

**Second informal workshop on good practices and lessons learnt with respect to existing nuclear-weapons free zones**

23-25 February 2021 (To be held virtually)

**Programme**

**Tuesday 23 February (time indicated in this programme is New York time/EST)**

**10:00 am-10:20 am Opening Session**

Welcome Remarks by Ambassador Sima Bahous, President of the First Session of the Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction

Opening Remarks by Ms. Izumi Nakamitsu, High Representative for Disarmament Affairs

Remarks by Ambassador Alotaibi (State of Kuwait), in-coming Presidency of the Second Session of the Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction

**10:25 am- 11:45**

**Session I**

**Topic 1: Pathways and objectives for the Middle East zone free of nuclear weapons and other weapons of mass destruction**

(The purpose of this session is to address, in the context of the current security dynamics in the region: the scope of issues to be included in a treaty establishing the zone; the role of the zone in connection with broader regional peace and security objectives; the model such a treaty could take, with reference to existing nuclear-weapon-free zone treaties; and the negotiation process.)

*Panelists:*

- Mr. Sudqi Al'Omoush, Deputy Permanent Representative of Jordan to the UN (Moderator)
- Mr. Nabil Fahmy, American University Cairo
- Ambassador (ret) Ali Asghar Soltanieh
- Mr. Robert Einhorn, Brookings Institute

To be followed by an interactive discussion

**11:45 am-1:00 pm**

**Topic 2: Core obligations related to nuclear weapons**

(The purpose of this session is to address core obligations relating to nuclear weapons, including, inter alia, various aspects of disarmament and non-proliferation, such as prohibitions, verification, safeguards, nuclear testing and confidence building measures etc..)

*Panelists:*

- Ambassador (ret) Wael Al Assad, United Nations Institute for Disarmament Research (Moderator)
- Ambassador (ret) Nabeela Al-Mulla, American University of Kuwait
- Ambassador (ret) Karim Haggag, American University Cairo (core prohibitions)
- Dr. Zia Mian, Princeton University (nuclear disarmament verification)

To be followed by an interactive discussion

**Wednesday 24 February**

**Session II**

**10:00am-11:30am**

**Topic 3: Core obligations related to other weapons of mass destruction**

(The purpose of this session is to address core obligations relating to biological and chemical weapons, including, inter alia, the application and extension of existing conventions, including confidence-building measures.)

*Panelists:*

- Daniel Feaks, Chief, BWC Implementation Support Unit (Moderator)
- Dr. Nisreen AL-Hmoud, Director of Bio-Safety and Bio-Security Centre of the Royal Scientific Society of Jordan (biological weapons)
- Dr. Arslan Chikhaoui, Nord-Sud Ventures (Algeria) (prevent, combat and suppress the use of biological weapons by non-state actors)
- Dr. Jean Pascal Zanders, Graduate Institute of International and Development Studies (chemical weapons)

To be followed by an interactive discussion

**11:30 am-12:45 pm**

#### **Topic 4: Transparency, security- and confidence-building measures**

(The purpose of this session is to address opportunities for undertaking measures in support of the core objectives of the zone, including in the areas of, inter alia, nuclear safety, CBRN security, maritime search and rescue, military-to-military communications, peace and reconciliation, information exchanges and consultative mechanisms. It can also address opportunities for cooperation in areas such as the nuclear fuel cycle)

##### *Panelists:*

- Mr. Xiaoyu Wang, Chief, MENWMD Unit, UNODA (Moderator)
- Ambassador Hannu Kyröläinen (retired)  
(lessons learned from confidence- and security-building measures in Europe)
- Mr. Hossein Mousavian, Princeton University  
(regional security measures in the context of the zone)
- Ms. Jasmine Auda, Middle East Scientific Institute for Security  
(CBRN security)
- Dr. Amnah Husain Ibraheem, University of Tennessee  
(nuclear energy)

**12:45 pm-1:00 pm**

#### **Wrap up/Closing of the workshop**

Ambassador Sima Bahous, President of the First Session of the Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction

**Thursday 25 February**

**10:00 am-1:00 pm**

#### **Session III**

Session dedicated to informal discussions among the participating and observer States of the Conference

(proposed topics: *Follow up to the informal workshops and the way forward*)

**Opening Remarks by Ms. Izumi Nakamitsu  
High Representative for Disarmament Affairs**

**Second Informal Workshop on Good Practices and Lesson Learned of  
Existing Nuclear-Weapon-Free Zones**

23 February 2021

Your Excellency, Ambassador Bahous,  
Your Excellency, Ambassador Alotaibi,  
Distinguished panelists,  
Excellencies, dear colleagues and friends,

It is my pleasure to welcome you to this second informal workshop in support of the Conference on the establishment of a Middle East zone free of nuclear weapons and other weapon of mass destruction.

The impact of the pandemic unfortunately continues to hinder our ability to gather formally in person. This why our ability to meet intersessionally is so important for sustaining momentum and engagement in connection with the Conference. Your interest in continuing this series of workshops and your participation today underscores the seriousness of this process.

It is my assessment that the first informal workshop facilitated a rich and substantive discussion on the development and implementation of existing nuclear weapon free zones, led by officials, academics and experts with direct experience on these matters.

Some of key takeaways from the discussions at the first session included the following:

- (1) Nuclear-weapon-free zones have been successfully negotiated against a backdrop of regional rivalries, tension and conflict.
- (2) Efforts to establish and consolidate zones can be successful if they are able to bring all regional States on board through the process.

- (3) Relations with nuclear-weapon States and other external actors need to be carefully managed and balanced.
- (4) Approaches to maritime and aviation issues like transit, overflight and visitation vary widely depending on the regional context and need to be carefully examined.
- (5) Approaches to security assurances may need to be modernized and tailored to the region.
- (6) Norms established by nuclear-weapon-free zone treaties can contribute to the progressive development of global norms promoting disarmament.

In close cooperation with Ambassador Bahous and her team, we have developed a programme designed to enable deeper engagement on some of the most important topics that were discussed at the first workshop.

The overarching aim in this second informal workshop is to shift from understanding the experience of existing nuclear-weapon-free zones and to seek to apply these lessons learned to the current process on the Middle East.

This includes an exploration of the current security dynamics of the region, possible approaches to core obligations, verification and related measures to promote transparency, security, confidence and mutual trust.

To facilitate this shift towards examining issues of particular relevance to the Middle East, we have sought inclusion of a diverse set of high-level panelists and experts from all parts of the region and beyond. I am also especially pleased to note the strong presence of women on the programme.

It is my hope that this workshop serves to support efforts by participating States toward fulfilling the outcome and political declaration adopted in November 2019.

I look forward to the outcome of your dialogue over the next three days.

Thank you very much for your attention.

ME Zone, UNODA, Feb 23, 2021

Remarks by Robert Einhorn, Brookings

The 1995 ME WMD-free Zone resolution was adopted at a time of considerable optimism for nonproliferation, both globally and in the Middle East:

- Argentina and Brazil had adhered to the Treaty of Tlatelolco.
- South Africa had dismantled its nuclear weapons and joined the NPT.
- The US and North Korea had adopted the Agreed Framework.
- In the ME, the Madrid peace process was still alive.
- The Jordanian-Israeli peace treaty had been concluded.
- Iraq's nuclear weapons program had been eliminated.
- The nuclear weapons ambitions of Iran, Libya, and Syria had not yet been publicly exposed.
- Globally, the IAEA's Additional Protocol was being developed.
- Of course, the NPT became permanent.

Today, a quarter century later, security conditions in the Middle East have sharply deteriorated:

- The Israeli-Palestinian peace process is moribund;
- Civil wars in Syria, Yemen, and Libya persist, with the involvement of outside powers, both regional and extra-regional.
- Violent non-state actors and proxy militias hold sway in Yemen, Iraq, Syria, and elsewhere.
- Syria has repeatedly used chemical weapons against its own people.
- The confrontation between Saudi Arabia and Iran and their regional allies has intensified.
- Israel's so-called "campaign between the wars" targeting nearby Iranian-supported facilities and military forces has become almost routine.
- With the fate of the JCPOA uncertain and Iran currently rebuilding its nuclear program, the Saudi Crown Prince has pledged to acquire nuclear weapons if Iran does.
- And President Erdogan has called it unfair that other countries can have nuclear weapons and Turkey cannot.

For years after the adoption of the 1995 ME resolution, Israel's nuclear weapons capability was widely regarded as the principal, even the sole, obstacle to establishing the Zone.

It's true, of course, that unless Israel gives up its nuclear weapons, the goal of a ME WMD-free zone can never be realized. But today – in a region consumed by armed conflict and mistrust, with some countries pursuing nuclear energy programs and apparently determined to at least keep open their option to acquire nuclear weapons – Israel's nuclear capability is far from the only obstacle to achieving that goal.

It would take a great leap of faith to believe that a ME zone can be realized without dramatic changes in the regional security environment – changes that seem very unlikely for the foreseeable future.

So, what should be done? I see two possible pathways for making progress.

The first is to remain focused on the end state – the contents of a comprehensive and legally binding agreement to establish the zone. Long before conditions are ripe for creating the zone, states of the region would get together to discuss their vision of a WMD-free Middle East.

The discussion would be as inclusive as possible, hopefully involving countries that would not join a zone today but have views on the substantive requirements of a zone, should conditions evolve to the point where they would be willing to join.

It would make little sense to begin drafting the specific provisions of a zone treaty now. The text of an agreement wouldn't be required for quite some time. And between now and the time a treaty text would have to be finalized, the views of the parties on key provisions could change.

In the near term, what would be most useful would be a serious consideration of some basic issues and the options available for addressing those issues. For example:

- Who should participate? States of the Maghreb, which are already bound by the Pelindaba Treaty? What about Turkey, given its increasingly assertive regional role? What about the P5 and other extra-regionals?
- Should enrichment and reprocessing be banned, limited, or not regulated at all in the agreement?
- Should the zone require only the standard IAEA Comprehensive Safeguards Agreement, or also the Additional Protocol, or also measures that go beyond the AP, such as in the JCPOA?
- Should entry into force simply require a minimum number of ratifying countries or also the adherence of a number of specifically-designated countries, like in the CTBT?

The point of discussing these issues, at least in the near term, would not be to reach agreement on particular options. Preferences on these issues could change over time, and the views of those not participating in early discussions would need to be taken into account. In any event, a regional consensus on these issues may not be quickly or easily reached.

The point of discussing them would be to give prospective zone participants a better understanding of what's involved. The Middle East zone idea has been around since 1974. But much of the time since then has been used for political point-scoring and mutual recriminations, not for grappling with the real issues and real obstacles that must be addressed if progress is to be made.

Perhaps the UN General Assembly-mandated conferences to be held each year can move the process in a more productive direction. This would especially be the case if they became a setting where all regional states felt comfortable participating. The normalization of Israel's relations with additional Arab states might facilitate such participation.

So, the first pathway is to focus on the end state and get a better appreciation of the choices that need to be made in getting there. This work would provide an essential foundation for finalizing a zone treaty when conditions allow.

The second pathway is to begin taking steps now – steps far short of a fully realized zone, but steps that can be pursued in the near term, that can produce tangible progress toward the more ambitious objectives of the zone, and that can help build the mutual trust necessary to permit further progress. Such steps can take many forms.

- Multilateral security dialogues can be held that enable regional states to engage in frank, face-to-face discussions about their security concerns. Engagement could be on a region-wide or sub-regional basis, such as a GCC-Iran forum. Multilateral frameworks could provide an umbrella under which more discreet, bilateral discussions could take place.
- Such dialogues could lead to tangible confidence-building arrangements – ranging from modest ideas like a moratorium on inflammatory rhetoric to more significant steps, such as maritime rules of the road or military transparency measures.
- And whether in the context of such regional security dialogues or separately, relevant parties could pursue solutions to critical disputes, most urgently Yemen.
- Trust-building regional cooperation could also be pursued outside the security realm, especially in such humanitarian areas as coping with pandemics and natural disasters.
- With several regional states now embarking on civil nuclear programs, a promising area of cooperation could be the peaceful uses of nuclear energy. Such cooperation could begin modestly, with exchanges of information on setting up regulatory frameworks or ensuring the safety and security of nuclear facilities. Eventually more ambitious cooperation might become possible, such as regional arrangements for procuring medical isotopes or even enriched reactor fuels.
- While comprehensive restrictions would have to await the full realization of the zone, partial steps might be possible, either region-wide or sub-regionally – for example, a region-wide ban on the construction of additional heavy waters reactors or a ban on reprocessing in the Gulf region.
- An important step – not just toward a Middle East WMD-free zone but also toward entry into force of the global CTBT -- would be to establish a Middle East zone free of nuclear weapons testing.
- And a critical step to impede proliferation in the region -- and to keep the prospect of a Middle East zone alive – would be for Iran and the US to return to full compliance with the JCPOA -- and then to build on the JCPOA with follow-on arrangements to make its nuclear restrictions longer lasting and to promote stability in the region.

This second pathway of pursuing partial steps has its critics, including those who argue that it would weaken pressures for the full zone and delay its achievement indefinitely. But for the last 25 years, the “all or nothing” approach has produced nothing -- and that is unlikely to change for quite some time.

I don't think it's necessary to choose between the two pathways. They aren't mutually exclusive. The best way forward may be to combine the two pathways -- to move toward a better understanding of the desired end state while at the same time pursuing partial steps that are valuable in their own right and that can also help promote the conditions that would eventually make the realization of a full Middle East zone possible.



# CORE OBLIGATIONS RELATED TO NUCLEAR WEAPONS FOR A MIDDLE EAST ZONE FREE OF NUCLEAR WEAPONS AND OTHER WEAPONS OF MASS DESTRUCTION

Zia Mian  
Program on Science and Global Security  
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UNODA Informal Workshop on Middle East Zone Free of Nuclear Weapons  
and Other Weapons of Mass Destruction  
23-25 February 2021

This brief note outlines some possible core obligations relating to nuclear weapons that could be considered in the negotiations for the establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction. The countries of the region who may be parties to negotiating such a zone will need to consider and find agreement among themselves on the scope, strictness, and duration of constraints on a range of nuclear activities. Since all the relevant states would be accepting such constraints for themselves as well as on each other, these obligations will need to reflect commitments states have already made as part of other treaties and arrangements as well as new commitments they are willing to make to each other specifically for the purposes of this treaty. The discussion here is limited to states that participated in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction and thus may be part of treaty negotiations.

The suggested measures draw on and would serve to reinforce commitments that many states in the region have already accepted as parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Comprehensive Nuclear-Test-Ban Treaty (CTBT), and the African Nuclear Weapon Free Zone Treaty (ANWFZT). The measures also draw on the Treaty on the Prohibition of Nuclear Weapons (TPNW), which has now entered into force, since many states in the region were part of the treaty negotiations and voted in favor of adoption of the treaty text (for the status of membership in and expressed support for these four treaties, see Appendix 1).

This discussion also includes nuclear restraints and transparency measures adapted from a report for the International Panel on Fissile Materials on advancing a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty<sup>1</sup> It also incorporates some principles from the 2015 Joint Comprehensive Plan of Action (JCPOA) regarding time-bound treaty obligations to enable a sustained period of confidence-building that could aid stabilization of a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction.

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<sup>1</sup> Frank N. von Hippel, Seyed Hossein Mousavian, Emad Kiyaei, Harold A. Feiveson and Zia Mian, [Fissile Material Controls in the Middle East: Steps toward a Middle East Zone Free of Nuclear Weapons and all other Weapons of Mass Destruction](http://fissilematerials.org/library/rr11), Report of the International Panel on Fissile Materials, October 2013. The report is in Arabic [\[http://fissilematerials.org/library/rr11arabic.pdf\]](http://fissilematerials.org/library/rr11arabic.pdf) -- [ضوابط المواد الانشطارية في الشرق الاوسط: خطوات نحو شرق اوسط خال من](#) [شليטה בחומרים בקיעים במזרח התיכון. צעדים לקראת מזרח תיכון](#) -- and Hebrew [חופשי מנשק גרעיני וכל סוגי הנשק להשמדה המונית](#)

## Core obligations

It is widely agreed that the minimum core obligations of a NWFZ should include those which are part of the NPT, as applied to non-weapon states. These obligations include:<sup>2</sup>

- not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly.
- not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices.
- not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.
- to accept safeguards by the International Atomic Energy Agency with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.
- not to provide source or special fissionable material, or equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, without safeguards.

The verification of obligations on the transfer and control over nuclear weapons is not laid out explicitly in the NPT. It is presumed that the safeguards system of the International Atomic Energy Agency (IAEA) as applied to non-weapon states can adequately monitor whether such a state is undertaking activities that fall under the prohibition to manufacture nuclear weapons. The limits of the IAEA Comprehensive Safeguards Agreement (CSA or INFCIRC/153 corrected), intended to be the basis for independently verifying that no nuclear material within a state is diverted and related facilities not misused, led to a system of supplementary measures codified in the Model Additional Protocol (INFCIRC/540, corrected).

To these longstanding and key NPT obligations could be added those relating to nuclear weapon testing as agreed under the CTBT. Restrictions on testing are necessary since the NPT did not bar nuclear tests. Article V of the NPT allows for non-weapon states to access “under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions”. This access was never exercised. The relevant nuclear testing obligations from the CTBT are:<sup>3</sup>

- not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control.
- to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.

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<sup>2</sup> Treaty on the Non-Proliferation of Nuclear Weapons, <http://disarmament.un.org/treaties/t/npt>.

<sup>3</sup> Comprehensive Nuclear-Test-Ban Treaty, <http://disarmament.un.org/treaties/t/ctbt>.

The verification of these obligations is limited to the actual conduct of a nuclear test explosion and is undertaken by the International Monitoring System managed by the Comprehensive Nuclear-Test-Ban Treaty Organization. This global system of monitoring instruments does not serve to verify the prohibition on causing, encouraging, or participating in a nuclear test explosion or the positive obligation on a state to prohibit and prevent such an explosion on its territory. Nor does it verify research relevant to preparing a nuclear weapon test.

There are important additional obligations that some states in the region have accepted as part of the ANWFZT relating to the prohibition of research and development on nuclear weapons and prohibiting the stationing of nuclear weapons and transparency regarding the capability for manufacturing nuclear weapons. These activities are not covered explicitly by the NPT or CTBT. ANWFZT commitments that could be made core obligations in the Middle East Zone treaty include:<sup>4</sup>

- not to conduct research on, develop, manufacture, stockpile any nuclear explosive device by any means anywhere;
- not to seek or receive any assistance in the research on, development, manufacture, stockpiling of any nuclear explosive device;
- not to take any action to assist or encourage the research on, development, manufacture, stockpiling of any nuclear explosive device.
- to declare any capability for the manufacture of nuclear explosive devices.
- to prohibit, in its territory, the stationing of any nuclear explosive device.

ANWFZT verification and monitoring arrangements rely on the IAEA safeguards system and an annual reporting system by states parties. The prohibitions on research and development for weaponization, assistance and encouragement, declaring capability are not fully verifiable under the IAEA safeguards system, even with the substantial verification benefits associated with the application of the measures in the Additional Protocol. However, a prohibition on nuclear weapon related research and development can be verified, as was made clear when, with appropriate transparency and cooperation from Iran, the IAEA was able to reach conclusions regarding “the existence or development of processes associated with nuclear-related activities, including weaponization.”<sup>5</sup>

None of the countries that are part of the current process to develop and agree a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction are believed to have ever made a nuclear weapon or nuclear explosive device. As long as this situation persists, there would seem to need to carry over from the ANWFZT the obligations on each party to “dismantle and destroy any nuclear explosive device that it has manufactured prior to the coming into force of this Treaty” and “to destroy facilities for the manufacture of nuclear explosive devices or, where possible, to convert them to peaceful uses.”

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<sup>4</sup> African Nuclear Weapon Free Zone Treaty (Treaty of Pelindaba), <http://disarmament.un.org/treaties/t/pelindaba>.

<sup>5</sup> Final Assessment on Past and Present Outstanding Issues regarding Iran’s Nuclear Programme, International Atomic Energy Agency, Vienna, 2 December 2015, <https://www.iaea.org/sites/default/files/gov-2015-68.pdf>.

A fourth source of possible nuclear weapon related core obligations for a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction is the TPNW. All but four states who were involved in first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction have registered their support for the TPNW through their vote in favor of adoption of the treaty at the conclusion of the successful negotiating conference in 2017. The TPNW obligations reiterate NPT obligations and CTBT obligations and some ANWFZT obligations, notably “never under any circumstances to”:<sup>6</sup>

- develop, test, produce, manufacture, otherwise acquire, possess, or stockpile nuclear weapons or other nuclear explosive devices;
- transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly or indirectly;
- receive the transfer of or control over nuclear weapons or other nuclear explosive devices directly or indirectly;
- use or threaten to use nuclear weapons or other nuclear explosive devices;
- assist, encourage, or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Treaty;
- seek or receive any assistance, in any way, from anyone to engage in any activity prohibited to a State Party under this Treaty;
- allow any stationing, installation or deployment of any nuclear weapons or other nuclear explosive devices in its territory or at any place under its jurisdiction or control.

For states that have never had nuclear weapons, key obligations are intended to be verified by the IAEA safeguards system. As with the other treaties noted above, some prohibitions are not fully verifiable through this system.

All of the four treaties discussed, and the other NWFZ treaties, recognize and leave in place the use of nuclear energy for peaceful purposes. This is in part a political legacy of a technocratic view from the 1960s that nuclear energy inevitably would be a major source of energy and access to it should be protected through treaty rights, but with agreed regulations on its use because of nuclear energy’s connection through key materials, technologies, and knowledge to nuclear weapon proliferation. The imagined future of the widespread use of nuclear energy has not come to pass and the prospects for nuclear energy are increasingly uncertain.<sup>7</sup> As of 2020, only 31 countries operate nuclear power reactors, with five countries generating about 70 percent of global nuclear electricity (which is only about 10 percent of global commercial gross electricity production), and some large, long-standing nuclear programs are coming to end -- Germany’s nuclear phaseout will be completed by the end of 2022.<sup>8</sup>

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<sup>6</sup> Treaty on the Prohibition of Nuclear Weapons <http://disarmament.un.org/treaties/t/tpnw/text>.

<sup>7</sup> [The Uncertain Future of Nuclear Energy](http://fissilematerials.org/library/rr09.pdf), Report of the International Panel on Fissile Materials, September 2010, <http://fissilematerials.org/library/rr09.pdf>.

<sup>8</sup> World Nuclear Industry Status Report 2020, [https://www.worldnuclearreport.org/IMG/pdf/wnisr2020-v2\\_lr.pdf](https://www.worldnuclearreport.org/IMG/pdf/wnisr2020-v2_lr.pdf).

The continued possible decline in interest in civilian nuclear energy globally because of increasingly poor economics compared to renewable energy, and the well-established risks from nuclear accidents, disposal of long-lived highly radioactive nuclear spent fuel, and possible proliferation, all may affect the actual future of nuclear energy programs in the Middle East. A Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty could be well served by seeing value in and enabling a nuclear free region. This would remove many possible sources of future security concerns and significantly ease verification demands.

In the absence of an early decision by states in the Middle East to forgo nuclear energy where states do not have it and a phase-out in states that already have it, it is worth considering how a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty could help reduce concerns about national nuclear fuel cycle activities. It is clear from the history of the region over the past three decades that agreed additional measures of restraint and transparency with regard to nuclear fuel cycle activities that go beyond those in the NPT and its safeguards system could be useful. Over this period there has been significant regional and global concern about nuclear activities in Libya, Iran, Iraq, and Syria related to the pursuit nuclear weapon capabilities despite all these states being parties to the NPT and having safeguards.

A Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction could gain additional stability if the treaty obligations, directly or as a protocol to it, included an agreed system of verifiable nuclear fuel cycle constraints, some of indefinite duration and others which are initially bounded in time but potentially capable of being made indefinite. The notion of treaty obligations that are of limited duration but that could be extended by agreement of the parties is not without precedent. It is worth noting that while existing NWFZ treaties and all their obligations are of unlimited duration, the NPT as negotiated required (Article X.2) that “twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.”

The potential positive value of such additional nuclear fuel cycle measures is that they put limits on nuclear activities of possible concern and introduce levels of transparency that together offer predictability and stability for an extended period after entry into force of such a treaty. This glide-path approach allows for the treaty and other political, economic, social, and technical processes to take effect and help further bind treaty parties in mutual, cooperative relationships.

This approach of using time-bound measures to create stability as part of an agreement underlies the JCPOA.<sup>9</sup> The measures there include caps and time limits for 8.5 years on some uranium enrichment centrifuge research and development activities, 10-year limits on some centrifuge production and operation activities, 15-year limits on uranium enrichment levels and locations, and on plutonium separation (reprocessing), heavy water production and heavy water reactors. The JCPOA also includes time bound measures of additional transparency, for instance 10 years of oversight of the purchase of dual-use materials, 20 years of continuous monitoring of uranium

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<sup>9</sup> Joint Comprehensive Plan of Action (JCPOA), 14 July 2015, [https://www.undocs.org/S/RES/2231\(2015\)](https://www.undocs.org/S/RES/2231(2015)).

enrichment centrifuge production, and 25 years of continuously monitoring of uranium mining and milling. There also are enduring commitments, including to not separate plutonium.

The process of reaching agreement on a Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty and achieving entry into force will have to run in parallel to the clock on the various JCPOA time-bound obligations – some of the core JCPOA obligations may end before the treaty enters into force, soon after entry into force, or long afterwards, unless these obligations are extended as part of the treaty, and presumably applied to all parties. It therefore will be uncertain what the scale, nature and transparency of Iran’s nuclear activities will be when a possible Middle East Zone treaty enters into force unless measures are included in the treaty to fix in place the scope and transparency of these activities for some agreed time after entry into force.

If a core aim is to strengthen the stability of the region against potential proliferation risks, critical potential nuclear fuel cycle control measures to include in the Middle East Nuclear Weapon Free Zone and Other Weapons of Mass Destruction treaty are:<sup>10</sup>

*A ban on the separation of plutonium.* Even if Middle East countries pursue ambitious civilian nuclear power programs, they need not develop reprocessing capabilities. No sound economic or environmental justification exists for using plutonium for civilian applications and reprocessing and stockpiling separating plutonium creates serious proliferation risks as the material could be used to make nuclear weapons.<sup>11</sup>

*Restrictions on Uranium Enrichment.* Centrifuge enrichment plants pose significant proliferation concerns because they can be quickly reconfigured for production of Highly Enriched Uranium (HEU) that is weapon-usable.

- A general prohibition on the production and use of HEU; the International Atomic Energy Agency treats uranium enriched above 20 percent as direct weapon-usable material.
- A limit on the maximum uranium enrichment of 5–7 percent U-235; this is more than sufficient for fuel used in light-water nuclear power reactors.
- A multilateral arrangement for uranium enrichment rather than national enrichment programs; it could be managed by the body responsible for implementing the treaty.

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<sup>10</sup> Zia Mian, A. Glaser, F. von Hippel, S. Mousavian, E. Kiyaei, and H. Feiveson, [Fissile Material Controls in the Middle East: Steps Toward a Middle East Nuclear-Weapon-Free Zone](http://www.princeton.edu/~aglaser/PU084-Mian-Glaser-2014.pdf), 55th Annual INMM Meeting, Atlanta, Georgia, July 2014. <http://www.princeton.edu/~aglaser/PU084-Mian-Glaser-2014.pdf>.

<sup>11</sup> [Plutonium Separation in Nuclear Power Programs. Status, Problems, and Prospects of Civilian Reprocessing Around the World](#), Report of the International Panel on Fissile Material, July 2015.

## Cooperative Verification and Safeguards

Along with accepting all the verification, safeguards and reporting measures in the NPT, including those which are not mandatory, and in the ANWFZT, and TPNW, there could be benefit in including complementary regional arrangements for safeguards, and transparency and cooperative verification.

*Comprehensive Safeguards Agreements and Additional Protocol.* A core obligation could be for states that have not yet done so to adopt a Comprehensive Safeguards Agreement and the Additional Protocol. While a Comprehensive Safeguards Agreement permits IAEA inspection of declared sites, the Additional Protocol provides IAEA inspectors access to all parts of the nuclear fuel cycle, “complementary access” to all buildings on a nuclear site, and allows collection of environmental samples at sites other than declared locations. States also are required to specify the location of nuclear fuel cycle activities, including operating and shut down uranium mines.<sup>12</sup> Following the experience with the JCPOA, states could regionalize and extend the duration of, or make permanent, the transparency measures beyond the Additional Protocol accepted by Iran.

Appendix 2 lists the status of Comprehensive Safeguards Agreements and the Additional Protocol for states participating in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

*Regional Nuclear Fuel-cycle and Verification Organization.* States may complement IAEA safeguards and inspections of nuclear activities in the region with a dedicated regional capability. A precedent for such an arrangement is the Brazilian–Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) developed between Argentina and Brazil as part of the Latin American NWFZ, and their agreed Common System of Accounting and Control of Nuclear Materials, which aims to verify non-diversion of nuclear materials towards nuclear weapons from any of the nuclear activities of the two countries.<sup>13</sup> ABACC was modeled on Euratom, which shares safeguards responsibilities with the IAEA in European Union.

The Middle East zone regional organization, possibly together with the IAEA, could oversee operations of any fuel-cycle facilities in the region, such as uranium enrichment plants, and monitor all nuclear materials used in any enrichment facility in the region, including uranium mining and purification, uranium imports, conversion of uranium into uranium hexafluoride (UF<sub>6</sub>) for enrichment or from UF<sub>6</sub> after enrichment.

*Middle East Open Skies.* A regional arrangement for mutual over-flights of unarmed aircraft or drones carrying agreed monitoring instruments could serve to increase confidence in the absence of clandestine nuclear facilities. The 1992 Open Skies Treaty provides a precedent for such over-flights.<sup>14</sup> Specific sensors could include:

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<sup>12</sup> Model Protocol Additional, INFCIRC/540 (corrected), International Atomic Energy Agency, Vienna, 1997, <https://www.iaea.org/sites/default/files/infirc540c.pdf>.

<sup>13</sup> Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials, <https://www.abacc.org.br/en>.

<sup>14</sup> Treaty on Open Skies, <https://www.osce.org/files/f/documents/1/5/14127.pdf>.

- gamma-ray spectrometers to identify ground-level radiation anomalies from uranium mining activity.<sup>15</sup>
- infrared sensors to verify the operating or shutdown status of a nuclear reactor by detecting the temperatures of reactor containment building or cooling towers.<sup>16</sup>
- krypton-85 sensors for monitoring the radioactive gas released when spent nuclear fuel is being prepared for plutonium separation.<sup>17</sup>

These measures of nuclear restraint and associated monitoring and verification could serve as strong technical and political barriers to any future attempts to seek nuclear weapons capability and add additional stability to a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

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<sup>15</sup> P.G. Martin, O.D. Payton, J.S. Fardoulis, D.A. Richards, T.B. Scott, “The Use of Unmanned Aerial Systems for the Mapping of Legacy Uranium Mines,” *Journal of Environmental Radioactivity*, Volume 143, May 2015, Pages 135-140.

<sup>16</sup> See Frank N. von Hippel, Seyed Hossein Mousavian, Emad Kiyaei, Harold A. Feiveson and Zia Mian, [Fissile Material Controls in the Middle East: Steps toward a Middle East Zone Free of Nuclear Weapons and all other Weapons of Mass Destruction](#), Report of the International Panel on Fissile Materials, October 2013.

<sup>17</sup> Michael Schoeppner, [Remote detection of undeclared reprocessing](#), Report of the International Panel on Fissile Material, October 2018; Michael Schoeppner, [Detecting Clandestine Reprocessing Activities in the Middle East](#), *Science & Global Security* 26, no. 1 (2018): 3-19.



**Appendix 1: Status of Middle East states with regard to ratification/accession or signature (S) or vote in favor (V) for treaties relating to nuclear weapons**

Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

Comprehensive Test Ban Treaty (CTBT)

African Nuclear Weapon Free Zone Treaty (ANWFZT)

Treaty on the Prohibition of Nuclear weapons (TPNW)

Israel is not included since it did not participate in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

<b>STATE</b>	<b>NPT</b>	<b>CTBT</b>	<b>ANWFZT</b>	<b>TPNW</b>
<b>Algeria</b>	12 Jan. 1995	11 July 2003	11 Feb. 1998	(V) 7 July 2017
<b>Bahrain</b>	3 Nov. 1988	12 April 2004	–	(V) 7 July 2017
<b>Comoros</b>	4 Oct. 1995	(S) 12 Dec. 1996	24 July 2012	–
<b>Djibouti</b>	16 Oct. 1996	15 July 2005	(S) 11 April 1996	(V) 7 July 2017
<b>Egypt</b>	26 Feb. 1981	(S) 14 Oct. 1996	(S) 11 April 1996	(V) 7 July 2017
<b>Iran</b>	2 Feb. 1970	(S) 24 Sep. 1996	–	(V) 7 July 2017
<b>Iraq</b>	29 Oct. 1969	26 Sep. 2013	–	(V) 7 July 2017
<b>Jordan</b>	11 Feb. 1970	25 Aug. 1998	–	(V) 7 July 2017
<b>Kuwait</b>	17 Nov. 1989	6 May 2003	–	(V) 7 July 2017
<b>Lebanon</b>	15 July 1970	21 Nov. 2008	–	(V) 7 July 2017
<b>Libya</b>	26 May 1975	6 Jan. 2004	11 May 2005	–
<b>Mauritania</b>	26 Oct. 1993	30 April 2003	24 Feb. 1998	(V) 7 July 2017
<b>Morocco</b>	27 Nov. 1970	17 April 2000	(S) 11 April 1996	(V) 7 July 2017
<b>Oman</b>	23 Jan. 1997	13 June 2003	–	(V) 7 July 2017
<b>Palestine</b>	10 Feb. 2015	–	–	(V) 7 July 2017
<b>Qatar</b>	3 Apr. 1989	3 March 1997	–	(V) 7 July 2017
<b>Saudi Arabia</b>	3 Oct. 1988	–	–	(V) 7 July 2017
<b>Somalia</b>	5 Mar. 1970	–	(S) 23 Feb. 2006	–
<b>Sudan</b>	31 Oct. 1973	10 June 2004	(S) 11 April 1996	(V) 7 July 2017
<b>Syria</b>	24 Sep. 1969	–	–	–
<b>Tunisia</b>	26 Feb. 1970	23 Sep. 2004	7 Oct. 2009	(V) 7 July 2017
<b>UAE</b>	26 Sep. 1995	18 Sep. 2000	–	(V) 7 July 2017
<b>Yemen</b>	1 June 1979	(S) 30 Sep. 1996	–	(V) 7 July 2017

**Appendix 2: Status of Middle East states with regard to with regard to accession or signature (S) of Comprehensive Safeguards Agreement and the Additional Protocol**

Comprehensive Safeguards Agreement (CSA)

Additional Protocol (AP)

Israel is not included since it did not participate in the first Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction.

STATE	CSA	AP
<b>Algeria</b>	7 Jan, 1997	(S) 16 Feb. 2018
<b>Bahrain</b>	10 May 2009	20 July 2011
<b>Comoros</b>	20 Jan. 2009	20 Jan. 2009
<b>Djibouti</b>	Signed 2010	26 May 2015
<b>Egypt</b>	30 June 1982	–
<b>Iran</b>	15 May 1974	(S) 18 Dec. 2003*
<b>Iraq</b>	29 Feb. 1972	10 Oct. 2012
<b>Jordan</b>	21 Feb. 1988	28 July 1998
<b>Kuwait</b>	7 March 2002	2 June 2003
<b>Lebanon</b>	5 March 1973	–
<b>Libya</b>	8 July 1980	11 August 2006
<b>Mauritania</b>	10 Dec. 2009	10 Dec. 2009
<b>Morocco</b>	18 Feb. 1975	21 April 2011
<b>Oman</b>	5 Sep. 2006	–
<b>Palestine</b>	14 June 2019	–
<b>Qatar</b>	21 Jan. 2009	–
<b>Saudi Arabia</b>	13 Jan. 2009	–
<b>Somalia</b>	–	–
<b>Sudan</b>	7 Jan. 1977	–
<b>Syria</b>	18 May 1992	–
<b>Tunisia</b>	13 March 1990	(S) 24 May 2005
<b>UAE</b>	9 Oct. 2003	20 Dec. 2010
<b>Yemen</b>	14 Aug. 2002	–

\* As part of the JCPOA, Iran accepted provisional application of the Additional Protocol as of 16 January 2016 pending entry into force.

# Prevent, combat and suppress the use of CBRN weapons by non-state actors

Dr. Arslan CHIKHAOUI

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Member of World Economic Forum expert committee

Alumnus NDU-NESA center for strategic studies

**Virtual Workshop on good practices and lessons learnt with respect to the  
implementation of Treaties establishing Nuclear Weapon Free Zones**

**United Nations Office for Disarmament Affairs**

**23-25 February 2021**

## The landscape (1)

It is broadly admitted that Chemical, Biological, Radiological and Nuclear (CBRN) materials are a threat of 3<sup>rd</sup> generation which is not only very serious but also needs to be given far higher attention by governments.

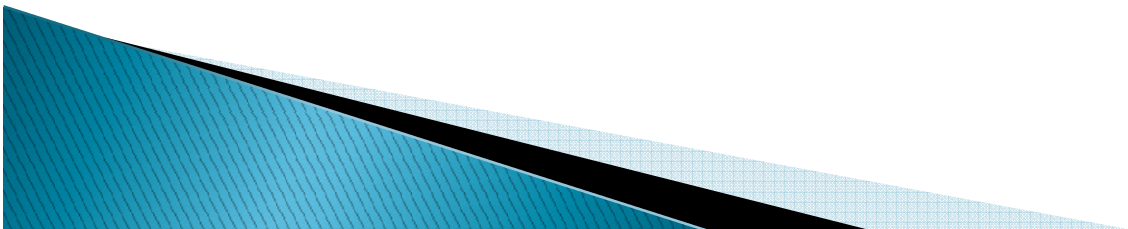
The proliferation and the use of Weapon of Mass Destruction (WMD) by non-state actors presents a clear danger for global health security. The Covid-19 pandemic gave us a flavour of what could be an effect of global contamination by chemical or biological agents.

To date deaths and injuries from biological and chemical warfare have not been overwhelming, but there is a very serious risk of all that changing.

The reality is that governments have tended focus on nuclear weapons, at the expense of biological or chemical warfare.

The threat of wide scale use by determined non -state actors and associate movements as Violent Extremist Organisations (VEOs) is growing.

Biological & Chemical weapons are easy to make, easy to transport, and difficult to detect the source – they make the perfect terror weapon in an era of uncertainties.



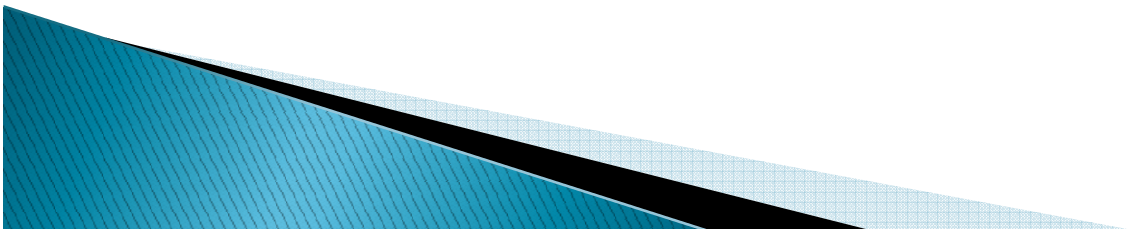
## The landscape (2)

Definitely plans exist, but policy makers usually says “The biological & chemical weapons threat is not going away. We are not ready for it.”

According to some intelligence reports, VEOs as Al-Qaida (AQ) affiliated or Islamic State (IS) are engaged in a long term, persistent and systematic approach to developing weapons to be used in mass casualty attacks.

In 2004, the United Nations Security Council passed Resolution 1540, with the intent of keeping WMD out of the hands of non-state actors. Many developing states fear that implementing the types of export controls required by UNSCR 1540 will smother their nascent industries.

All the more imperative we look at arms control and biological warfare. Admittedly they can only go so far in reaching out to governments to respond. The only way to deal with non-state actors and associate movements is through top level and committed intelligence and cross link between communities.



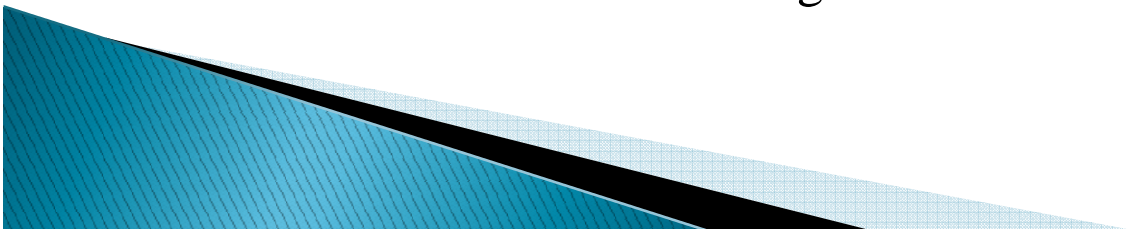
## The landscape (3)

Societies often change when confronted with: Wars; Recessions; Pandemics;  
Similarities associated with Pandemics and Terrorism

Non-state actors as Transnational Criminal Organizations (TCOs) and Violent Extremist Organizations (VEOs) often use opportunity space when available.

TCOs and VEOs are adapting in the Era of Covid-19:

- From global to local crime
- Medical supplies trafficking
- Illicit trafficking of WMD and related materials
- Counterfeit goods
- Cybercrime
- Kidnapping and Extortion
- Corruption
- Alternative Governance
- More violence intending to use CBRN weapons

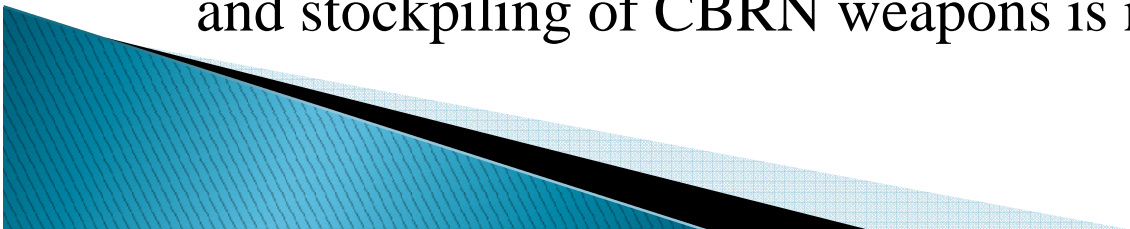


## The challenges (1)

As a result of complex and regional relationships there is virtually no security framework or organisation in the Middle East and North Africa (MENA) and the Sahel (ungoverned space of five bordering countries), much less an arms control culture.

The danger with today is that science is constantly changing. Agent deliveries are growing with new long and short range missiles, drones can deliver. To be complacent is not an option.

Bring together countries in our MENA and Sahel region to work towards a common aim of prohibiting production, development, and stockpiling of CBRN weapons is not an easy task.



## The challenges (2)

All being well with highly disparate parties involved ranging from a nervous Iran on the one side to the absence of Israel on the other, it requires a huge balancing act to all concerned. Driving the debate were divergent views over the proper balance between sharing technology and non-proliferation obligations as well as ideological differences over the function of the CBRN Weapons Convention.

CBRN could be predictable as far as verification remains the hot-button issue.

There is little trust. Parties are suspicious, nervous, proud, hostile and deeply reluctant to open up their secrets.





# Look ahead!

The whole MENA region is politically distracted with major changes already in process, often painfully. The Sahel region is undermined by Low Intensity Conflicts

To reach the goals, political and strategic realities do make achievement elusive. The impasse stems from contentious disagreements regarding actual implementation.

From my perspective, working groups has to focus on the examination of threats posed by non-state actors, and on the importance of facilitating regulated yet unobstructed peaceful applications of dual use bio-technology.

For all that, verification remains key.

Relationship building between communities networking are key to ensure the momentum is not lost.

The most contentious policy challenges are unlikely to move the discussion beyond political grand-standing.

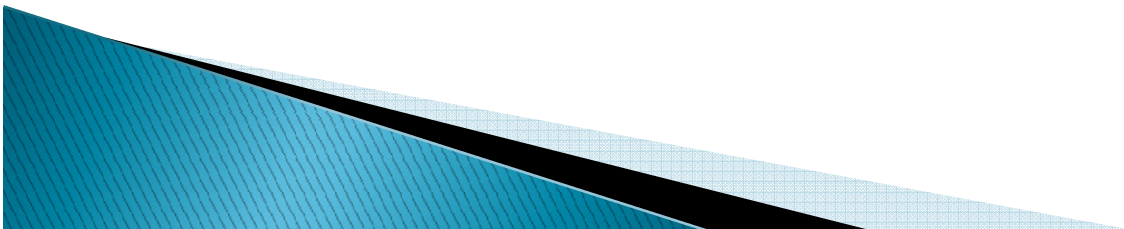


# Role of Civil Society

The upside of the new world that is emerging is greater freedom of speech and indeed a much greater role for Non-Government Organisations (NGO) and Non-Government Individuals (NGI).

The dedicated people might be disconnected from civil society who can support and develop the case. To be effective, low key discussions must take place at all levels, with more public awareness of what is being done. This would then make it much easier for the policy makers and indeed the politicians to accept the recommendations.

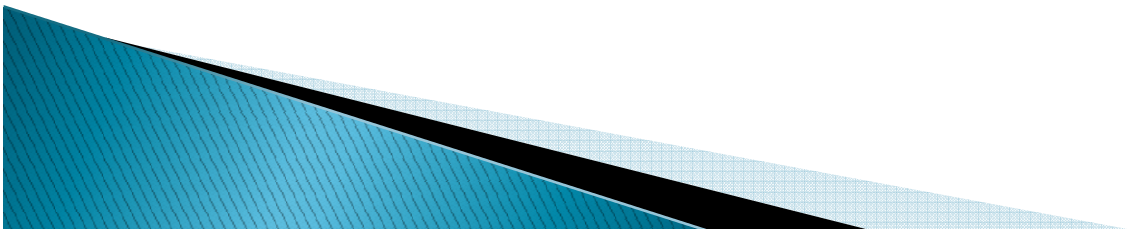
Dialogue is a long and painstaking process especially at a time like this. It requires the 3 P rule: Presence, Patience, and Perseverance. Only then with the ground work done can the politicians take over and achieve the final results with formal and binding agreements.



## How do you break through?

As the enemy is common, to ensure the success to create a WMD Free Zone in MENA and Sahel regions, it requires the following:

- Work on confidence building measures.
- Trust and Transparency have to be the foundation of the whole process.



# Conclusion

- Dialogue and communication are key to raise awareness of the importance of the 3 S (Safety, Security, Safeguard) bearing in mind that CBRN involves safety considerations which are new for law enforcement and criminal forensic personnel.
- Develop cooperation in information and intelligence sharing, and exchanging experiences in terms of combat CBRN crimes.
- Develop a regional cooperation through existing frameworks or innovative ones in:
  - Crisis management, in response to a potential CBRN terrorist attack.
  - Setting up global CBRN forensic analytical and response capabilities
  - Reinforce the Civil Defence capacity building to respond to a CBRN attack.
- Develop cross links between communities such as scientific, business, industry, intelligence, NGOs, NGIs in order to build trust and confidence and promote a culture of security and safety.
- Use of Science Diplomacy and Key Opinion Persons (KOP) to raise awareness among policy makers and decision makers.

# Core Obligations Related to Chemical Weapons

Dr Jean Pascal Zanders

*Centre on Conflict, Development & Peacebuilding,  
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and  
*The Trench*

*Second informal workshop on good practices and lessons learnt with respect to existing nuclear-weapons free zones*  
Organised by UN Office for Disarmament Affairs (Virtual)  
17 November 2020

# Main prohibitions against CW

- **1925 Geneva Protocol**
  - Prohibits the use in war of CBW
    - Not a disarmament treaty; part of laws of war
  - 145 states parties; 36 signatory states
- **1993 Chemical Weapons Convention (CWC)**
  - Comprehensive ban on development, production, possession, and use of CW
  - Also covers toxins (like the 1972 BTWC)
  - 193 states parties; 1 signatory state

# MENA region treaty participation

## Geneva Protocol

- 18 MENA states are party
- 6 MENA states are not party
  - Comoros
  - Djibouti
  - Mauritania
  - Oman
  - Somalia
  - United Arab Emirates

## CWC

- 22 MENA states are party
- 2 MENA states are not party
  - Egypt
  - Israel (signatory)

All 24 MENA states are bound by  
at least 1 international agreement banning CW use

# Integrated approach in the CWC

- Definition of the weapon under consideration
  - Demarcates applicability of treaty
  - Lays foundation for the verification system
- All dimensions of the ban on development, acquisition and possession covered
  - Backward-looking dimension (destruction of weapons & related infrastructure)
  - Forward-looking dimension (prevention of future armament)
  - Application of the *General Purpose Criterion (GPC)* in the definition to cover dual-use problem
  - Prohibits use under any and all circumstances
  - Covers inter-state behaviour, as well as terrorism and crime
  - Demands national implementation, including national criminalisation and penalisation of international prohibitions
- Operates tools to enhance transparency, monitor and enforce compliance (incl. verification), and resolve concerns and conflicts
- *One* treaty for disarmament, non-proliferation, cooperation & technology transfers, assistance, verification, complaints & compliance, ...



# Understanding the *General Purpose Criterion* (GPC)

- The GPC is a core element in the definition of a CW
  - Covers all toxic chemicals (past, present *and* future)
  - CWC contains 3 Schedules in annex
    - Schedules do not replace the GPC
    - Tools to organise declarations and help with organisation of industry verification
- The GPC is a critical tool in addressing 'dual-use' issues
  - Under the GPC the CWC *does not prohibit* objects or activities
  - The CWC *prohibits* certain purposes to which they may be applied (i.e. acquisition, retention and use of the proscribed weapons)
- The GPC determines the scope of the CWC
  - The *default position* is that all applications of toxic chemicals are prohibited
  - Only a restricted set of purposes are '*non-prohibited*'

# Organisation of compliance

- OPCW
  - International organisation overseeing implementation of and compliance with *all* treaty articles
  - Has *autonomous responsibility* for detecting non-compliance and restoring compliance
- Mechanisms to:
  - Generate transparency  $\Rightarrow$  declarations
    - States parties must declare all past and present CW-related activities within treaty-specified parameters
    - Any unreported or erroneously reported activity is CWC violation (but not necessarily deliberate)
  - Address anomalies
    - Consultations
    - Clarification requests
    - Challenge inspections
  - Investigation of alleged CW use
- Division of labour between the international organisation and states parties
  - Strength of treaty regime depends to a large extent on effective national implementation

# National implementation = key aspect

- 'Any necessary measures'
  - Wide range of legislative and regulatory tools available
- Penal legislation
  - Deterrence and prevention
- Criminal procedural legislation
  - Enable investigation and prosecution of CBRN-related crimes
    - Before an incident (→ in the CW context, incorporation of the *General Purpose Criterion*)
    - After an incident
- Transfer controls
  - Import, transit and export control legislation
  - Legislation governing domestic transfers of materials (terrorism & crime)
  - Legislation must cover all actors involved in the transfer process
- Authorisation of legitimate activities
  - Registration and licensing of legal and natural persons and certain types of activity
  - Transport and storage regulations
  - CBRN safety and security policies
    - Government level
    - Company level
    - Individual level

# Past steps by regional actors to ensure regional security and stability prior to disarmament

- *Prenuptials*: prior to CWC opening for signature many states in regional security complexes signed regional agreements not to use CW against each other, not acquire or retain CW, and committed themselves to joining the CWC
- Past examples:
  - USA – USSR: *Memorandum of Understanding Regarding A Bilateral Verification Experiment and Data Exchange Related to Prohibition of Chemical Weapons* (23 September 1989)
  - Argentina, Brazil and Chili + later Bolivia, Ecuador, Paraguay and Uruguay: *Joint Declaration on the Complete Prohibition of Chemical and Biological Weapons* (Mendoza Agreement, 5 September 1991)
  - Bolivia, Colombia, Ecuador, Peru and Venezuela: *Declaration on the Renunciation of Weapons of Mass Destruction* (Andean Declaration, 4 December 1991)
  - Southeast Asia and Oceania (21 countries): Statement issued by participating States at the conclusion of the Third Chemical Weapons Regional Seminar, held in Sydney, Australia, from 21 to 23 June 1992
  - India and Pakistan: *Joint Declaration on Complete Prohibition of Chemical Weapons* (19 August 1992)

# Possible early confidence-building steps

- *A unilateral renunciation of chemical warfare* under any circumstances.
- *A unilateral pledge* not to engage in the development, production or any other form of acquisition and retention of CW
- A statement on when the country *ceased offensive chemical warfare activities* and CW development and production
  - It could accompany such a statement with a brief description of past CW activities
- Voluntary national statements on the *nature of chemical research and development activities* in the country, as well as statements on the *production of chemicals for peaceful purposes* that could have potential use for CW production
  - The statements could be modelled after the CWC requirements
- A national statement on the types of *chemical defence activities*
- *Promulgation of national legislation* (or supplementing any existing legislation) that prohibits any natural or legal person operating on its territory from engaging in any form of activity that contributes towards chemical weapon development and production, as well as assisting anybody else inside or outside the country with CW acquisition
  - Already required for all MENA states under UNSC Resolution 1540
- In a second phase, each state could *conduct some national transparency-enhancing visits (inspections)* in accordance with the CWC procedures and publicise the results of the exercise
- In a third phase, MENA states might engage in *transparency-enhancement* processes similar to the steps in the US–Soviet MoU of 1989

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Hannu Kyröläinen

19 Feb 2021

**SECOND INFORMAL UNODA WORKSHOP ON GOOD PRACTICES AND LESSONS LEARNT WITH RESPECT TO EXISTING NUCLEAR-WEAPONS FREE ZONES**

Panel 4: Transparency, security- and confidence-building measures,  
24 Feb, 2021

*Reflections from the European point of view*

I wish to thank the Under-Secretary General and the UNODA for inviting me to this panel.

At the outset, let me point out that my remarks today are solely on my personal responsibility.

One can identify a multitude of reasons why the model and framework of post-Cold War Europe in building security, cooperation and trust - better known as the Helsinki Process - cannot be exported to other regions.

Yet, I would argue that, despite temporal and geopolitical differences, many lessons and best practices of the Helsinki Process are worth looking at from the perspective of the Middle East region.

Before taking a closer look at some confidence- and security-building measures proper, I would like to raise a couple of general factors in the overall European security process and structure which I see quite fundamental for the development of CSBMs over the years.

First, inclusiveness: the Conference (and now Organization) for the Security and Co-operation in Europe has all the states from Vancouver to Vladivostok as its participating States.

Second, a broad agenda. The OSCE focuses on comprehensive security with an agenda in the fields of, inter alia, human rights, media freedom, politico-military issues, conflict prevention and CSBMs. Thus, all participating States can find issues of relevance for them on the all-European agenda.

I am convinced that these two factors have been cornerstones of the relatively successful development of security- and confidence-building measures in Europe during past decades. By "relative success" I refer to a situation where after three decades of positive development, we have had to witness that the basic principles and commitments underlying the CSBM regime have been broken. This has had erosive impact on the implementation of the CSBM regime.

The building of trust and security is not a self-evidently progressive process, but it takes political will and nursing from all parties involved to be sustained.

All in all, the OSCE has in place an impressive set of measures which could inspire building of zones free of weapons of mass destruction and their delivery vehicles in other regions, the Middle East included, and maybe, in the Middle East in particular.

After all, today's Middle East has many of the same characteristics that Cold War Europe had. Those include a persistent threat of the use of force, weapons of mass destruction in the possession of many governments, a



deep lack of trust and stability, and a general perception of a zero-sum situation.

Maybe the biggest difference is symmetry or lack of it. In Europe of 70s the security situation and threat perceptions emerging from it were pretty symmetrical. In the Middle East today there are many asymmetrical conflicts.

As known, the discussion of a Middle East zone free of weapons of mass destruction has over the years highlighted the question about what should come first - peace and security or disarmament.

In the Helsinki Process, political agreement on the basic principles of interstate behaviour and commitment to cooperation preceded step-by-step deals on military confidence-building measures. Disarmament measures - in fact, agreed by the then two military alliances - only came later.

I leave disarmament measures like CFE Treaty aside, and try to give a brief overview of main CSBMs that promote predictability and military stability among OSCE participating States.

Time will not allow me to take you through the long development process of the CSBMs in the OSCE area, so let me introduce to you a cross-section of the main categories of those CSBMs today. What has been essential in the process is that the first somewhat vague and declaratory CSBMs were later followed by more robust and verifiable ones.

The earliest CSBMs, established by the Helsinki Final Act in 1975, aimed to prevent a surprise attack and reduce the risk of conflict sparked by misunderstandings or miscalculations.

The Vienna Document, an evolving instrument first adopted in 1990, contains politically binding CSBMs. They promote predictability and military stability among OSCE participating States through transparency and verification measures.

The OSCE CSBM regime is not a static collection of norms. In 1992, the Forum for Security Co-operation was created as a platform that supports the work on CSBMs, arms control, and disarmament. The Forum meets every week. It reviews, among other things, the implementation of the CSBMs. The FSC has also established an Annual Implementation Assessment Meeting. There the implementation of Vienna Document is evaluated by the capitals of participating States.

To increase transparency the Participating States have to provide each other with information about their military forces annually, including on personnel strength and major conventional weapon and equipment systems, organization as well as defence plans and budgets. They have also to notify each other ahead of time about major military activities such as exercises.

In order to make verification possible, Participating States have to accept three inspections and at least one evaluation visit per year to check the provided military data. They have also committed to invite other States to observe certain military activities above a certain threshold of troops or equipment numbers.

The Vienna Document, furthermore, includes a consultation and co-operation obligation in case of unusual military activity or increasing tensions.

To facilitate management of some 3500 notifications between the Participating States per year under the Vienna Document, a computer-based Communications Network has been built.

Next, I would like to take up the OSCE Code of Conduct on Politico-Military Aspects of Security. Adopted in 1994, it constitutes a rulebook for Participating States to guide their inter-State relations and to increase confidence in the armed and security forces and ensure the protection of their human rights by placing them under democratic control. A major cornerstone of this agreement is democratic - civilian - control of the armed forces as well as respect of the international humanitarian law and proportionate and adequate use of force.

The OSCE Participating States have adopted documents on Small Arms and Light Weapons, and on Stockpiles of Conventional Ammunition. They stipulate norms, principles and measures to regulate and manage the life cycle of Small Arms and Light Weapons from production to destruction. They also control their export.

The Forum for Security Co-operation supports the participating States to implement the provisions of these documents. The FSC also assists OSCE States, upon their request with collecting and destroying Small Arms and Light Weapons.

The OSCE Forum for Security Co-operation is active in non-proliferation, too. It supports Participating States with the complex task of implementing the UN Security Council Resolution 1540.

To sum up, while I see inclusiveness and a comprehensive agenda important for the success of a regional CSBM regime, the process towards it

can take different forms and sequences. If considered useful and inspiring, European experiences, naturally, are available to other regions and states.

Security in the OSCE area is inseparably linked to that of neighbouring regions and can be strengthened through dialogue and the sharing of norms, commitments and expertise. In fact, there already exists a channel for this. The OSCE maintains privileged relations with 11 Asian and Mediterranean Partners for Co-operation to better address shared security challenges.

Thank you for your attention!

## UN workshop on Weapons of Mass Destruction Free Zone (WMDFZ) in the Middle East

Seyed Hossein Mousavian

Princeton University- 23-25 February 2021

The idea of a Middle East zone free of nuclear and other weapons of mass destruction which has featured prominently on the agenda of each review conference of the nuclear non-proliferation treaty (NPT), has failed to be realized mainly because Israel has declined to be a party to the NPT. Israel is the only country in the Middle East with nuclear weapons, and is not ready to put them on the negotiating table.

The Middle East is on the verge of collapse due to civil wars, sectarianism and terrorism. The current impasse on the Iran nuclear deal, multiple failed states, the use of chemical weapons in Syria, and the emergence of a risk that terrorists will acquire WMD; requires serious steps to realize a WMDFZ in the Middle East.

In my new book, ***A Middle East Free of Weapons of Mass Destruction: A New Approach to Nonproliferation***, co-authored by Emad Kiyaei; we have outlined a phased approach toward arms control in the region, prescribing confidence-building measures and verification tools to create trust among the region's governments. This includes the realization of a WMD-free zone within a broader regional agenda for security and cooperation to advance socioeconomic and political progress.

- The first phase would be to ***revive the 2015 Iran nuclear deal*** known as JCPOA between Iran and the world powers, which contains the most intrusive monitoring, verification and transparency measures agreed to by any undefeated country during the history of non-proliferation. Full and non-discriminatory implementation by the signatory states would be the key.
- A 2d initiative would be about ***regionalization of the JCPOA*** is the best route to create a transparent non-proliferation regime within the region.
- A 3d initiative would reinforce regional non-proliferation efforts by placing them within ***a comprehensive cooperation & security system in the Persian Gulf*** involving Iran, Iraq, Saudi Arabia and other Gulf Cooperation Council (GCC) states. The ideas of regionalizing the principles of the JCPOA and a WMDFZ could be embedded within this regional security system.

- A 4th initiative would reduce the proliferation by **establishing a multinational enrichment facility** operated and owned by member states of the Persian Gulf security system.
- A 5th initiative would look at the role religion could play in advancing WMD non-proliferation, with measures to strengthen, expand, replicate, and **operationalize** the religious decree issued by Iran's Supreme Leader, Ayatollah Ali Khamenei, banning the development and use of WMD.

Building on these essential confidence-building measures among the Persian Gulf countries, we need a three-phased roadmap to free the entire Middle East from WMD.

- The first phase would **lay the foundations for the zone** through a consensus on definitions, parameters, and guiding principles.
- The second phase would require **a regional nonaggression pact** to allay countries' security concerns, and agreed principles for limiting conventional arms.
- The third phase would require prospective member states to **join and ratify treaties and conventions relating to WMD eradication**: the Biological Weapons Convention (BWC), Chemical Weapons Convention (CWC), and Nuclear Non-proliferation treaty (NPT).

This would no doubt be a long process, requiring extensive negotiations on an array of questions and flexibility in adapting arrangements from other regions to fit the unique characteristics of the Middle East. Realizing a WMD-free zone could unleash regional efforts to tackle deep-rooted challenges such as energy security, shared environmental problems, and regional stability.

This would require that regional countries build closer lines of communication and reduce tensions and mistrust, enabling a new beginning in bilateral and multilateral relations. These geopolitical connections could unlock the positive social, economic, and cultural potential of a region rich in both natural and human resources, in one of the most strategic locations on the planet. Diminishing excessive spending on defense would also free up vast financial resources for high-impact human development.

Last but not least, such progress requires the five permanent members of the UNSC to end their double standard policies on non-proliferation in the region and beyond. Iran is under the maximum pressure with the most comprehensive and brutal sanctions while is member of NPT, has remained as the most inspected member of IAEA for more than a decade, has accepted the most intrusive inspections and limits on its nuclear program

which no other member state of NPT has ever accepted. On the other hand, the world powers provide maximum level of support for Israel while Israel has constantly declined to accept NPT and possesses hundreds of nuclear weapons.

## **Second Informal Workshop on Good Practices and Lessons Learned of Existing Nuclear-Weapon-Free Zones**

**23 – 25 February 2021** (held virtually)

### **Panelists**

Mr. Nabil Fahmy, The American University in Cairo  
 Ambassador (ret.) Ali Asghar Soltanieh  
 Mr. Robert Einhorn, The Brookings Institution  
 Ambassador (ret.) Nabeela Al-Mulla, American University of Kuwait  
 Ambassador (ret.) Karim Haggag, The American University in Cairo  
 Ambassador (ret.) Wael Al Assad, United Nations Institute for Disarmament Research  
 Dr. Zia Mian, Princeton University  
 Mr. Daniel Feakes, BWC-ISU  
 Dr. Nisreen Al-Hmoud, Center for Excellence in Biosafety, Biosecurity and Biotechnology  
 Royal Scientific Society of Jordan  
 Dr. Arslan Chikhaoui, Nord-Sud Ventures  
 Dr. Jean Pascal Zanders, Graduate Institute of International and Development Studies  
 Ambassador (ret.) Hannu Kyröläinen  
 Ambassador (ret.) Hossein Mousavian, Princeton University  
 Ms. Jasmine Auda, Middle East Scientific Institute for Security  
 Dr. Amnah Husain Ibraheem, University of Tennessee

### **Participating States**

People's Democratic Republic of Algeria  
 Kingdom of Bahrain  
 The Arab Republic of Egypt  
 Republic of Iraq  
 Islamic Republic of Iran  
 Hashemite Kingdom of Jordan  
 State of Kuwait  
 Republic of Lebanon  
 Islamic Republic of Mauritania  
 Kingdom of Morocco  
 The State of Qatar  
 Kingdom of Saudi Arabia  
 Syria Arab Republic  
 United Arab Emirates  
 Republic of Yemen

### **Observer States**

People's Republic of China  
 United Kingdom of Great Britain and Northern Ireland  
 French Republic  
 Russian Federation



**Relevant international organisations (GA decision 73/546)**

Biological Weapons Convention Implementation Support Unit (BWC-ISU)

International Atomic Energy Agency (IAEA)

Organisation for the Prohibition of Chemical Weapons (OPCW)