that a mechanism should be created to activate this initiative instead of just adopting resolutions by the UN or by reiterating former known positions and attitudes. In this respect, the implementation of the resolution on the Middle East at the NPT Review and Extension Conference of 1995 supporting the establishment of a zone free of weapons of mass destruction has been highlighted. Without this resolution there would have been no consensus at the 1995 NPT Review Conference on the extension of the Treaty. The three Depository Governments of the NPT co-sponsored that resolution and therefore confer on them major responsibilities for bringing this resolution into fruition.

I am sorry to have reverted to the NPT, but it is just to make the point that we need to move on with the elimination of WMDs. The Chemical Weapons Conventions has certainly made great progress through its organization (OPCW) to convince more countries to adhere to the convention. This is an achievement in itself, and a recognition of the present efforts of its Director-General.<sup>8</sup> The Treaty, like its sister-treaty, the NPT, is also experiencing some problems and challenges such as the delay in observing the timetable for the destruction of declared CW stockpiles. It seems that the United States and Russia will be granted a five-year extension of the destruction deadline, which means April 2007-2012, despite the fact that even this extended deadline may not be met.<sup>9</sup> Sergey Batsanov rightly observes that the OPCW should seriously explore the possibility of closer interaction with other international organizations and arrangements to prevent WMD proliferation. For example, joint actions could be considered with the IAEA on the issue of creating a WMD free zone in the Middle East.<sup>10</sup>

This view demonstrates the close interrelationship between the treaties on weapons of mass destruction.

## The BTWC

The state of adherence to the Treaty is a less impressive than that of the CWC, which may be because the Treaty does not have an executive organ similar to that of the OPCW. As of April 2006, it has had 155 Parties. Sixteen States have signed the Convention but not ratified it, while more than 20 States have not signed it at all. In the first category, the States are: Burundi, Central African Republic, Cote-d'Ivoire, Egypt, Gabon, Guyana, Haiti, Liberia, Madagascar, Malawi, Myanmar, Nepal, Somalia, Syria, United Arab Emirates, Tanzania. Non signatory States are: Andorra, Angola, Cameroon, Chad,

<sup>8</sup>For the role played by the OPCW, see Sergey Batsanov, *Approaching The Tenth Anniversary of the Chemical Weapons Convention. A Plan for Future Progress*, *Nonproliferation Review*, Vol. 13, No. 2, July 2006, pp. 341-342.

<sup>9</sup>*Ibid.*, p. 347.

<sup>10</sup>*Ibid.*, p. 349.



Comoros, Cook Island, Djibouti, Eritrea, Guinea, Israel, Kazakhstan, Kiribati, Marshall Islands, Mauritius, Micronesia, Mozambique, Namibia, Nauru, Niue, Samoa, Trinidad and Tobago, Tuvalu and Zambia.

Also, as the NPT and the CWC, the BTWC is experiencing some difficulties. It's known that the Treaty lacks a capacity for monitoring and verification, implementation and enforcement. An additional problem is that many governments have not adopted or fully implemented national legislation to ensure fulfillment of their obligations.

The last Review Conference of the Convention, which was held in December 2006, called for universal adherence to the Convention. It was more or less a successful conference, although the question of verification was perhaps the most obvious failure of the conference. Attempts in the past to study the verification problem came to a stand still as a result of United States lack of interest, which remained unchanged at the conference.<sup>11</sup> A success in solving the verification issue might help with regard to further adherence to the Treaty.

Closely related to the universality issue are the export control regimes and more particularly the Nuclear Suppliers Group (NSG)<sup>12</sup> with regard to the NPT and the Australia Group (AG)<sup>13</sup> with regard to both the CWC and the BTWC. What is needed are reliable assurances of supply to all parties of material and substances that are needed for their legitimate activities. Guidelines and policies should be adopted by the suppliers after close consultations with the potential recipient countries who are now usually confronted with guidelines and policies worked out in their absence.

Lastly, Security Council Resolution 1540 of 28 April 2004 prescribed for the first time under Chapter VII of the UN Charter the way to contain, to respond and to act to face up to potential WMD terrorism. In order to assess adherence to the domestic legal requirements of the resolution, a committee of the Security Council has been created to review national reports submitted by States on their efforts to implement the resolution. After submitting its first report in 2006, the Committee's mandate was renewed for two years by Security Council Resolution 1673 of April 27, 2006. It is too soon to assess the Committee's work in its first phase. The aforementioned report was encouraging.

Finally, Resolution 1540 contains provisions to indicate that the intention is to complement and reinforce, rather than replace and subvert, the negotiated Treaties. It is also indicated that the obligations of the resolution should not be interpreted as conflicting or altering the rights and obligations under the treaty regimes. The resolution calls for the promotion of these Treaties, the adoption of their national implementation requirements and cooperation with the non-proliferation treaty organizations.<sup>14</sup>

In conclusion it must be said that universality of WMD treaties and related instruments and regimes is a crucial element that ought to lead to equal treatment, fairness and an open opportunity to join and contribute to a world free of WMDs. Treaty-making has been, and should remain, the basic approach to universality. The outcome of Security Council Resolution 1540 on WMD Terrorism may one day find its way to a single convention on combating terrorism in all its facets. It would not be an easy task, but a precedent exists in the single convention on drugs.

<sup>11</sup>See Jez Littlewood, "Out of the Valley: Advancing the Biological Weapons Convention after the 2006 Review Conference", *Arms Control Today*, Vol. 37, No. 2, March 2007, pp. 12-16.

<sup>12</sup>IAEA Doc. INFCIRC/254, Feb. 1978. For part 1 as it stands today see INFCIRC/254/Rev. 6/Part 1, 16 May 2003.

<sup>13</sup>See James I. Seevaratanan, "The Australia Group. Origins, accomplishments and challenges", *The Non-Proliferation Review*, Vol. 13, No. 2, July 2006, pp. 401-415.

<sup>14</sup>Peter Crail, "Implementing UN Security Council Resolution 1540. A Risk-based Approach", *The Non-Proliferation Review*, Vol. 13, No. 2, July 2006, p. 360.



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## INTERNATIONAL CONFERENCE

ORGANISED BY



*Ministero degli Affari Esteri*



*Istituto Affari Internazionali*

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### THE TENTH ANNIVERSARY OF THE CHEMICAL WEAPONS CONVENTION: ASSESSMENT AND PERSPECTIVES

**ROME, 19 APRIL 2007**

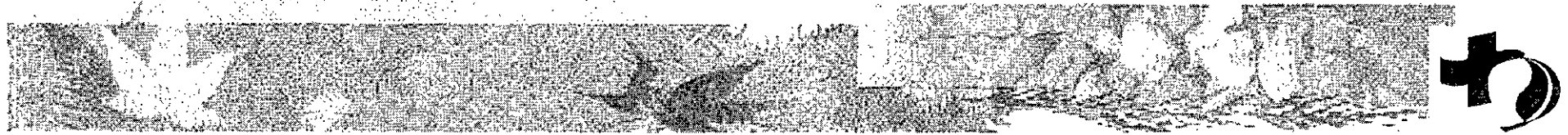
*Palazzo Rospigliosi  
Via XXIV Maggio, 43*

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PRESENTATION  
by  
**Finn Torgimsen Longinotto**

*Special thanks to Green Cross Italia  
for contributing to the conference*





# Making Progress in Global Chemical Weapons Destruction

**Finn Torggrimsen Longinotto**  
**Senior Legacy Program Fellow**

**Global Green USA, Washington, DC,**  
**US Affiliate of Green Cross International**

**April 19, 2007**  
***Palazzo Rospigliosi***  
**Rome, Italy**





# Declared CW Stockpiles

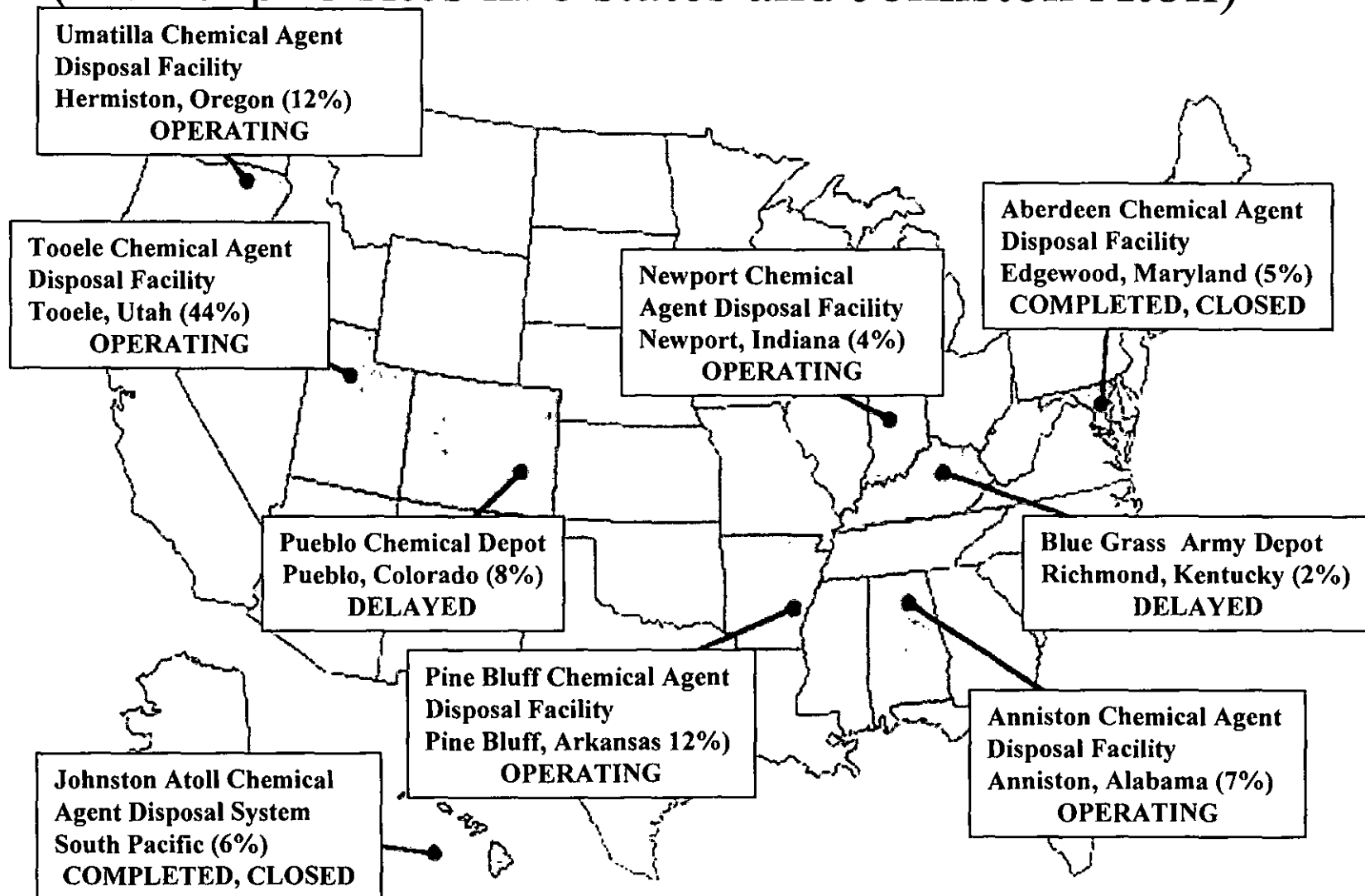
■	<b>Russia</b>	<b>39,965 MT</b>
■	<b>U.S.A.</b>	<b>31,495 ST</b>
■	<b>India</b>	<b>1,044 MT</b>
■	<b>South Korea</b>	<b>300-1,000 MT</b>
■	<b>Libya</b>	<b>24 MT</b>
■	<b>Albania</b>	<b>16 MT</b>

(MT = Metric Tons, ST = Short Tons)

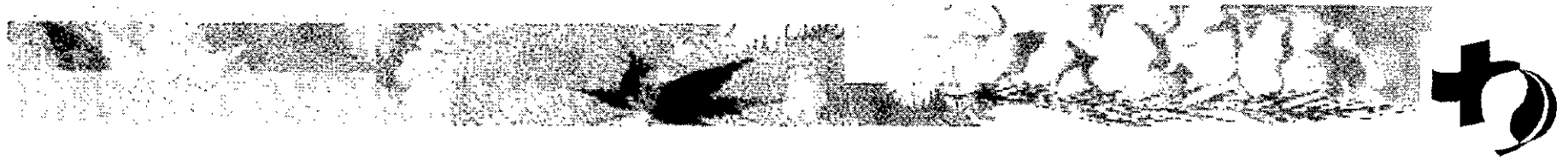


# Declared U.S. CW Stockpile: 31,495 Short Tons



(9 stockpile sites in 8 states and Johnston Atoll)







# U.S. CW Destruction Program

- 9 on-site destruction facilities
- 5 incinerators (Johnston Atoll, Utah, Oregon, Alabama, Arkansas) 
- 4 neutralization facilities (Maryland, Indiana, Colorado, Kentucky) 





## US CW Demil (11 March 2007)

■ Johnston Atoll	1990-2000	100% destroyed
■ Aberdeen	2003-05/07	100% destroyed
■ Tooele	1996-2016	59% destroyed
■ Anniston	2003-2016	27% destroyed
■ Umatilla	2004-2018	24% destroyed
■ Pine Bluff	2005-2016	11% destroyed
■ Newport	2005-2012	45% neutralized
■ Pueblo	2012/13-2018/20	0% (2,520 ST)
■ Blue Grass	2012/13-2023	0% (630 ST)

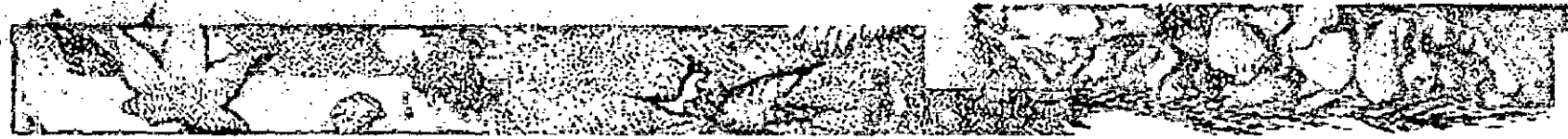




# CW Destruction Progress

- Russia 4,114 - 6,472 MT destroyed (10-16%)
- US 12,600 ST destroyed (40%)
- India 550 MT destroyed (53%, 2006)
- South Korea 105,000 shells destroyed (67%, 2006)
- Albania 3 MT+/- destroyed (20%, estimate)
- Libya Not yet begun (0%)



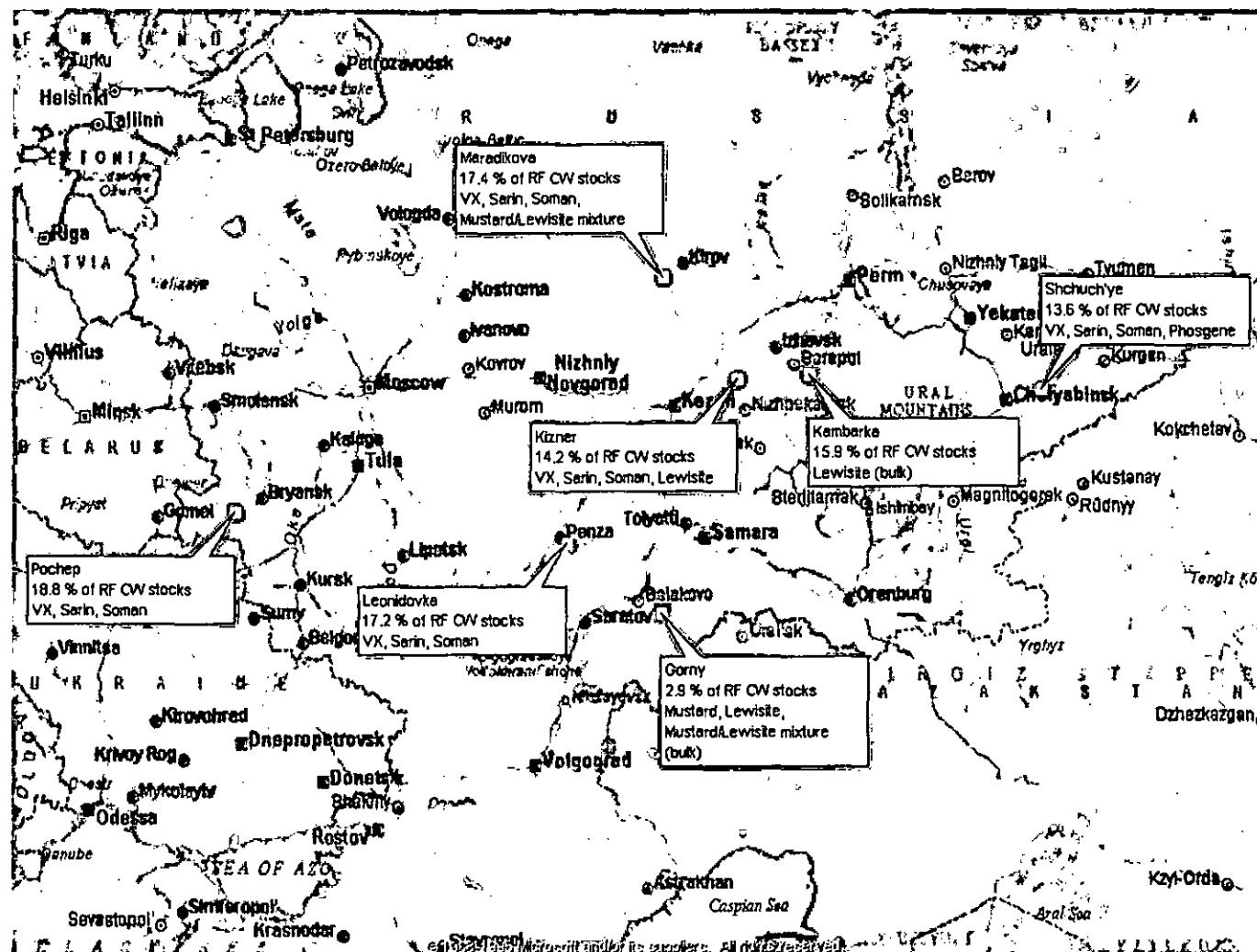


## Other CW Demil Deadlines

- Albania Jan 2007-June 2007
- India by December 2009
- Libya 2008-2011
- South Korea by December 2008





# Declared R.F. CW Stockpile: 39,965 Metric Tons (7 stockpiles in 5 Oblasts and 2 in the Udmurt Republic)







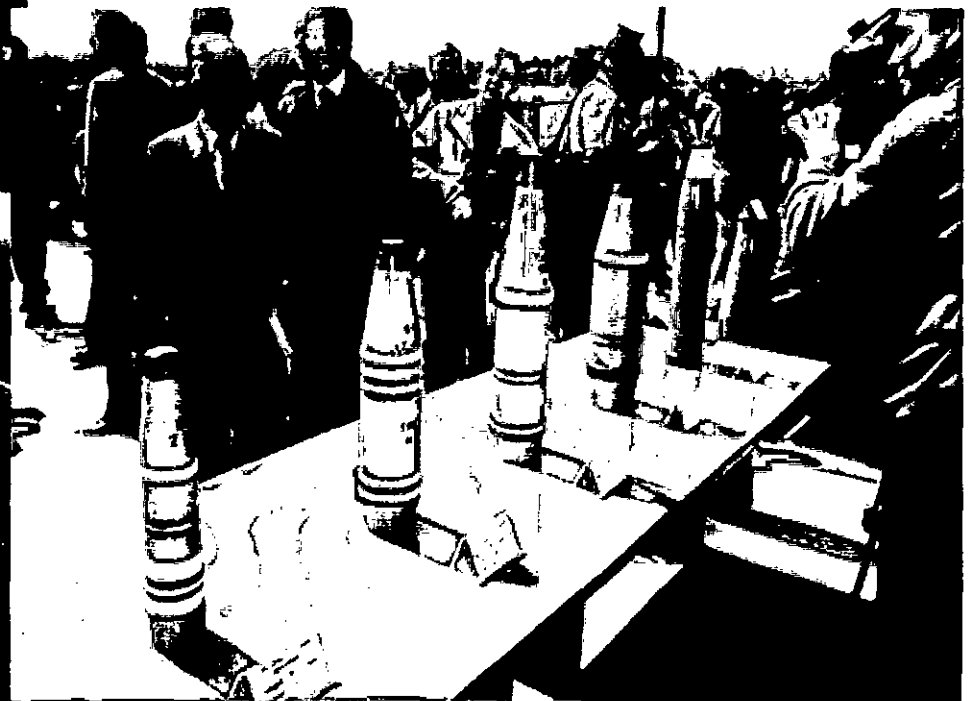
# R.F. CW Destruction Program

- 7 neutralization destruction facilities 
- 1 site – Gorny, Saratov Oblast – destroyed (1<sup>st</sup> stage process)
- 2 sites – Kambarka, Udmurtia and Maradikovsky, Kirov Oblast – operating
- 1 site – Shchuch'ye, Kurgan Oblast – 50% constructed 
- 3 sites – Pochep, Bryansk Oblast; Leonidovka, Penza Oblast; & Kizner, Udmurtia – in early planning & preconstruction





# Shchuch'ye Chemical Weapons



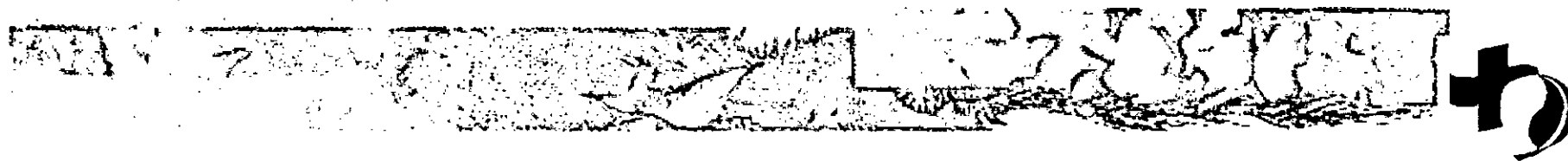




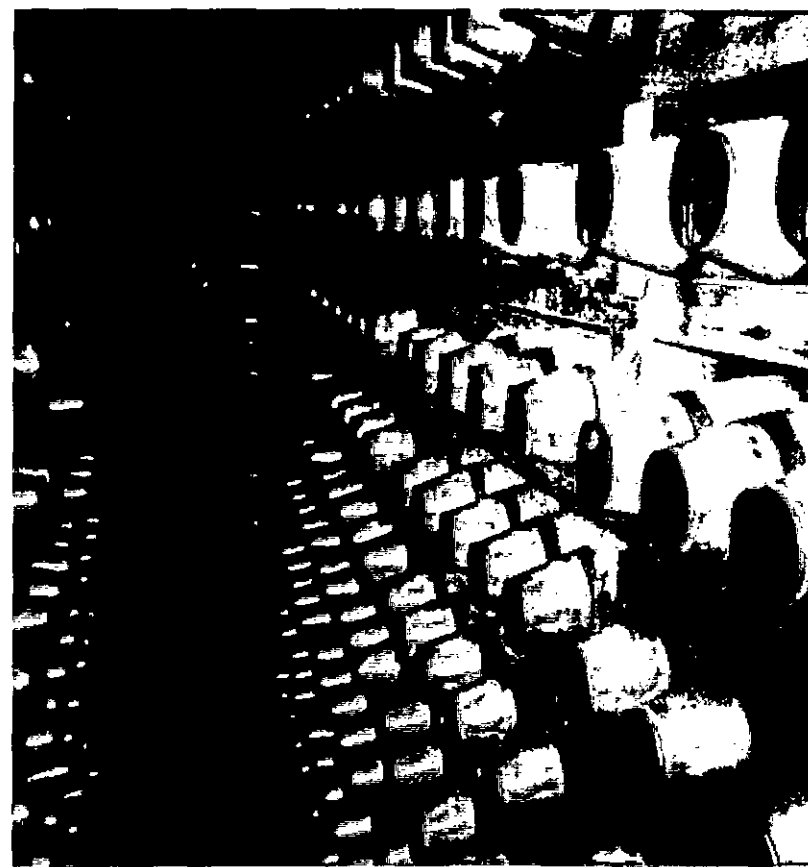
## Russian CW Demil

- Gorny 1,142 MT destroyed Dec 02 - Dec 05
- Kambarka 2,972+/- MT destroyed since Dec 05 (total 6,349 MT – through 2009)
- Maradikovsky 13,692+/- bombs neutralized since Sept 06 (total 40,000 bombs = 6,890 MT, through 2010)
- Shchuch'ye to open 2008/2010-2012 (5,456 MT)
- Pochep 2008 – 2012 (7,498 MT)
- Leonidovka 2008 – 2012 (6,885 MT)
- Kizner 2009 – 2012 (5,745 MT)

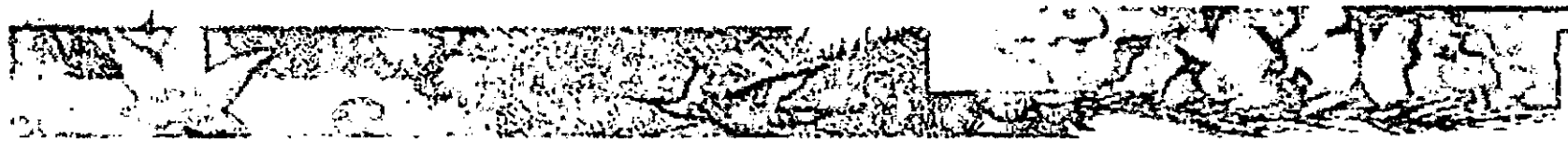




## Shchuch'ye Stockpile







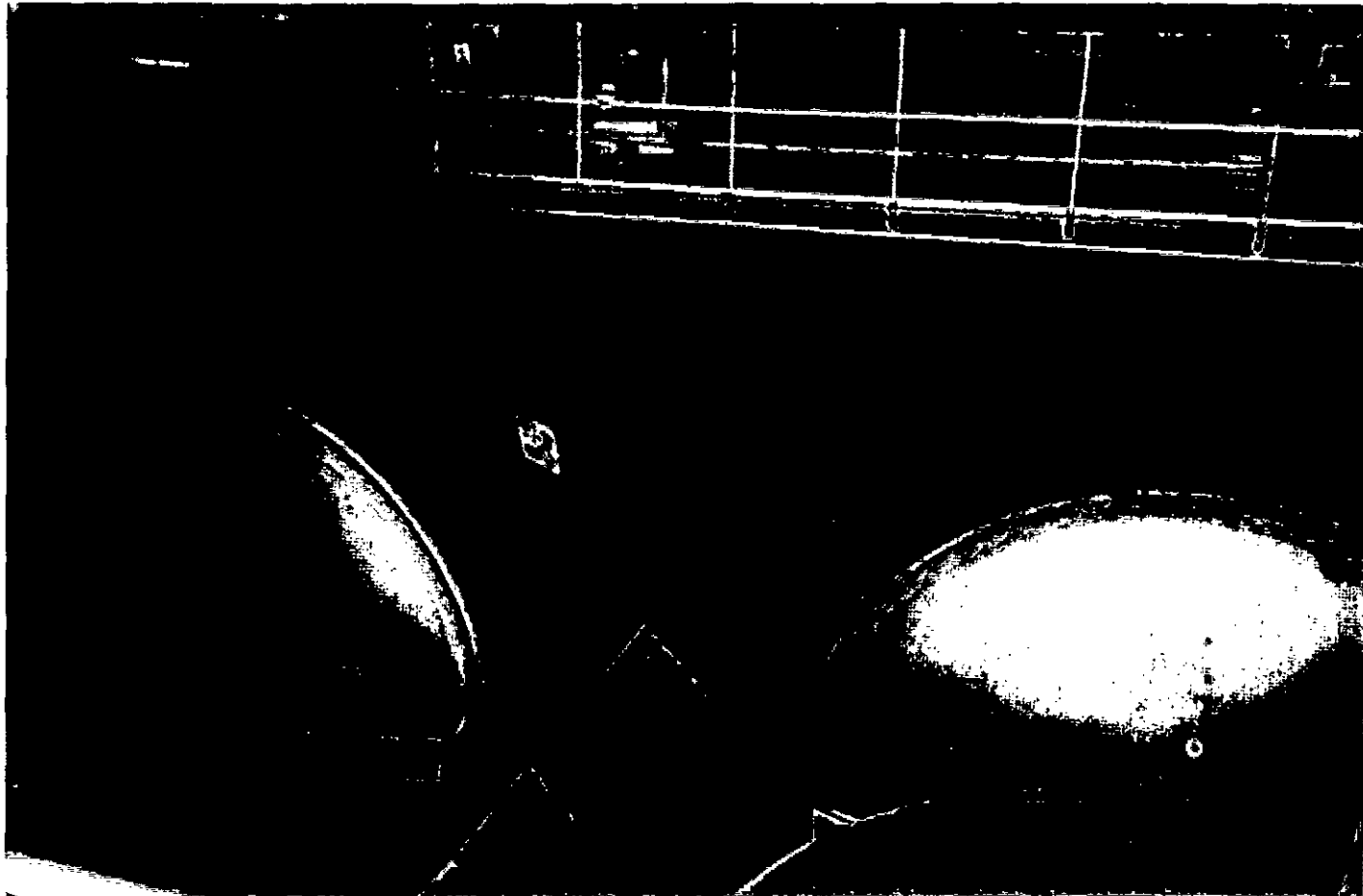
# Kambarka Opening, March 1<sup>st</sup>, 2006







# Kambarka Lewisite Tanks





# Legal Challenge for Russia



- Completed **1% CWC deadline April 2003** (after 3-year extension from April 2000)
- Received new deadline for **20% to 29 April 2007** (5-year extension from 2002)
- Received new deadline for **45% to 31 December 2009** (5.5 year extension from 2004)
- Requested extension for the **100% deadline to 29 April 2012** (5 year extension from 2007)

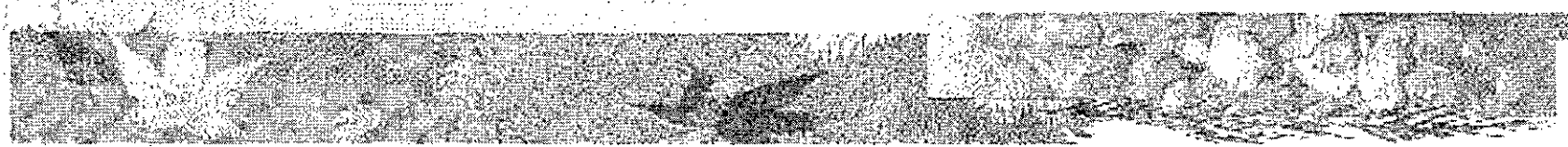




## Economic Challenge for U.S. and R.F.

- Initial cost estimate:
  - U.S. \$ 2 billion
  - R.F. \$5-6 billion
- Current cost estimate:
  - U.S. \$ 40 billion
  - R.F. \$8-10 billion





# Global Partnership Contributors

- U.S. \$ 1.039 Billion for CW (total \$10 million)
- 16 additional GP contributors -- \$ 700+ M
  - Canada, Czech Republic, Denmark, EU, Finland, France, Germany, Ireland, Italy, The Netherlands, New Zealand, Norway, Poland, Sweden, Switzerland, and the UK
- Several billion US\$ remain to be funded





# Key Recommendations

- Importance of funding from Global Partnership
- Implementation of individual country GP pledges
- Public Involvement and Transparency
  - Green Cross outreach offices
- Community Investment
  - Essential for successful program
- Adequate Emergency Preparedness
- Environmental and Public Health Protection



# CWC 10<sup>th</sup> Anniversary, Washington, D.C., 29 March, 2007 - Global Partnership Panel







# Global Partnership – Total Funding

- USA                      US\$ 10 billion
- Russia                US\$ 6 billion
- Other G8 pledges:
  - Germany      Euros 1.5 billion
  - Canada        Cdn \$ 1 billion
  - EU              Euros 1 billion
  - Italy            Euros 1 billion
  - France        Euros 750 million
  - U.K.            US\$ 750 million
  - Japan      US\$ 200 million





# Global Partnership – CW Funding

- Canada C\$ 98.9 million
- France Euros 250 million
- Germany Euros 300 million
- Italy Euros 365 million
- Netherlands Euros 7.6 million  
(+Euros 4.4million “under consideration”)
- Norway Euros 800 million
- European Union Euros 18 million





## Reasons for CWD Delay

- Finances – US, RF, and GP
  - US under-funding Pueblo and Blue Grass
  - US stopping CTR funding of RF CWD
  - RF 10 years late in funding CWD
- Technology – 2<sup>nd</sup> stage processing
- Mismanagement – Transportation
- Politics – US-RF, and Federal-State

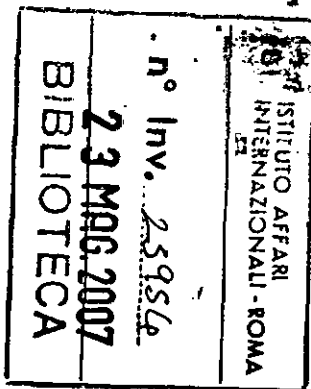




# CWC Deadline Implications

- 1 State Party – Albania – will be close to making April 2007 100% deadline
- 3 State Parties – India, Libya, and South Korea – will likely make April 2012 deadline
- 2 State Parties – Russia and US – will miss 2012 deadline by 4-12 years





# Conclusion and Follow Up

## What's to be Done?

- Emphasize the critical importance of State Parties fully funding and implementing their ongoing CW destruction programs – US, RF, and GP (including CTR)
- Promote public discussion of challenges in meeting deadlines at CWC 10<sup>th</sup> anniversary events in 2007
- Emphasize universality of CWC – Egypt, Israel, Lebanon, North Korea, Somalia, Syria, et al
- Improve US-RF relations and overcome recent differences.