

Towards WMDFZ in the Middle East: Biological Confidence-Building Measures

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Background paper

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Abbreviations

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AG Australia Group

BWC Biological and Toxin Weapons Convention

BW Biological Weapons

BWC Biological Weapons Convention CBMs Confidence-Building Measures

CSBMs Confidence and Security Building Measures

CWC Chemical Weapons Convention

MECIDS Middle East Consortium on Infectious Disease Surveillance

NPT Treaty on the Non-Proliferation of Nuclear Weapons

WMD Weapons of Mass Destruction

WMDFZ Weapons of Mass Destruction Free Zone

1. Introduction

This article discusses biological weapons threats and possible opportunities to cooperatively address them, particularly as they relate to the Middle East region. Regional confidence building measures to prevent and prepare for pandemics, whether naturally occurring or man-made, are an area relatively ripe for regional cooperation, and one that could prove to be a major platform for enhancing confidence building and trust in the region, as well as a first step toward a Middle East zone free of weapons of mass destruction.

1.1 Arms Control and Non Proliferation in the Middle East

From political and strategic perspectives the Middle East is one of the most sensitive and complex areas in the world, and this is especially so regarding regional arms control efforts. Several factors make the situation particularly complex:

- a. The State of Israel is perceived as a nuclear state. There is also an assumption that Israel has chemical and biological capabilities.
- b. Israel has formal peace agreements with Egypt and Jordan only. It has no diplomatic relations with most of the countries in the region.
- c. Countries in the region have offensive biological and chemical weapons programs. Syria and Iran have operational chemical capabilities, irrespective of their membership in Chemical or Biological Weapons Conventions.
- d. Iran has a military nuclear program and has nuclear weapon aspirations, despite its membership in the NPT.
- e. Israel is not a member of the NPT. It has signed but not ratified the CWC and has not signed the BWC.
- f. Syria is a member of the NPT, has not signed the CWC, but has signed the BWC.
- g. Egypt is a member of the NPT, has not signed the CWC, but has signed the BWC.
- h. Iran is a member of all three conventions.

The parties to the Chemical and Biological conventions and other international organizations have invested considerable effort in promoting the universality of the conventions and on influencing countries in the region to join them fully. Egypt and Syria have made Israel's joining the NPT a precondition for their joining all such conventions.

During recent decades, efforts, formal and informal, have been made to promote a zone in the Middle East that is nuclear weapons free and free of all weapons of mass destruction. The 1990s ACRS talks in the Middle East with American, Israeli, Egyptian, Jordanian, Canadian and European participation were one such example. These talks ultimately reached an impasse¹.

1.2 Arms Control and Non-proliferation – The Israeli Perspective

Israel's political and strategic situation in the Middle East is not stable. Most countries and non-state actors in its surrounding first and second circles are neither in a state of peace nor even have proper political relations with it, and some threaten Israel's existence and declare their desire to destroy it. Some of the states have programs to develop and stockpile chemical

¹ Emily B. Landau, ACRS: What Worked, What Didn't, and What Could Be Relevant for the Region Today, in: *Disarmament Forum*, No. 2 (July 2008), pp.13-20.

and biological weapons, as well as operational arsenals of these weapons.² Furthermore, terrorist organizations such as Al-Qaeda, Hezbollah, and Hamas have declared on more than one occasion that for the purposes of destroying Israel, it is legitimate to use non-conventional weapons.³ It is not inconceivable that as part of the military assistance that these organizations receive from various countries they will equip themselves with non-conventional weapons in the future.

Israel regards the aspiration to prohibit the stockpiling and use of non-conventional weapons positively, and sees the elimination of these weapons as an important goal. It certainly supports the principles of the Chemical and Biological Weapons Conventions, as well as the goal of a Middle East free of weapons of mass destruction. As part of this policy, in 1969 Israel signed the Geneva Protocol, which prohibits the use of chemical and bacteriological weapons in war. Israel likewise participated in preparatory discussions of the Chemical Weapons Convention and has even signed it, thus declaring that it identifies with its goals. While it has not joined the Biological Weapons Convention, it has emphasized in both declarative and practical terms that it is a party to the spirit of the convention. Over the years, Israel has also joined a number of processes and dialogues that have attempted to promote the idea of a Middle East free of weapons of mass destruction. Furthermore, Israel takes additional external and internal initiatives that promote the arms control and nonproliferation goals of the conventions. Thus, for example, Israel supports, and in practice, behaves in accordance with the supply regimes such as the Australia Group (AG).4 It supported Security Council Resolution 1540 (2004),5 whose goal is to combat and prevent the proliferation of weapons of mass destruction to dangerous elements and to fight unconventional terrorism, mainly through state legislation. Israel is undertaking related legislation and regulations, including control of the import and export of nuclear, chemical, and biological materials (2004);6 control of dual-use products (2006); and the export control law (2007). The main goal of import and export controls on nuclear, chemical, and biological materials is to help prevent the proliferation of non-conventional weapons and their components by prohibiting export of materials, products, technologies, and services that can be used in the development and production of chemical, biological, and nuclear weapons. The list of prohibited materials is identical to international lists that have appeared in the Australia Group regime.

At this stage, the considerations and formal position of the State of Israel on ratifying the Chemical Weapons Convention, joining the Biological Weapons Convention, and agreeing to

² Danny Shoham, *Chemical and Biological Weapons in the Arab States and Iran—An Existential Threat to Israel?*, Shaarei Tikva: Ariel Center for Policy Research Publishers (2001), pp. 73-98. www.acpr.org.il/publications/books/syria-4-in-1-shoham.pdf, Nuclear Threat Initiative, *Syria Country Profile—Chemical*, updated August 2012 www.nti.org/country-profiles/syria/chemical/, Nuclear Threat Initiative, *Iran Country Profile—Chemical*, updated November 2011, www.nti.org/country-profiles/iran/chemical/, and James Farwell, Syria's WMD Threat, in: *National Interest*, April 5, 2012, http://nationalinterest.org/commentary/syrias-wmd-threat-6737.

³ J. B. Tucker, *War of Nerves. Chemical Warfare from World War 1 to Al-Qaeda*, New York: Pantheon Books (2001).

⁴ Australia Group, *Guidelines for Transfers of Sensitive Chemical or Biological Weapons*, (June 2012). <www.australiagroup.net/en/guidelines.html>.

⁵ UN Security Council Resolution 1540, S/Res/1540, April 28, 2004.

⁶ Import and Export (Control of Chemical, Biological, and Nuclear Export) Order, 5764-

^{2004,} Tamas.gov.il, 2004, https://www.tamas.gov.il/NR/rdonlyres/35E9E31F-AA99-40E9-A750-2AA349FBE588/0/ImportandExport_ControlofChemicalBiologicalandNuclearExport_Order.pdf >.

a weapons of mass destruction free zone (WMDFZ) is influenced decisively by the basic political-strategic situation in the Middle East, the position of other regional states towards the conventions and non-conventional weapons in general, the fact that a number of states in the region are stockpiling these weapons, and that at least one (Iran) is clearly violating the treaties to which it is a signatory. Therefore, and in spite of the fact that it assigns supreme importance to these objectives, Israel believes that in order to attain them significant developments must take place in the region, including mutual recognition by involved states, good neighbourly relations, confidence-building measures and peaceful relations. Only after these goals are attained can the states in the region continue to take upon themselves additional commitments, first in those areas covered under the provisions of the conventions, and later in more complex and sensitive areas lying outside areas covered by the conventions. No state needs to unilaterally take upon itself steps that will harm its essential security interests.

2. Towards WMDFZ in the Middle East – Biological CBMs

The vision of establishing a Middle East zone free of weapons of mass destruction is shared in principle by all governments in the region. While political and strategic realities continue to make the full achievement of that goal elusive, it seems that biological arms control presents the fewest political impediments to constructive discussions. There appears to be greater regional consensus on bio-related issues, such as the limited military utility of BW, threats posed by non-state actor acquisition, and the importance of facilitating regulated, yet unobstructed, peaceful applications of dual-use biotechnology. This makes BW a promising starting point for substantive multilateral engagement and confidence building on WMDFZ implementation.⁷

Four fundamental "pillars" would be needed to support implementation of a regional BW-free zone. These include: prevention of the acquisition or use of BW by state or non-state actors; response and mitigation in the event of a BW attack; enforcement of international or regional agreements, laws, standards, and best practices designed to prevent acquisition, development, or use of BW; and cooperation on peaceful uses of legitimate biological research, in the interest of bettering humanity and public welfare.

2.1 Confidence-building Measures

The concepts of confidence-building measures (CBMs), and their variants confidence- and security-building measures (CSBMs), have been increasingly suggested in the post-Cold War era as the main mechanisms of conflict resolution and peace building.8 Today, CBMs have become an almost standard acronym in any discourse on conflict resolution anywhere in the world. This has been a result of the positive achievements of CBMs in the European context. They succeeded in stabilizing the East-West détente agreements in the 1970s, and helped in averting the outbreak of a third world war. Having succeeded in Europe, it is suggested that CBMs and CSBMs can succeed anywhere else. However, analysts disagree on the utility of

⁷ Benjamin Bonin, Personal Communication. Task Force on Technical Dimensions of a WMDFZ in the Middle East (2010).

⁸ Mohammad El-Sayed Selim, *The Role of Confidence-Building Measures in Conflict Resolution. A Comparative Cross-regional Study with Special Reference to the Arabian Gulf Region*, (2007), pp. 169-182, http://www.hufsmiddleeast.or.kr/PDF/1n800356.pdf.

CBMs in other regions. There are those who argue that, in the age of globalization, CBMs are the major strategy of conflict resolution and peace building. However, other analysts contend that being an output of the European experience, CBMs will not necessarily work in other regions, and that at least a major change in their conceptualization must occur in the direction of taking the particular characteristics of each region into account before introducing them.

2.2 BWC Confidence-building Measures

The first CBMs for the BWC took the form of data exchange measures and were agreed upon during the Second Review Conference in 1986 'in order to prevent or reduce the occurrence of ambiguities, doubts and suspicions'. They were extended at the Third Review Conference in 1991. In this year conference efforts were focused on the work of the Ad Hoc Group, which was considering a legally binding system for states' declarations of relevant activities. In 2001, at the Fifth Review Conference, states made a number of proposals to improve and broaden the CBMs. However, as the conference was unable to agree on a Final Declaration, these proposals did not translate into action. Therefore, the topics that were agreed in 1991 are still valid today and are listed below:

- Confidence-building measure A: Part 1: Exchange of data on research centres and laboratories; Part 2: Exchange of information on national biological defence research and development programmes.
- Confidence-building measure B: Exchange of information on outbreaks of infectious diseases and similar occurrences caused by toxins.
- Confidence-building measure C: Encouragement of publication of results and promotion of use of knowledge.
- Confidence-building measure D: Active promotion of contacts.
- Confidence-building measure E: Declaration of legislation, regulations and other measures.
- Confidence-building measure F: Declaration of past activities in offensive and/or defensive biological research and development programmes.
- Confidence-building measure G: Declaration of vaccine production facilities.

Each year, every BWC member state must submit a CBM return to the United Nations Department for Disarmament Affairs covering the previous calendar year. If a state has nothing, or nothing new, to report, it can use Form 0, indicating with just a tick whether there is no, or no new, information to declare on the different CBM topics. The UN collects and copies the CBM returns and distributes them to states parties. The United Nations does not, however, have a 'collection mandate'; it cannot ask states for their CBM returns. A limited amount of information from the CBMs is made public in the reports that the Department for Disarmament Affairs prepares for the BWC review conferences. These reports list, in a yes/no format, which CBM forms states have submitted, but they do not contain declared data, much less provide analysis or evaluation of those data. Some states have made their CBM submissions public. Other state representatives have claimed that the CBMs are 'for government use only'. However, when adopting the CBMs, states did not specify that access

⁹ Iris Hunger and Nicolas Isla, Confidence-building needs transparency. An analysis of the BWC's confidence-building measures, in: *Disarmament Forum* (2006), pp. 27-36.

to data would be restricted. Moreover, confidentiality obviously runs counter to the goal of transparency.

2.3 Biological CBMs in the Middle East

As mentioned above, a crucial step towards implementation of WMDFZ would be in the form of confidence building and technical exchange. It aims to bring together policy and technical experts from relevant countries to undertake cooperative projects on issues of practical relevance to WMDFZ implementation. These activities do not constitute actual implementation of a zone, but should contribute to developing key foundations while promoting linkages across national stakeholder communities (e.g. research communities, academic institutions, or even militaries). Activities during this stage do not necessarily require the all-out support of governments. Engagement can take place in the Track II and non-government areas if necessary. However, government recognition (if only tacit) of these activities' value would be desirable and indeed helpful for facilitating productive exchange.

Confidence building and technical exchange activities might include the collaborative development of draft agreements, laying out the major legal and organizational elements of a future WMDFZ, draft codes of conduct for governing and regulating legitimate peaceful research in the biological sciences and statements of principle on standards and best practices for controlling WMD, agreed upon and signed by key figures in relevant stakeholder communities. Science and technology base activities might include collaborative technical research and development and demonstration projects, developing and showcasing the potential of technologies relevant to implementing safety, security, materials control, and even verification measures in a future zone. General awareness building is also an important cross-cutting activity at this stage.

2.4 Health-care and Biological Preparedness CBMs

The initial response to an infectious disease outbreak (natural or man-made) is primarily a domestic government function. However, national governments cannot handle global microbial threats alone, and inadequate surveillance and response capacity in a single country can endanger national populations and the public health security of the entire world. Therefore, enhanced cooperation among states is increasingly vital to address the complexity of cross-boundary disease outbreaks and the resulting health problems. Effective regional disease surveillance networks have the potential to support long-term health, stability, and security in a region, and can be a valuable mechanism for under-resourced states to collaborate on and coordinate health-care capacity building. Furthermore, it can also yield security benefits and provide a foundation for cooperation on more contentious issues such as biodefence.

The Middle East Consortium on Infectious Disease Surveillance (MECIDS)¹⁰ is composed of public health experts and ministry of health officials from Israel, Jordan, and the Palestinian Authority and has the purpose of improving the region's ability to detect and respond to infectious disease threats. As demonstrated by the MECIDS response to recent

The Middle East Consortium on Infectious Disease Surveillance (MECIDS), http://www.mecidsnetwork.org/, July 3, 2008; see also L. Gresham, A. Ramlawi, J. Briski, M. Richardon, T. Taylor, Trust Across Borders: Responding to 2009 H1N1 influenza in the Middle East, in: *Biosecurity and Bioterrorism. Biodefense Strategy Practice, and Science*, 7:4 (December 2009), pp. 399-404, < www.nti.org/media/pdfs/bsp.2009.pdf? =1322495797>.

disease outbreaks, such as the 2009 H1N1 pandemic, regional collaboration has been especially valuable for facilitating joint action, even in a region experiencing political conflict and with a challenged history of collaborative efforts on health issues against a specific health threat.

Unfortunately, MECIDS remains, up till now, the only example of regional Middle East cooperation on biological threats. More efforts should be made in the region to follow or enlarge this successful model to improve regional capacity to counter biological threats from any source.

Following are additional examples and suggestions for CBMs that can be implemented in the region:

- workshops on border security cooperation in relation to bio outbreaks and BW attacks
- Joint training courses for law enforcers including police, customs officials, border security, and regulatory compliance officials with regard to:
- identifying anomalous activities that might suggest a covert bio-threat
- maintaining and sharing information on criminal and terrorist activities
- investigating pathogen releases
- enabling effective responses to bio-attacks and maintaining public order
 - A joint exercise for first responders focusing on optimal modalities for mitigating bio-attacks in the region, including victim treatment and hospital care, decontamination of affected sites, and imposition of quarantine and other restrictions on travel.
 - A workshop for law enforcers and scientists with regard to techniques for attributing responsibility for bio-attacks, including microbial forensics and intelligence sharing.
 - A conference on advanced methods for detection, diagnosis, pathogenesis and treatment of relevant pathogens.
 - A workshop on new methods and approaches for networking in epidemiology and surveillance.
 - A workshop on mechanisms for ensuring rapid and effective access to medical countermeasures in the wake of bio-attacks, including: research and development, manufacturing and stockpiling of vaccines; delivery logistics; and dispensation strategies.
 - A joint workshop on epidemiological research programs and policies for the treatment of and response to epidemics.
 - Workshops on biosecurity and biosafety capacity building and policies, including discussion of how to limit dual-use risks.
 - Discussion of a regional coordinating mechanism for bio-safety, including relevant industry and university officials.
 - A regional workshop/conference on education and ethics in the life sciences, including exchange of information and data, discussion of current status and cooperation in educational programs for scientists and students.
 - Joint workshops on drafting and implementation of domestic BW-related laws, including especially those required by UNSC Resolution 1540.

- Data and information exchange and cooperation with regard to biosafety and biosecurity legislation, regulation, and export control systems.
- Discussion of a regional non-binding science and industry code of conduct for biosecurity and biosafety.
- Drafting of a non-binding statement of principles on biosafety and biosecurity.
- Development of a list of national contacts for bio emergencies.
- Workshops on the BW threat posed by sub-national actors.
- Expanding the framework of MECIDS to include more countries (currently to include Israel, Jordan and Palestinian Authority) and more relevant agents.

3. Conclusion

Although the Middle East is one of the most sensitive and complex areas in the world, especially regarding regional arms control efforts and prevention, coordinating preparedness strategies among states in the region may be possible. Cooperatively addressing biological threats could lead to constructive progress towards the otherwise elusive goal of establishing a weapons of mass destruction-free zone in the Middle East.