MENARA Working Papers
No. 24, November 2018

WEAPONS OF MASS DESTRUCTION IN THE MIDDLE EAST AND NORTH AFRICA

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This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under grant agreement No 693244

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ABSTRACT

The Middle East and North Africa (MENA) is both the source of concern about weapons of mass destruction (WMD) *and* the driving force pushing for multilateral arms control. While most states in the region are parties to – or have signed, but not ratified – the multilateral WMD-related arms control treaties, the few outstanding cases provide a certain embeddedness for the region in the global order. Yet they also reveal the *multidimensional asymmetry* between regional and extra-territorial actors, the haves and have-nots, in both weapons programmes and civilian capabilities. The case studies of the unacknowledged Israeli nuclear arsenal, the Iranian nuclear programme and the Syrian chemical weapons programme demonstrate the close relationship and interaction between the global and the regional levels. In the absence of a regional security architecture, the Arms Control and Regional Security (ACRS) group has been the only – temporarily – successful exercise, while negotiations on the Middle Eastern WMD-free zone have been postponed indefinitely.

INTRODUCTION

In the late 20th and early 21st centuries, the Middle East and North Africa (MENA) region has been the greatest source of global concern about weapons of mass destruction (WMD), forcing action by the international community on the possession, use and/or threat of use of WMD.

As the Arab uprisings have evolved and become (relatively) segmented "local" issues, and the Islamic State is being expelled from the territory it once held, the two MENA regional issues demanding global attention and even provoking global action have been related to weapons of mass destruction: the Iranian nuclear programme and the use of chemical weapons in Syria. The third WMD-related issue – the Israeli nuclear arsenal – has remained what it has been for decades: of concern to the Arab states, albeit gradually fading in relevance, and increasingly only a concern for those situated in the eastern Mediterranean basin.

This paper argues that the MENA region is both the source of WMD concerns *and* the driving force pushing for multilateral arms control. The regional system is characterized by *multidimensional asymmetry* – especially manifold in the field of WMD – while at the same time it is a *penetrated system* by outside actors behaving as regional states. These characteristics, as well as the nature of the issue of WMD, mean there is the potential for the region to shape the international agenda, though their capacity to defend regional states' interests is not guaranteed.

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Warfare with weapons of mass destruction, as well as WMD control and disarmament efforts, have been limited primarily to the 20th and to some extent the 21st centuries, in spite of the fact that chemical and biological agents and materials have been present practically all through the history of mankind. While they are often mentioned in the collective, weapons of mass destruction – nuclear, chemical and biological weapons as well as their carrying vehicles, especially ballistic missiles – are rarely, if ever, considered or discussed together. (The proposal of a WMD-free zone for the Middle East and North Africa is an exception.) The relevant multilateral treaties – the Nuclear Non-Proliferation Treaty (NPT, 1968), the Biological and Toxin Weapons Convention (BTWC, 1972), the Chemical Weapons Convention (CWC, 1993) – have separate forums and verification organizations (the International Atomic Energy Agency, IAEA and the Organization for the Prohibition of Chemical Weapons, OPCW), even if all belong to the competence of the international community, namely to the United Nations via its specialized mechanisms.

Arms control is typically a cooperative exercise, a process of negotiations in which state actors engage voluntarily with the aim of achieving a common goal in negotiations, to implement measures from confidence-building, to limitation, to an eventual total ban on a full category of weapons (Goldblat 2002). Since the beginning of the 2000s, the MENA has been among the very few regions to raise concerns and even provoke reactions among the international community and the UN for nearly every category of WMD.

Cooperative security thinking, however, has had little chance of success in a region where security is usually considered in terms of the realist school of international relations (IR) theory. Nevertheless, the interdependence between the international system and the region, as well as the fact that the MENA is a penetrated system, has forced a certain level of adaptation to international norms. Nevertheless, since the end of the colonial era there has only been one brief period, that of the Arab–Israeli peace process (1991–5), when the spirit of cooperation proved strong. And even this coincided with the end of the Cold War, the relaxing of superpower competition and the rush for hegemony in the MENA region and elsewhere.

It is a generally held notion that security is indivisible. This is especially true in relation to weapons of mass destruction due to their innate dual-use character, their practically limitless capacity for indiscriminate destruction, and the extensive range of their increasingly typical carrying vehicles, ballistic and cruise missiles.

WMD proliferation, the development of biological, chemical and nuclear weapons by state actors, and WMD non-proliferation and disarmament efforts were specific elements of global security throughout the 20th century. Prior to the 1970s, however, these were considered part of the great powers' agenda and capability. This was especially true in the case of nuclear weapons, which were considered the main deterrent factor in the Cold War, and was reflected in the NPT, which distinguishes between nuclear weapons states and non-nuclear weapons states.[2] However, with détente and the end of the Cold War, and with the general – though far from complete – global non-proliferation regime embodied in multilateral arms control agreements, as well as the general scientific-technical development globally, WMD programmes and the innate threats associated with them have increasingly become a factor in regional conflicts.

2 It should be noted, however, that the text of the treaty reflects at several points the belief and the aim that this difference should and eventually would disappear (Preamble, Article 6).

"Originally 'arms control' was meant to denote rules for limiting arms competition (mainly nuclear) rather than reversing it. [...] Today, 'arms control' is often used interchangeably with [...] disarmament'" (Goldblat 2002: 3). Arms control and disarmament are understood as a process of negotiations among state parties with the aim of limiting or eventually terminating the possession, development, storage and use of certain types of weapons.[3]

Arms control may refer to conventional weapons as well as weapons of mass destruction. In the case of the latter, however, it is characterized by the practice of "decision-making by consensus" and the expressed aim of universality. Multilateral WMD treaties usually include a verification clause, by which the international community entrusts the verification of the treaty to an international organization, typically under the umbrella of the United Nations, which "by virtue of its universal character [...] is the only forum in which universal consensus on key security issues can be worked out" (Goldblat 2002: 47). Nevertheless, arms control – both the process and the eventual agreements – can also be regional (the nuclear weapons-free zones, NWFZs) or bilateral (e.g., Soviet–US, India–Pakistan), or even unilateral (if a state undertakes some limitations alone).

This effort to make decisions by consensus and the aim of universality are the two specific characteristics of WMD arms control and disarmament that serve to embed any state, even the tiniest one, in the international order – regardless of the fact that by many other standards it may be peripheral.

In the case of weapons of mass destruction, the MENA region is characterized by a *multidimensional asymmetry*, where asymmetrical relationships are manifest on several different levels.

1. REGIONAL VS EXTRA-TERRITORIAL ACTORS: THE MENA AS A PENETRATED REGIONAL SYSTEM

"The MENA region has been systematically described by IR scholars not only as a regional system subordinated to the global [one] – as 'changes in the major system will have a greater effect on [this] minor system than the reverse' [...] – but also as a 'penetrated' system" (Quero and Dessì forthcoming: 5). Although the analysis of this penetration is not the subject of this paper, we would like to argue that

1. "penetration" constitutes a certain dependence, even if asymmetrical, between the "penetrator" and the "penetrated". The "penetrator" cannot avoid reacting to certain developments and/or threats emanating from the region it has penetrated. Thus the "penetrated" may have a certain amount of leverage over the "penetrator".
2. The "penetrated" may "localize" the norms and practices conveyed to them "and modify these [...] according to domestic preferences and conditions" (Cassarino and Del Sarto 2018: 1–2).

Although it was European powers who colonized the MENA region and projected European norms and institutions on the region, now Europe has to bear the consequences of the conflicts in the region, including the waves of migration and the spillover of those conflicts. In the same vein, in spite of a kind of Pax Americana and the United States' "Pivot to Asia" policy, the USA is still held

3 For a complex definition of arms control see Goldblat (2002).

captive by certain developments and threats emanating from the region. The war on terror took on a new definition with the advent and demise of the Islamic State, but the (re-)emergence of global powers such as Russia and China (and even India) will still force the USA to remain "a Middle Eastern actor".

In terms of security, "'penetration' has traditionally translated into the inception and survival of a [...] regional order by which security-oriented responsibilities are chiefly assumed by extra-regional actors" (Quero and Dessì forthcoming: 5). It has often been stated that the MENA region has no security architecture of its own, but rather that regional actors depend on extra-regional states, primarily the USA, for their security. During the Cold War, the Soviet Union was also a security provider to the former socialist Arab states, while recently Russia has been playing a similar role in relation to the government of Bashar al-Assad in Syria. NATO's Mediterranean Dialogue may be far from providing security, but it does offer a framework to complement efforts by regional states to guarantee their own security.

While regional security is not institutionalized on the regional level, there are several international treaties embodying and enshrining norms and legal obligations related to security that add a further layer of external influence by providing an international umbrella, represented in the first instance by the United Nations. With regard to WMD, adherence to the multilateral WMD treaties has become nearly universal (outstanding cases will be discussed below) (see Table 1), and while the Middle Eastern nuclear weapon-free zone (ME NWFZ) has not yet been realized, the African nuclear weapon-free zone (Pelindaba Treaty) does cover the North African part of the MENA region (Table 2).

It should also be noted that there have been regional and sub-regional initiatives to establish regional security structures, both within the framework of organizations such as the League of Arab States and the Gulf Cooperation Council, and in the form of declarations (such as the Damascus Declaration after the 1991 Gulf War, or the Arab Peace Plan in 2002). However, due to regional political issues, first of all but not exclusively the Arab/Palestinian–Israeli conflict, these have not materialized or have not proved sufficient, which in turn has increased the reliance on extra-regional actors. Nevertheless, the academic community within and outside of the region has come up with proposals for WMD arms control, such as the idea of a Gulf NWFZ or a chemical weapon-free zone (APOME,[4] Karem 2012: 60), although neither has reached the political level.

To date there has only been one regional security dialogue, under the supervision of the two superpowers at the time, the USA and the Soviet Union/Russia,[5] which, in spite of the constraints, demonstrated some successes as well. The Arms Control and Regional Security (ACRS) working group within the multilateral talks of the Arab–Israeli peace process (1992–5) seems even more important in hindsight, as

> cooperative regional forums that included Israel were a new development in the Middle East [...] in the final analysis, the ACRS process turned out to be much more significant than might originally have been expected [...] The experience of ACRS may well surface as a set of ideas that needs to be considered once again. (Landau 2006: 160–172)

4 See APOME website: *Policy Briefs for the Middle East Conference on a WMD/DVs Free Zone*, http://academicpeaceorchestra.com/?p=policybriefs.

5 The Soviet Union was dissolved after the Arab-Israeli Peace process was launched in Madrid.

Table 1 | Signatories to multilateral arms control treaties and arrangements

	Non-Proliferation Treaty (NPT)	Comprenhensive Nuclear Test-Ban Treaty (CTBT)	Geneva Protocol	Chemical Weapons Convention (CWC)	Biological Weapons Convention (BWC)	Hague Code of Conduct (HCoC)	Missile Technology Control Regime (MTCR)
Algeria	1995	1996/2003	1992	1993/1995	2001		
Bahrain	1998	1996/2004	1988	1993/1997	1988		
Egypt	1968/1981	1996	1925/1928		1972		
Iran	1968/1970	1996	1929	1993/1997	1972/1973		
Iraq	1968/1969	2008/2013	1931	2009	1972/1991	2002	
Israel		1996	1969	1993			
Jordan	1968/1970	1996/1998	1977	1997	1972/1975	2002	
Kuwait	1968/1989	1996/2003	1971	1993/1997	1972/1972		
Lebanon	1968/1970	2005/2008	1969	2008	1972/1975		
Libya	1968/1975	2001/2004	1971	2004	1982	2002	
Mauritania	1993	1996/2003		1993/1998			
Morocco	1968/1970	1996/2000	1970	1993/1995	1972/2002	2002	
Oman	1997	1990/2001		1993/1998	1992		
Qatar	1989	1996/1997	1976	1993/1997	1972/1975		
Saudi Arabia	1988		1971	1993/1996	1972/1972		
Somalia	1968/1970			2013	1972		
Sudan	1968/1973	2004/2004	1980	1999	2003		
Syria	1968/1969		1968	2013*	1972		
Tunisia	1968/1970	1996/2004	1967	1993/1997	1972/1973	2002	
Turkey	1969/1980	1996/2000	1929	1993/1997	1972/1974	2002	
UAE	1995	1996/2000		1993/2000	1972/2008		
Yemen	1968/1986	1996	1971	1993/2000	1972/1979		

Signed and ratified **Signed but not ratified** **Not signed**

* Assad's government sent a letter to the United Nations Secretary General announcing that his government had signed a decree providing the accession of Syria to the Chemical Weapons Convention.

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Table 2 | Signatories and their status in the Pelindaba Treaty

MENA country	Signed	Ratified
Algeria	11 April 1996	11 February 1998
Egypt	11 April 1996	
Libya	11 April 1996	11 May 2005
Mauritania	11 April 1996	24 February 1998
Morocco	11 April 1996	
Sudan	11 April 1996	
Tunisia	11 April 1996	7 October 2009

Source: African Union website: *The African Nuclear-Weapon-Free Zone Treaty (Pelindaba Treaty): Status List*, https://au.int/en/node/7777.

2. HAVES VS HAVE-NOTS

The ACRS negotiations exposed two important aspects of the WMD problematique: the relationship between the "haves" and the "have-nots" (those in possession of WMD and those who do not have them) and the eventual "interaction" among the different categories of WMD. The global non-proliferation debate between the haves and the have-nots has received a new boost with the proposal of the new Nuclear Ban Treaty (Treaty on the Prohibition of Nuclear Weapons), which was supported by 122 states with one abstention and one no-vote. Since the treaty was opened for signature on 20 September 2017, sixty-nine states have signed and nineteen have ratified it. Of the MENA states, Algeria and Libya have signed, and Palestine has signed and ratified the treaty.[6]

With regard to the other multilateral treaties on chemical (CWC) and biological weapons (BTWC), the existing global norm (not to have such weapons) received a huge boost when Syria joined the CWC, leaving only Israel and Egypt among the regional states not party to the global treaties (as potential "haves") (Makdisi and Hindawi 2017). The civilian nuclear, chemical and biological capabilities reflect the same categories of haves and have-nots, which is especially significant in the field of nuclear energy generation. While in some of the most developed industrial countries (Germany, Japan) nuclear energy is increasingly disappearing from the energy mix, in other parts of the world it is seen as one possible option, or even the only option, for meeting the demand for energy. The MENA region, especially the Mashreq and the Arab Gulf states, have ambitious plans to construct a series of nuclear power plants – a move very much influenced by political considerations (to balance Israel's and Iran's capabilities) (Shaker 2010, Johnson 2018).

The penetrated nature of the MENA region discussed above has added an extra layer to the haves vs have-nots issue: besides the regional states, the "penetrators" – both in the historical and in the current political context – have been states with an acknowledged nuclear weapons status, even if their nuclear capability has not been considered to be used in the region. Although during colonial times Great Britain and France were not nuclear weapons states, when their current military involvement in the region is analysed – for example, their military bases and/or joint military exercises with regional states, not to mention their roles in the Arab uprisings and afterwards in Libya and Syria – their nuclear status has to be taken into consideration. This is even more the case with the Soviet Union/Russia and the United States, both in the Cold War and currently, as both have security arrangements with regional states.

Regional states themselves represent a wide variety of categories: Israel is an unacknowledged nuclear weapons state, as it is widely believed – based on the indirect proof provided by Mordechai Vanunu – to be a state in possession of nuclear weapons, although "Israel [has] adhered to a policy of avoiding any reference to the precise state of its nuclear capacity. Its declarations were limited to repeated statements to the effect that Israel 'would not be the first to introduce nuclear weapons to the Middle East'" (Feldman 1997: 96). This *neither acknowledge nor deny* policy has been referred to as *nuclear ambiguity*, part of David Ben Gurion's concept of "cumulative deterrence" (Feldman 1997: 95–7) or *nuclear opacity* (Aronson and Brosh 1992).

6 See UN Treaty Collection website: *Status of Traties: Treaty on the Prohibition of Nuclear Weapons*, https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVI-9&chapter=26&clang=_en.

Some Arab states are either known or suspected to have tried to obtain nuclear weapons, but were unsuccessful due to financial constraints or international pressure. Egypt has not been known to pursue military nuclear ambitions, although Gamal Abdel-Nasser's long-term ambitions are frequently cited, in spite of the fact that, compared with other regional states, Egypt has a relatively sophisticated civilian nuclear programme in research and development. For Syria, the loss of Soviet support – as Mikhail Gorbachev told Hafez al-Assad – to achieve a "strategic parity" with Israel terminated all such considerations, if they had not already been abandoned. In December 2003, Colonel Muammar Qaddafi announced that Libya would permanently forswear WMD. Iraq, under the leadership of Saddam Hussein, was the only Arab country to have been caught "red-handed" in its pursuit of a nuclear weapons capability – but that was only following the 1991 Gulf War, within the framework of the UNSCOM inspections under UNSC Resolution 687 (1991). It should be noted that these Arab states did conduct chemical (and, in some cases, even biological) weapons programmes, in part to compensate for their failure to attain a nuclear capability, and in part to deter or counterbalance their adversaries (discussed below).

Turkey, in spite of its military capability, has never been suspected of pursuing a WMD programme. Yet the very fact that US tactical nuclear weapons are deployed in its territory makes it necessary to include Turkey in the overall picture of WMD in the MENA region (although the internationally accepted definition of an eventual Middle Eastern WMD-free zone excludes Turkey) (IAEA 1989).[7]

The Islamic Republic of Iran has been suspected by many of trying to develop nuclear weapons, in spite of the fact that Supreme Leader Ayatollah Ali Khamenei issued a fatwa prohibiting "the production, stockpiling and use of nuclear weapons" and ordering "that the Islamic Republic of Iran shall never acquire these weapons" (IAEA 2005: 121). The nuclear deal concluded between Iran and the world's leading powers (the USA, Russia, China, Great Britain, France and Germany/the European Union) in 2015, approved unanimously by the UN Security Council, seemed to settle the debate. Yet, with President Donald Trump withdrawing the USA from the deal in 2018, the debate has been reopened. With regard to other WMD capabilities, namely chemical and biological, the suffering experienced by Iranians in the 1980–8 Iraq–Iran War, when Iraq used chemical weapons against Iran, has not only enhanced the Iranian sense of victimhood and provided it with a thematic justification for stepping forward in international forums as a responsible regional power, but has made chemical weapons a kind of national taboo as well.

7 IAEA Resolution GC(33)/RES/487 does not define the Middle East region (see IAEA 1988). The Secretariat could not trace any official definition of the Middle East as a region in United Nations documents or in resolutions adopted by the United Nations General Assembly. For the purpose of the present study the region has been taken as including the area extending from the Libyan Arab Jamahiriya in the west, to the Islamic Republic of Iran in the east, and from Syria in the north to the People's Democratic Republic of Yemen in the south. This selection carries no political significance and it is purely geographical.

Table 3 | WMD programmes of some MENA states

		Running	Started	Finished
Egypt	Nuclear	No		
	Chemical	?	early 1950s	
	Biological	?		
Iran	Nuclear	No		
	Chemical	not known		
	Biological	not known		
Iraq	Nuclear	past ambitions/No	early 1970s	1991
	Chemical	No	early 1960s	2003
	Biological	No	1985	1991-1992
Israel	Nuclear	nuclear ambiguity	mid to late 1950s	
	Chemical	Yes	mid-1950s	
	Biological	allegations, but no public statement		
Libya	Nuclear	past ambitions/No	1969/1970	2003
	Chemical	terminated	1980s	2014
	Biological	allegation	1982	2003
Syria	Nuclear	past ambitions/No		
	Chemical	terminated	early 1980s	2013 (2014)
	Biological	No (?)		

3. THE CIVILIAN USE OF NUCLEAR ENERGY

Although the civilian use of nuclear energy falls within the scope of another MENARA paper (Menichetti et al. 2018: 10–11), due to the dual-use nature of nuclear energy – that is, that it can be used for civilian *and* military purposes – a brief overview of regional states' nuclear capabilities is necessary.

The possession of nuclear material, equipment and technology, or even the relevant knowledge (scientists, technicians, etc.), can pose, or at least be perceived as, a potential threat. Any part of the so-called nuclear fuel cycle – the series of technologies from the mining of uranium ore to the manufacture of nuclear fuel, reprocessing as well as the storage of nuclear wastes – may increase the likelihood of proliferation, but it is the mastering and possession of the full nuclear fuel cycle that is construed as a threat. Given that the number of states in possession of the full nuclear fuel cycle is limited, and that nuclear technology implies an advanced level of modernity and technical development, its possession may increase a state's prestige and regional power status, in addition to serving as an eventual deterrent factor against external threats.

Only two states in the MENA region – Israel and Iran – have mastered and developed the full nuclear fuel cycle. While this in itself does not necessarily confirm the existence of a military nuclear programme, it means they have the potential and the technical capability to step over

the nuclear threshold. Israel's *nuclear ambiguity* ("Israel will not be the first") and Iran's *civilian* nuclear capability ("it is forbidden in the Islamic Republic to" under the fatwa by Supreme Leader Ali Khamenei) both have at their core an emphasis on self-reliance for their own security, but at the same time they reflect their position as technically modern nations in a region where the use of nuclear energy is still limited. Only a few of the approximately twenty-five states in the MENA region have some elements of a nuclear programme (usually research reactors), and only Iran uses nuclear energy for generating electricity in its so-far only nuclear power plant at Bushehr on the Persian Gulf. But the region as a whole, with the exception of Israel, Iran and to a certain extent Egypt, relies entirely on expertise and know-how from external sources.

Since 2007, however, following an emotional call by then Secretary General of the Arab League Amr Musa for Arab nations to start nuclear programmes to compensate for their inability to force Israel to give up its assumed nuclear arsenal, several Arab states have announced plans to start civilian nuclear programmes. (It remains to be seen what consequences the ambitious plans of the United Arab Emirates (UAE) and Saudi Arabia to build nuclear power plants will have for the "nuclear power balance" of the region.) "Despite the global decrease, there has been a sharp rise in the number of nuclear power projects either under construction, planned, or proposed in the MENA region – as much as 48 have been put on paper in the last few years" (Fallon and Hoare 2018). Although this development exposes the regional states to the nuclear infrastructure construction companies, the very fact that in a shrinking global market it is the MENA region that still aspires to build nuclear power plants gives them some leverage. Nevertheless, the competition for these lucrative deals adds new momentum to the great power rivalry in the region, especially as Russia and China have successfully increased their share of the contracts to build nuclear power plants.

4. INTERACTION BETWEEN THE DIFFERENT WMD CATEGORIES

Strategists and the WMD non-proliferation and disarmament community have frequently debated whether there was a causative link between the inability (for any reason) to acquire nuclear weapons and the decision to go for chemical (and eventually biological) weapons, with some claiming that chemical weapons were "the poor's atomic bomb". While this question has subsided with the universalizing norm (and pressure) of adhering to the multilateral WMD treaties, such considerations cannot simply be set aside, especially in the Middle East and North Africa. Nevertheless, data regarding the different WMD programmes in the region show that those (Arab) states that considered but failed to develop a military nuclear programme did develop chemical (and biological) programmes, in an attempt to achieve parity with Israel (i.e., the Israeli nuclear capability). Although it cannot be said that this was their only aim (e.g., Iraq used chemical weapons in the Iraq–Iran War against Iran), the fact that it could serve as an "excuse" for such WMD programmes and was at times considered as potential leverage was manifest in the ACRS negotiations.

WMD-related discussion in the ACRS centred on two closely interrelated topics: the sequence of peace/security and arms control (i.e., which should come first), and the initiative of a WMD-free zone and the Israeli nuclear capability, or as it was summarized: the Israeli "framing of the nuclear issue as basically non-negotiable within the arms control talks before comprehensive peace was achieved" (Landau 2006: 53) The Arab states in the months preceding the opening

for signature of the Chemical Weapons Convention (January 1993) linked their signature of the treaty to Israel's readiness to take measures on the nuclear issue. The Arab League members were "ready to comply with the treaty on chemical non-proliferation [...] when Israel responds to international demand for joining the [NPT]" (Landau 2006: 134). Although the joint Arab stance eventually melted away as some Arab states signed the CWC upon its opening, this positioning of the Israeli nuclear capability vs some Arab states' chemical (and biological) programmes has resurfaced again and again, despite the fact that Israel had a chemical weapons programme as well.

5. THE NEARLY FIFTY-YEAR-OLD PROPOSAL OF COOPERATIVE SECURITY: THE MIDDLE EAST NUCLEAR WEAPON-FREE ZONE/WMD-FREE ZONE (ME NWFZ/WMDFZ)

In the MENA region, the global trend of non-nuclear weapons states proposing the creation of nuclear weapon-free zones has played out in the longest-drawn-out, but still not realized, plan for an NWFZ. In response to the asymmetry between the Israeli nuclear (and other WMD) capability and the Arab chemical and biological programmes, in 1990 Egyptian President Hosni Mubarak expanded the proposal for a WMD-free zone in the MENA region (Karem 1988). In the absence of a regional security framework, the only multilateral forum in which to negotiate this question has been the NPT review conferences, where the issue has already been shown to have the capability to prevent the achievement of a common final declaration (Davenport 2017). However, the proposal was referred to in UNSC Resolution 687 (1991) and was set as an aim by the 1995 NPT Review and Extension Conference.

The Middle East, a term coined by European colonial powers to denote the territory neighbouring Europe to the south, has never been defined properly. However, the territory of the proposed Middle Eastern zone – whether an NWFZ or a WMD-free zone – was defined as the territory from Libya in the west to Iran in the east, from Syria in the north and Yemen in the south, and was later expanded to include all Arab League member states, plus Iran and Israel (IAEA 1989).

The Middle East NWFZ was first proposed in 1974 by Egypt and Iran. Several regional documents played a role in its inception, including the Treaty of Tlatelolco (1967), the resolution of the Arab League, and the Declaration on the Denuclearization of Africa by the Organization of African Unity in July 1964. However, the same complex security situation in the Middle East that led to the call for the establishment of such a zone has made its realization impossible to this day. While for several decades the main obstacle was the Arab/Palestinian–Israeli conflict, in the 2000s this was compounded by the Israeli–Iranian nuclear controversy.

The Resolution on the Middle East at the 1995 NPT Review and Extension Conference (UN 1995: 13–14) calling for "the establishment of an effectively verifiable Middle East zone free of weapons of mass destruction, nuclear, chemical and biological, and their delivery systems" has become the main point of reference for any future initiative. Although neither the 2000 nor the 2005 NPT Review Conference led to a breakthrough, it was the 2010 NPT Review Conference that set out five "practical steps" towards the realization of the Middle East zone. It was agreed that a conference

on the zone should be organized in 2012, and Ambassador Jaakko Laajava was appointed as facilitator.[8] However, due to political events that year (most of all the presidential campaign and elections in the USA) and differences of opinion between regional states (first of all Israel and Iran), the conference on the Middle East NWFZ/WMDFZ had to be postponed indefinitely.

Many observers expected the lack of progress on the Middle East zone to threaten the outcome of the 2015 NPT Review Conference. Egypt, supported by the Arab League, put forward a new proposal by which the UN Secretary-General would be the sole authority in charge of convening the conference on the Middle East zone, transferring the issue from the NPT framework to the UN. This would make it possible to include Israel (a non-party to the NPT), and the original sponsors, first of all the USA, would no longer be responsible for setting the agenda and convening the conference.

The final draft of the document included elements of the Egyptian proposal (that the Secretary-General should convene the conference by 1 March 2016, and that a special representative was to be appointed), but the USA, the UK and Canada did not support the proposal. Thus, in the absence of a consensus – on the Middle East zone, among other issues – the final document was not adopted. Although the failure of the decision on the Middle East zone is expected to increase the pressure on the next review conference in 2020, the lack of interest shown so far by the Trump administration does not bode well for arms control in general and the NPT in particular. Arab frustration has increased, and there is a sense of waiting. The Israelis appear to be satisfied with having put the issue off at least until the next review conference. While Iran's position seemed relatively safe after the conclusion of the nuclear deal (2015), with ally Syria having joined the Chemical Weapons Convention it could support the expansion of the NWFZ concept to that of a WMDFZ, which it has not previously done. However, with the withdrawal of the USA from the nuclear deal, the issue of the WMDFZ seems to have been pushed lower down the agenda, if not abandoned entirely (Péczeli and Rózsa 2017). Nevertheless, the academic community in the Middle East and North Africa, as well as in Europe, have suggested several cooperative ideas based on different segments of the comprehensive complex, such as the idea of an all-inclusive nuclear test-free zone or a WMD-free zone based on the CWC and the BTWC, a Gulf WMD-free zone, and others (see APOME publications).

8 The Academic Peace Orchestra Middle East (APOME) project led by Prof Bernd Kubbig prepared 49 policy papers on the different aspects and possible implications in support of the conference and Ambassador Laajava's work. See APOME website: *Policy Briefs for the Middle East Conference on a WMD/DVs Free Zone*, http://academicpeaceorchestra.com/?p=policybriefs.

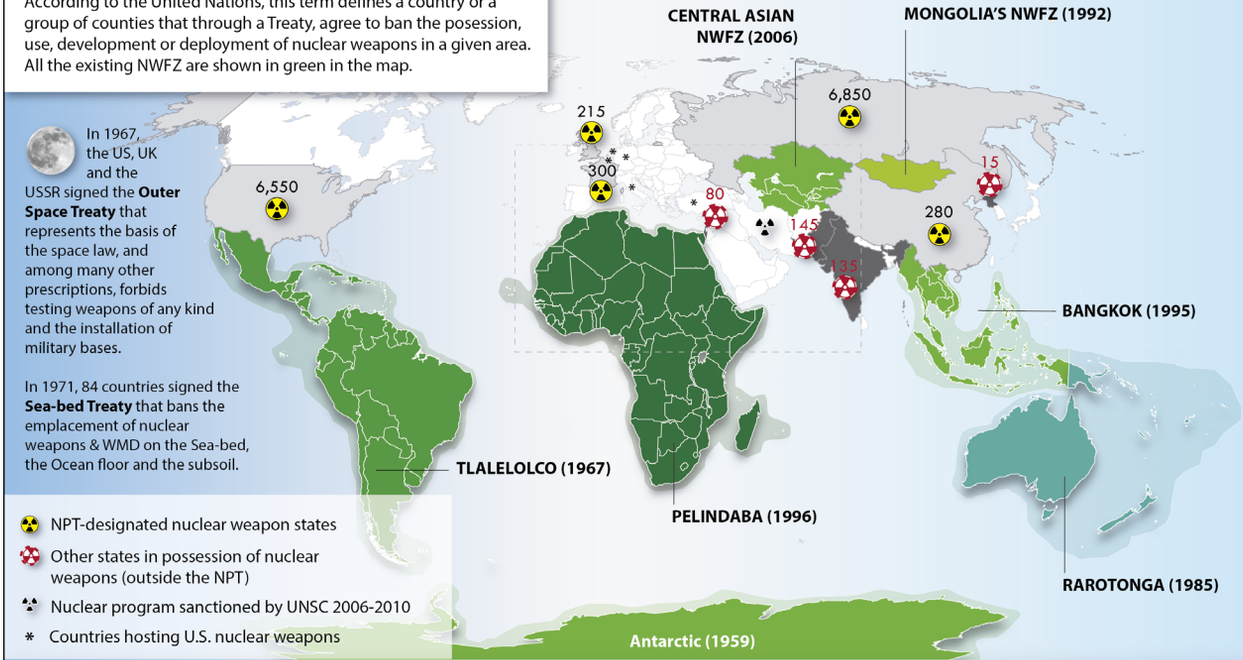
MENARA MAPS - N.6 (September 2018)

THE MENA NWFZ: 44 YEARS OLD DREAM... POSTPONED AGAIN

Current Nuclear Weapons Free Zones (NWFZ)
According to the United Nations, this term defines a country or a group of counties that through a Treaty, agree to ban the posession, use, development or deployment of nuclear weapons in a given area. All the existing NWFZ are shown in green in the map.

In 1967, the US, UK and the USSR signed the **Outer Space Treaty** that represents the basis of the space law, and among many other prescriptions, forbids testing weapons of any kind and the installation of military bases.

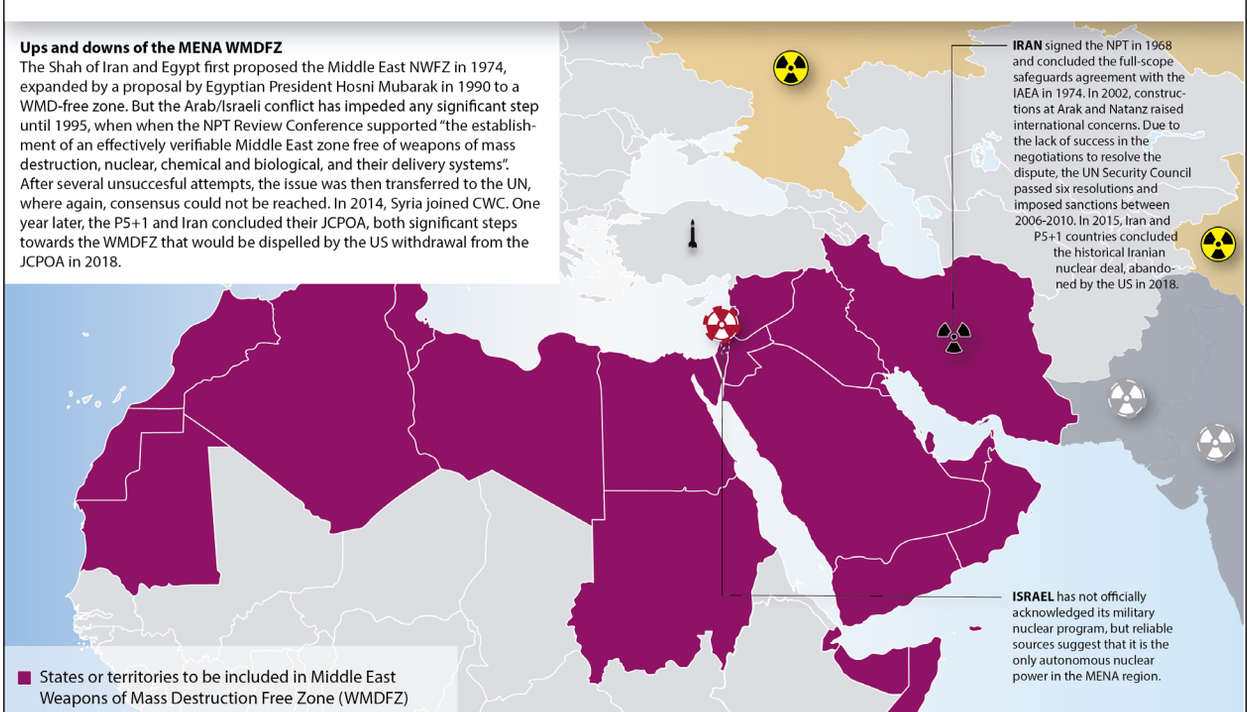
In 1971, 84 countries signed the **Sea-bed Treaty** that bans the emplacement of nuclear weapons & WMD on the Sea-bed, the Ocean floor and the subsoil.



- NPT-designated nuclear weapon states
- Other states in possession of nuclear weapons (outside the NPT)
- Nuclear program sanctioned by UNSC 2006-2010
- * Countries hosting U.S. nuclear weapons

THE MIDDLE EAST WMD-FREE ZONE

Ups and downs of the MENA WMDFZ
The Shah of Iran and Egypt first proposed the Middle East NWFZ in 1974, expanded by a proposal by Egyptian President Hosni Mubarak in 1990 to a WMD-free zone. But the Arab/Israeli conflict has impeded any significant step until 1995, when when the NPT Review Conference supported "the establishment of an effectively verifiable Middle East zone free of weapons of mass destruction, nuclear, chemical and biological, and their delivery systems". After several unsuccesful attempts, the issue was then transferred to the UN, where again, consensus could not be reached. In 2014, Syria joined CWC. One year later, the P5+1 and Iran concluded their JCPOA, both significant steps towards the WMDFZ that would be dispelled by the US withdrawal from the JCPOA in 2018.



- States or territories to be included in Middle East Weapons of Mass Destruction Free Zone (WMDFZ)

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This project has received funding from the European Union's Horizon 2020 Research programme under grant agreement No. 693244. This publication reflects the views only of the authors, and the Comission cannot be held responsible for any use which may be made of the information contained therein. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the members of the consortium.

6. THE REGIONAL PROVOKING THE GLOBAL: THE IRANIAN NUCLEAR PROGRAMME > DEAL > THEN WHAT?

The international controversy over the Iranian nuclear programme fits into a context that is much broader than "just" non-proliferation and arms control. On the one hand, it is a "clear case" of preventing a state that has acquired a nuclear capability from posing a threat, and in this sense it has proved the ability of the international community to avoid war through the means of diplomacy and negotiations. It should not be forgotten, however, that from the beginning the Iranian nuclear file was considered an international concern, although with reference to regional security. Nevertheless, regional states were concerned to find themselves excluded from the negotiations. On the other hand, the Iranian nuclear file has never been entirely decoupled from the broader political aim – held by at least some global and regional actors – of facilitating regime change in the Islamic Republic. Since the direct involvement of the USA was crucial to the negotiations and to the deal, it should be noted that ever since the 1979 Islamic Revolution (but especially following the occupation and hostage-taking at the US Embassy in Tehran in November 1979) regime change in Iran has been on the US agenda. Although the relevance of the issue has fluctuated across different US administrations, from President Barack Obama's offering an "unclenched fist" to the present policy by President Trump to initiate regime change (or, as many suggest, possibly even regime collapse or state failure), it has always provided a much wider context to the nuclear non-proliferation and disarmament efforts. Thus, the Iranian nuclear controversy and the deal have ensured that Iran – and, based on the security implications of Iran's regional ambitions and regional power status, the MENA region as well – is somewhat embedded in the international order.

Iran signed the NPT in 1968 and ratified it in 1970, concluding a comprehensive safeguards agreement with the IAEA in 1974 (INFCIRC/214). The Islamic Republic left these international commitments in force, and Ayatollah Ruhollah Khomeini even ordered that nuclear activities be stopped. However, the nuclear programme was restarted in the mid-1980s. Although some general concerns were repeatedly voiced about the nature of the Iranian nuclear programme (Iran is an "unreliable regime", why would Iran need nuclear energy when it has oil, etc.), the full-scope safeguards in place with the IAEA were not challenged.

The Iranian nuclear programme became the focus of attention in 2002, when it was revealed that the Islamic Republic was working on the construction of a uranium centrifuge plant at Natanz and on a heavy water plant to contribute to the plutonium-fuelled research reactor unit planned at Arak – of which the IAEA had not been informed. Following rounds of unsuccessful negotiations to settle the issue, the IAEA Board of Governors referred the matter to the UN Security Council in February 2006, which between 2006 and 2010 adopted six resolutions (four of which included sanctions) requiring Iran to take steps to alleviate international concerns about its nuclear programme. The new round of negotiations between the permanent members of the Security Council and Germany (P5+1 or E3/EU+3) on the one hand, and Iran on the other, led to the conclusion of the Iranian nuclear deal on 14 July 2015, which was approved by a unanimous vote in the Security Council (UNSC Res 2331).

The Joint Comprehensive Plan of Action (JCPOA) was a joint effort not only by the participants in the negotiations, but more widely as well, involving the European Union and others who helped organize the meetings, provided the sites and infrastructure for the negotiations, and so on. It was considered a "historic deal" by which "every pathway to a nuclear weapon is cut off" (White House 2015), subjecting Iran to an unprecedented set of inspections in return for the easing and gradual suspension of the nuclear-related sanctions. Only one state, Israel, was firmly opposed, while some Arab Gulf states, especially Saudi Arabia, although not openly against it, only grudgingly accepted the deal, fearing the threat of increased Iranian influence over the Middle East and thus a threat to their own interests and even security.

The US withdrawal from the deal, announced by President Donald Trump on 8 May 2018, however, re-established the Iranian nuclear file as a priority on the international agenda and set in motion a complex array of international activities – political, diplomatic, economic and financial. Several fault lines have appeared among states, banks, business and companies. In an unexpected move, in August 2018, President Trump tweeted his readiness to talk to the leaders of Iran. The outcome is as yet uncertain, but the potential impact of the Iranian nuclear deal clearly reflects the MENA region's embeddedness, even if in an asymmetrical way, in the global order.

7. THE REGIONAL PROVOKING THE GLOBAL: CHEMICAL WEAPONS USE IN SYRIA TRIGGERED INTERNATIONAL ACTION

> While Syria had long been suspected of possessing a sizeable stockpile of chemical weapons, its official policy had mirrored that of Israel's non-confirmation of its nuclear arsenal. Indeed, Syria's justification for these weapons was based on strategic deterrence given Israel's large weapons of mass destruction (WMD) stockpile that the West has largely ignored in official terms. (Makdisi and Hindawi 2016)

The first official acknowledgement of the Syrian chemical weapons capability came in July 2012, when Syrian officials made declarations that "any chemical weapons possessed by Syria would never be used, under any circumstances, within Syria, no matter how the situation progresses internally [... CWs] would not be used unless Syria faced an external aggression" (Makdisi and Hindawi 2016). In the international debate that followed, President Obama drew a "red line": "We have been very clear to the Assad regime, but also to other players on the ground, that a red line for us is we start seeing a whole bunch of chemical weapons moving around or being utilized" (White House 2012).

In the course of the Syrian uprising-turned-civil war, however, incidents of CW use were attributed both to the Assad government and to some opposition groups. Although the Assad government invited international inspectors to investigate cases of CW use, many nevertheless believed that it was in fact government forces that had used such weapons, while the regional media reported some cases in which opposition groups were clearly responsible. However, US (and international) intervention did not materialize.

Instead, in an unprecedented case of international cooperation, Syria joined the Chemical Weapons Convention in 2013, and all of its declared chemical materials and their delivery vehicles were destroyed under the OPCW–UN Joint Mission. The Joint Mission was unprecedented not only in nature, but in its task as well: transporting the most dangerous chemicals out of the country, to be destroyed on the high seas. In a further, rather unusual case of international cooperation, some twenty-five states provided funding for this venture. Thus, and with the active involvement of the Syrian government, all Syrian chemical weapons had either been destroyed or removed from Syrian territory by 30 September 2014 (Makdisi and Hindawi 2016).

While some outstanding issues did remain, the Syrian CW issue seemed to have been settled for good, until reports began to emerge of incidents of the use of chlorine and mustard gas – sometimes related to the Islamic State – not only in Syria but in Iraq as well (Zanders 2018: 3).

The case of chemical weapons in Syria has revealed another asymmetry in the proliferation of weapons of mass destruction: WMD proliferation, as well as arms control, typically has been a state actor exercise, yet developments in the international system have been increasingly shaped, sometimes even forced, by non-state actors. The MENA region is characterized by a wide variety of non-state and hybrid actors, some of whom are radical militants, and the possibility of such organizations producing or obtaining some kind of WMD (most probably chemical) capability cannot be excluded. (Da'ish has tried to attain such a capability, but the late al Qaeda leader Osama bin Laden also had similar intentions – and allegedly aspirations to obtain nuclear weapons as well.)

8. THE GLOBAL BLOCKING THE REGIONAL: THE UNACKNOWLEDGED ISRAELI NUCLEAR CAPABILITY

The controversy over Israel's nuclear capability has been the reverse of both the Iranian and the Syrian cases, in the sense that a regional security concern has regularly been dismissed by global actors, first and foremost the USA, in favour of Israel's security.

However, in the beginning it was not evident that the USA would stand by Israel over its nuclear capability: when the Nixon administration realized that "Israel was moving very close to a nuclear weapons capability or even possession of actual weapons", there was intense debate over "whether to apply pressure to restrain the Israelis or even delay delivery of advanced Phantom jets whose sale had already been approved" (Burr and Cohen 2014). It was argued that failure to exert such pressure "would involve us in a conspiracy with Israel which would leave matters dangerous to our security in their hands". The Department of Defence's Paul Warnke warned in early 1969 that the Israeli nuclear programme represented "the single most dangerous phenomenon in an area dangerous enough without nuclear weapons". Nevertheless, National Security Advisor Henry Kissinger believed that it would be sufficient for US interests if Israel kept its nuclear activities secret, since "public knowledge is almost as dangerous as possession itself". It is still not clear why President Nixon overrode the near consensus of senior US officials and was willing to tolerate Israeli nuclear weapons as long as their existence remained secret (Burr and Cohen 2014).

In the context of the MENA region's oldest unresolved conflict – that between Arabs/Palestinians and Israel – the Israeli nuclear arsenal, the existence of which has never been acknowledged nor denied, in line with US policy, has for decades been a grave security concern. In addition to the Palestine issue, the struggle to counterbalance the Israeli nuclear capability and efforts at reaching parity with Israel in general have come to symbolize both Arab unity (in the relevant international forums) and Arab failure to protect Arab interests. The Middle East Resolution at the 1995 NPT Review and Extension Conference is a case in point: the USA blocked any mention of Israel in the document, which called upon those regional states that had not yet acceded to the treaty to do so. Arab attention to the Israeli nuclear capability has been waning – partly because of their inability to prevent the USA from eventually blocking any action, partly due to changes among and within the Arab states themselves and the consequent changing Arab attitude towards Israel, and partly, more recently, because of the Iranian nuclear programme coupled with Iran's regional power status.

9. MISSILES, THE NON-NEGOTIABLE SUBJECT

The international community's inability even to start a multilateral negotiation process on the limitation and control of missiles has been attributed to the fact that "unlike nuclear warheads, conventionally equipped missiles [...] have been built for use rather than only for deterrence. This may explain why they have a secure place in the stockpiles of the armed forces and in the war doctrines of almost all militarily advanced states" (Kubbig and Fikenscher 2012: 7).

This is clearly reflected in the fact that most of the MENA states have not joined either of the two existing missile regimes, the Hague Code of Conduct (International Code of Conduct against Ballistic Missile Proliferation, HCoC) or the Missile Technology Control Regime (MTCR). Morocco, Tunisia, Libya, Jordan and Iraq are signatories of the HCoC, and Turkey is a party to both (see Table 1).

Delivery vehicles themselves constitute complex categories as they include aircraft and missiles, rockets, cruise missiles, ballistic missiles and so forth. Comparing the haves and the have-nots is problematic, as it is difficult to make comparative assessments of missiles to aircraft, or to compare the possession of missiles with that of missile defence systems, for example. While the HCoC and the MTCR, as well as international thinking on non-proliferation, are generally focused on missiles, in the specific context of the Middle East rockets have a special relevance given their use by Hamas and Hezbollah against Israel, which, in spite of its advanced military force and being the only nuclear power in the region, is especially vulnerable to rocket attacks.

Although unmanned aerial vehicles and pilotless combat aircraft are becoming increasingly available, with as yet unforeseen consequences for the region, the MENA region has been the scene of especially frequent use of missiles: nearly 91 per cent of the 5,025 ballistic and cruise missiles fired in combat since the end of the Second World War have been used there (quoted in Kubbig and Fikenscher 2012: 39-61). While some regional states have their own indigenous missile development and production programmes, the region is highly dependent on external sources for missile technology, including the USA, Russia (in the Cold War the Soviet Union), China, North Korea and others. For this reason, some regional states have pursued missile defence programmes. Israel has developed, and is further developing, a multi-tier missile defence programme (Arrow,

Iron Dome, Magic Wand) with US support but is increasingly becoming self-reliant. Turkey, Egypt and the Arab Gulf states (Qatar, Kuwait, the UAE) depend on external suppliers, first of all the USA, but some Russian missile defence systems are also being sold in the region (S-300 to Syria and Iran, S-400 to Turkey and Iran). Syria's own missile defence capabilities are questionable. Iran, in addition to cooperating with Russia (S-300 and S-400), is at the same time developing its own defence system (Bavar-373) (Rózsa and Péczeli 2013).

In spite of the fact that the MENA region is characterized by complex and manifold missile- and rocket-related threats, adding up to a regional arms race, there has been no regional arms control initiative related to this category of weapons. On the contrary, private sources have revealed that when the idea was suggested to the regional states, they all rejected it. The first instance in which the international community came forward to control the missile activities of a regional state was with UN Security Council Resolution 687 (1991), which required Iraq to "accept the destruction, removal, or rendering harmless, under international supervision, of [...] all ballistic missiles with a range greater than one hundred and fifty kilometres, and related major parts and repair and production facilities" (UNSC Res 687). Although the 2015 JCPOA does not address the issue of missiles, under UN Security Council Resolution 2231 there are "nonbinding U.N. restrictions on Iran's development of nuclear-capable ballistic missiles" (Katzman 2018: i). In a rare case of the unilateral adoption of arms control measures, Iranian officials and finally Supreme Leader Ayatollah Ali Khamenei announced that Iran will not develop missiles with a range exceeding 2,000 kilometres (Davenport 2017). Meanwhile, Iran has so far firmly resisted the EU member states' proposal for negotiations to discuss the Iranian missile programme.

CONCLUSION

The proliferation of weapons of mass destruction threatens the security of the entire international community. Not only have efforts at non-proliferation and the eventual disarmament of such weapons become the universal norm, but the obligation to work for that goal has been enshrined and codified in several international treaties. Multilateral arms control treaties related to WMD (the NPT, the Comprehensive Nuclear Test-Ban Treaty (CTBT), the CWC and the BTWC) ensure the embeddedness of all state parties in the international non-proliferation order: the shared aim of achieving universality cannot be realized if any state, even the smallest and most peripheral, is not included.

The states of the Middle East and North Africa, with very few exceptions, are parties to – or have signed but not ratified – all these treaties. (Israel is not party to the NPT or the BTWC; it has signed but not ratified the CTBT and the CWC. Egypt is not party to the CWC; it has signed but not ratified the CTBT and the BTWC. Saudi Arabia, Somalia and Syria are not parties to the CTBT. Iran and Yemen have signed but not ratified the CTBT. Somalia and Syria have signed but not ratified the BTWC.) Yet in the recent past it has been the Middle East and North Africa that has been the greatest cause of concern, prompting the international community to act.

Despite the increasingly complex transformation of the region, the Israeli WMD capability is still non-negotiable. Both the controversy over the Iranian nuclear programme and the dismantlement of the Syrian chemical weapons arsenal seemed to have been solved by international cooperative

diplomacy, only to resurface again on the international agenda. The conference on the more than forty-year-old concept of a Middle East free of nuclear weapons/weapons of mass destruction has been put off indefinitely. All these regional arms control cases prove that WMD arms control and disarmament *by nature* have to potential to "embed" a region in the international order when they require joint action by the international community as a whole, the agreement and cooperation of the UNSC permanent members in general, and the firm commitment and engagement of the USA in particular.

The Trump administration so far has not shown any interest in general arms control and disarmament. However, time and again it has focused selective attention on specific cases. Yet President Trump's "agreements" with Russia and North Korea, not to mention his ultimatum to Iran, are more reflective of the position of a hegemon rather than cooperative security diplomacy, which is at the core of arms control.

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Middle East and North Africa Regional Architecture: Mapping geopolitical shifts, regional order and domestic transformations (MENARA) is a research project that aims to shed light on domestic dynamics and bottom-up perspectives in the Middle East and North Africa amid increasingly volatile and uncertain times.

MENARA maps the driving variables and forces behind these dynamics and poses a single all-encompassing research question: Will the geopolitical future of the region be marked by either centrifugal or centripetal dynamics or a combination of both? In answering this question, the project is articulated around three levels of analysis (domestic, regional and global) and outlines future scenarios for 2025 and 2050. Its final objective is to provide EU Member States policy makers with valuable insights.

MENARA is carried out by a consortium of leading research institutions in the field of international relations, identity and religion politics, history, political sociology, demography, energy, economy, military and environmental studies.

This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under grant agreement No 693244. This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.