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Building Confidence over Biological Matters in the Middle East

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Background paper

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Abbreviations

BW	Biological Weapons
BWC	Biological Weapons Convention
CBMs	Confidence-Building Measures
CWC	Chemical Weapons Convention
EOSG	Executive Office of the Secretary General
GP	Geneva Protocol
IHR	International Health Regulations
MEW MDFZ	Middle East Weapons of Mass Destruction-Free Zone
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
UNODA	UN Office of Disarmament
WHO	World Health Organization
WMD	Weapons of Mass Destruction

1. Introduction

The idea of a Middle East Weapons of Mass Destruction Free Zone (MEWMDFZ) dates back to an Egyptian proposal from 1990 (CD/989, 20 April 1990). Linkages have long been made between the three categories of weapons that are commonly subsumed under the heading of WMD: nuclear, chemical and biological weapons. Ultimately, all three will have to be addressed together to achieve the goal of such a zone. However, this does not exclude the possibility of first steps of confidence-building – a prerequisite for reaching this goal – that address the three weapons categories separately. The field of biological weapons presents itself as a good starting point.¹

First, almost all states of the region are parties to the 1925 Geneva Protocol or the 1972 Biological Weapons Convention (BWC), or both.² They have thus either foregone with the option of using such weapons or that of maintaining a capability to do so. Moreover, a strong taboo exists against biological weapons, and the prohibition of biological weapons use has entered in international customary law and is thus considered binding on all states.³ Offensive biological weapons capabilities should thus have no active role in the security doctrines of the states in the region.

Second, at the current stage of biotechnology, biological weapons are considered of low military utility.⁴ This is all the more true in a region characterised by states in close proximity to one another, since biological agents, once released, are hard to contain and will not stop at borders. Depending on the agent, the use of biological weapons – if it were to be considered despite the legal and moral barriers – would carry the risk of affecting the employer's own population. It would also be certain to provoke very strong and determined international reactions. Even a purely military–utilitarian rationale would thus be unlikely to favour a biological weapons option.

Third, there are concerns that recent advances in biotechnology, if exploited for weapons purposes, might one day change the military utility assessment and make biological weapons more attractive for certain kinds of military action. Even if this happened in spite of the strong norm against biological weapons, it would make the case for biological confidence-building and transparency even stronger as the latter may contribute to preventing the growth of yet another perceived threat in a region in which tensions are high anyway.

Fourth, defined more broadly, biological threats – including bioterrorist and biocriminal acts, accidental releases of dangerous pathogens, and natural disease outbreaks alongside

¹ For a similar view see Nilsu Gören, *Is Biosecurity the Low-Hanging Fruit?* (WMD Junction, James Martin Center for Nonproliferation Studies), (10 January 2012) http://wmdjunction.com/120110_biosecurity_mideast.htm (accessed October 11, 2012).

² This paper uses the IAEA list of potential members of a Middle East Nuclear Weapons Free Zone as a working list of potential MEWMDFZ members. See IAEA, *Technical Study on Different Modalities of the Application of Safeguards in the Middle East*, (1989) http://www.iaea.org/About/Policy/GC/GC33/GC33Documents/English/gc33-887_en.pdf (accessed October 15, 2012).

³ See Anders Boserup, *CBW and the Law of War. The Problem of Chemical and Biological Warfare*, Solna: SIPRI, (1973).

⁴ Covert targeted actions might be an exception, but biological agents would probably still not be weapons of choice for all but very few scenarios due to their low degree of predictability and high dependence on target conditions.

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biological weapons use – are increasingly perceived as serious and potentially growing threats. Defending against these threats requires domestic preparedness and international/regional collaboration, e.g. information sharing and technological cooperation in disease surveillance, contingency planning, and detection. Improving biological safety and security as well as public health systems and contingency measures, a crucial factor in biodefence and preparedness, would entail broader benefits for the populations of the region. This is true in particular in situations which present great challenges to health systems, for instance, in less developed areas or in cases of large refugee movements. Exchanging relevant information and possibly exploring opportunities for collaboration in the field of biology and biotechnology and, by implication, public health should thus be in the interest of all actors involved. It could contribute to confidence-building by increasing transparency in national protection measures and in biotechnological activities, many of which have high dual-use potential.

This paper proposes three sets of preliminary measures aimed at stimulating interaction in the region in the biological area, with the ultimate aim of increasing transparency and trust as well as preparing steps more closely related to a MEWMDFZ. The steps proposed here would work through the reaffirmation of existing legal obligations and through exchanges of information on various biological issues.

2. Reaffirming the Non-Use of Biological Weapons

Two international agreements deal with prohibitions of biological weapons. The 1925 Geneva Protocol (GP) prohibits the use of chemical and biological weapons in war. The 1972 Biological Weapons Convention (BWC) prohibits development, production, stockpiling, acquisition and retention of biological weapons. As of October 2012, 165 states were parties to the BWC, while the Geneva Protocol had 137 members.⁵ All states in the Middle East are members of at least one of the two agreements, most have joined both. All but three are full members of the BWC; Egypt and Syria have signed it, and only Israel is a non-member.⁶ Oman and the United Arab Emirates are the only Middle Eastern states not party to the Geneva Protocol.

A number of parties to the Geneva Protocol attached reservations to their ratifications, which *inter alia*, limited the applicability of their obligations under the Protocol towards other states parties and/or towards those states that respect the Protocol provisions. Several members have by now withdrawn these reservations, but those concerned in the Middle East have not yet done so.⁷

⁵ For the BWC see <http://www.unog.ch/80256EE600585943/%28httpPages%29/7BE6CBBEA0477B52C12571860035FD5C?OpenDocument>; for the GP see <http://disarmament.un.org/treaties/t/1925> (27 September 2012).

⁶ Their signature obligates Egypt and Syria ‘to refrain from acts that would defeat the object and purpose’ of the BWC, which includes *inter alia* development, possession and proliferation of biological weapons (1969 Vienna Convention on the Law of Treaties, Article 18).

⁷ Bahrain, Jordan, Kuwait, Libya and Syria have, in addition, attached a reservation stating that their membership in the Protocol would not constitute recognition of the state of Israel.

Country	BWC Member	GP Member	GP Reservation Use of BW ⁸
Bahrain	X	X	X
Egypt	Sign.	X	--
Iran	X	X	--
Iraq	X	X	X
Israel	--	X	X
Jordan	X	X	X
Kuwait	X	X	X
Lebanon	X	X	--
Libya	X	X	X
Oman	X	--	n/a
Qatar	X	X	--
Saudi Arabia	X	X	--
Syria	Sign.	X	--
United Arab Emirates	X	--	n/a
Yemen	X	X	--

Table 1: Membership of BWC and Geneva Protocol in the Middle East; reservations attached to GP ratification

Given developments in international humanitarian and disarmament law over the past decades, reservations limiting the prohibition of BW use are by now *de facto* obsolete. For those states who are also members of the BWC – all except Israel – they are void because the renunciation of the possession of biological weapons precludes any possibility of their use. The two BWC signatories Egypt and Syria have never attached reservations to their GP ratification. Even for Israel, which maintains its reservations on biological weapons use and has not joined the BWC, the use of biological weapons would not be a legal option given the universal prohibition under international customary law.

With this relatively solid legal and normative basis against biological weapons in the Middle East, the following acts of confidence-building could be considered:

- In a first step of collective confidence-building, all states of the region could **affirm their commitment to the non-use of biological weapons** – a commitment that is legally binding on all of them anyway. Preferably, this would take the form of a joint declaration, but if this is not politically feasible at this point in time, states could issue separate but concerted statements. The two Middle Eastern states that are not yet members of the Geneva Protocol – Oman and the United Arab Emirates – could join this agreement to underline their statement; a logical and supposedly uncontroversial step since both are members of the BWC.

⁸ See <http://disarmament.un.org/treaties/t/1925> (accessed October 15, 2012).

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- As a second measure, those states that maintain reservations intended to limit the scope of the Protocol could **withdraw these reservations**. As outlined above, they are void anyway, and such symbolic action would underline the sincerity of the first step.⁹

As regards the BWC, universal membership of all Middle Eastern states would be a high but desirable aim and might ultimately be necessary to achieve a MEWMDFZ.¹⁰ It has so far been prevented, *inter alia*, by the well-known linkages established between the possession of weapons and membership in all three major WMD treaties – the NPT, CWC and BWC – and by Israel’s unclear stance towards the BWC. While accession to the BWC without preconditions might thus not be a practicable immediate option, the three states outside the BWC might consider additional statements renouncing biological weapons. This would be merely declaratory in nature but it would still be a step forward from the status quo. Egypt has already expressed its appreciation of the BWC and its objectives, most recently at the 7th BWC Review Conference in 2011. While the current situation in Syria makes such a move difficult at this point in time, it remains to be hoped that a full and effective renunciation of biological weapons will be part of any post-conflict settlement. Any form of official distancing from biological weapons would be welcome and needed from Israel, which is the only BWC non-signatory and whose policy regarding BW and the BWC has been opaque.

Given the universal prohibition on biological weapons use and the strong general taboo on these weapons, publicly renouncing a weapons category that offers no realistic possibility for military application should, the existing political linkages and difficulties notwithstanding, be considered a reasonable price to pay in return for significant political or symbolic gains on the road to a Middle East weapons of mass destruction-free zone.

3. Confidence-Building in the Biological Weapons Field

The BWC suffers from various weaknesses, but it does possess a system for (potential) confidence building that might be of some use in a Middle Eastern context. The confidence-building measures (CBMs) agreed under the BWC were devised to reduce uncertainty and increase transparency with regard to relevant state activities. They were not intended as an instrument to ensure or verify compliance with the treaty, nor could they serve this objective. Taking the BWC CBMs into consideration in the context of a Middle Eastern WMD-free zone might be surprising at first glance. After all, the CBMs are politically binding only for the members of the BWC. Secondly, they were established in a particular phase of regime development to serve a particular purpose *within* the BWC regime. Thirdly, only few Middle Eastern states have in the past participated regularly in this CBM exchange, which indicates a lack of enthusiasm for this measure in its original context.¹¹ Fourthly, and probably most

⁹ For a general discussion of the universal prohibition of biological weapons use, the GP reservations and their withdrawal see Nicholas Sims, *The Future of Biological Disarmament. Strengthening the Treaty Ban on Weapons*, London/New York: Routledge, (2009), pp. 19-28.

¹⁰ See Mark Fitzpatrick, *Towards a More Secure and WMD-Free Middle East*, in: UNA-UK Briefing Report No. 2, (2012), p. 13, <http://www.una.org.uk/content/towards-zero-briefing-report-no-2-towards-more-secure-and-wmd-free-middle-east-mark-fitzpatr> (accessed October 15, 2012).

¹¹ As of October 2012, Bahrain, Iran, Iraq, Jordan, Lebanon, Libya, Qatar and Yemen have submitted CBMs under the BWC at least once since 2007. See <http://www.unog.ch/80256EE600585943/%28httpPages%29/4FA4DA37A55C7966C12575780055D9E8?OpenDocument> (accessed October 15, 2012).

significantly, even within the BWC regime the CBMs do not enjoy the support of all states parties for political reasons, the participation rate has been low ever since their inception, and the efficiency and efficacy of the CBM system has been under criticism. So why consider them in this context at all?

One simple reason is the very fact that they exist – the forms are readily available, and using them or a selection as templates, to be adapted to region-specific information exchanges, would save negotiation time. This could be accompanied by an express agreement that this process would be disconnected entirely from the BWC. Egypt, Israel and Syria could thus engage in the exchange with the understanding that this does not have implications for their legal relationship with the BWC, and those states that harbour political reservations about the CBMs in the BWC context could still join the regional endeavour. As regards the content of such regional CBMs, the following information exchanges could be considered:

- **on research facilities and laboratories** of biosafety level 2 and higher¹²
- **on vaccine production facilities** or related research and development efforts
- **on relevant publications and scientific collaboration**
- **on national legal steps taken to criminalize biological weapons and prevent the misuse of biology for hostile purposes**

Enhanced **transparency in national biodefence activities and declarations of past offensive biological weapons programmes** would of course be most useful CBMs on the way to a MEWMDFZ, but also the most far-reaching and difficult to attain. They should nevertheless be kept in mind as possible steps further down the road of regional confidence building. This would be all the more important since there are concerns and uncertainties about the state of biological weapons proliferation in the region.

To be clear, the idea is not necessarily to use the BWC formats as they are, but as a starting point from which more fitting (and more acceptable) measures could be developed, without having to invent new measures from scratch. The challenge would be to transfer and adapt CBMs from the BWC to a Middle East context without carrying over the multifaceted political baggage associated with them in the BWC regime.

4. Building Confidence and Cooperation in Public Health, Biotechnology, Biosafety and Biosecurity

If the use of BWC CBMs as a starting point were to prove impracticable, in parallel to their adaptation states could agree on a mode of data exchange that would be somewhat removed from the biological weapons issue proper, but could still initiate a beneficial process and thereby prepare the groundwork for politically more sensitive interaction at a later stage. The areas listed below touch upon biological *weapons capabilities* only indirectly but have implications for proliferation and biodefence. They are more directly related to the safety and

¹² Laboratories are classified based on their equipment, safety and containment measures, ranging from 1 (lowest) to 4 (highest), see WHO Laboratory Biosafety Manual, 3rd edition, 2004, http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_CSR_LYO_2004_11/en/, accessed October 15, 2012). Work with pathogens requires different safety levels depending on the dangers posed (e.g. virulence, transmissibility, available vaccines/treatment); the standards can vary from country to country.

security of biotechnology and its application (which is likely to grow further in the region), to transfer controls and to public health.¹³ Most of the issue areas proposed here resemble issues that have figured prominently in the BWC regime over the past decade. The proposal to consider similar issues on a regional basis and with a different objective in mind is not to prejudge their function *within the BWC regime*. Rather, it is recognition of their practical utility in containing biological risks and threats on a broader basis. The measures proposed are of potential benefit to all actors in the region, and collaboration in this area might thus be more amenable. Given the high dual-use potential of biology and the convergence of health and security concerns in the biological realm, such collaboration can be considered a preliminary step on the way to a MEWMDFZ.

With regard to *public health*, exchanges might be considered regarding

- national **disease surveillance, detection and response** capacities
- **contingency plans for disease outbreaks** (natural and deliberately induced)
- **assistance** available in cases of biological weapons attacks and/or severe disease outbreaks

In order to be manageable and effective for the purpose of building confidence regarding security issues, the exchange could be limited to measures related to pathogens that have been discussed as possible biological agents. While further information exchanges and collaboration in the public health sector could immediately benefit all those involved and would thus be welcome, their relation with confidence building in the biological *weapons* area might be more remote. Moreover, a number of actions in this area might either already be covered by or fall into the purview of the WHO and its Regional Office for the Eastern Mediterranean (which operate under a non-political mandate), and duplication of efforts and resources should be avoided.¹⁴ Public health could thus represent a good point of departure to get dialogue and interaction underway. In combination with other measures, it could also contribute meaningfully to preparing a MEWMDFZ.

With regard to *biotechnology and industry*, information could be shared

- on the **biotechnology sector** (if existent), its areas of priority, rationales and planned development, as applicable, as well as on the nature of investment (state or private, domestic or foreign).

Depending on the country in question, on the state and organization of its economy and industry sector, and on the mode of government, the nature of such information may vary considerably from actor to actor. Nevertheless, creating transparency in industry developments as far as possible may help shape understanding of the level of development, priorities and biotechnological capabilities. It may also open up possibilities for technological and/or economic cooperation.

With regard to *national control measures*, the following could be addressed:

¹³ For related proposals see CNS Task Force, Overview and Recommendations from Track II Technical Discussions on the Biological Weapons Dimensions of Implementing a WMD Free Zone in the Middle East and North Africa, (2011), http://cns.miis.edu/activities/pdfs/121214_bw_mideast_wmdfz.pdf (accessed October 15, 2012).

¹⁴ <http://www.who.int>; <http://www.emro.who.int>.

- national practices and policies regarding the **safety and security of biological technology, laboratories, material and know-how**, including **raising awareness** about the potential for misuse of biology and biotechnology
- national **transfer controls**
- national policies regarding the criminalization of **dangerous or illegitimate biological activities** (regardless of treaty membership).

Many aspects covered by these topics correspond to international legal obligations under the WHO International Health Regulations (IHR, 2005) and UN Security Council Resolution 1540 (2004). All Middle Eastern states are parties to the IHR, and all have at least submitted initial reports to the 1540 Committee.¹⁵ Regardless of their political stance towards these instruments, they should thus be able to draw on existing information that could be shared in the region, supplemented by any information or elaboration that they collectively consider useful for the purpose of confidence building in the Middle East. Where applicable, such an exchange would create transparency concerning the safety and security of biotechnology in the countries of the region, which may serve as indicators of the potential risk of accidents with and unauthorized access to biological agents. It may also facilitate increased national efforts or regional cooperation aimed at improving national safety and security. This would benefit national security and biological safety; it may also reduce a given state's own perceived or actual vulnerabilities and/or perception of threats emanating from elsewhere. It is this latter aspect that would be of particular value in preparing a MEWMDZFZ.

5. Institutional arrangements

Provided that Middle Eastern states could in principle agree on any form of information exchange, channels would be needed to facilitate cooperation and communication, in particular given the existing obstacles to direct communication between some actors. Since there is no suitable regional or bio-specific international organization at hand, other clearing house arrangements would be needed that could be accepted and viewed as impartial by all relevant actors. The following options could be considered:

- the UN, either through the Executive Office of the Secretary General (EOSG) or the Office of Disarmament (UNODA)
- any government that is acceptable to all relevant actors as mediator and that is willing to provide good offices
- the Facilitator appointed for the 2012 Middle East Conference, Ambassador Jaakko Laajava of Finland

¹⁵ http://www.who.int/ihr/legal_issues/states_parties/en/; <http://www.un.org/en/sc/1540/national-implementation/national-reports.shtml> (accessed October 1, 2012). For other proposals to use the 1540 reports in a Middle East confidence-building context see Fitzpatrick 2012, Toward a More Secure and WMD-Free Middle East, p. 15; Harald Müller and Claudia Baumgart-Ochse, A Weapons of Mass Destruction-Free Zone in the Middle East. an Incremental Approach. Background Paper EU Non-Proliferation Consortium, Brussels, (2011) p. 5, <http://www.nonproliferation.eu/documents/backgroundpapers/muller.pdf> (accessed 15 October 2012).

6. Conclusions

This paper has listed several possible confidence-building steps in the area of biological weapons and biotechnology that might in the long run help facilitate movement towards a MEWMDFZ. Most of these steps have modest aims in that they build on existing obligations and measures that would only need to be modified and adapted to the specific requirements of a confidence-building process. Several of them would probably only yield information that is available anyway from open or intelligence sources. The point at this stage, however, is not to acquire or supply new information, but to demonstrate willingness to share information in a structured and reciprocal way, to engage in focused interaction, and to discuss bio-related issues on a regional basis.

The proposals were consciously designed as first steps on a long road – none of them would provide immediate certainty about the presence or absence of biological weapons capabilities and intentions anywhere in the Middle East. This is based on the assumptions that a) given the current intricate situation in the Middle East, even low-key interaction and information exchanges could serve a confidence-building purpose by demonstrating willingness to engage, and b) such confidence building would need to precede any more far-reaching and binding steps. Only *after* a more robust basis for interaction, communication and trust has been created in the region will it make sense to negotiate more demanding steps which would then in turn reinforce confidence. The proposals in this paper might serve as building blocks: the indirect, facilitated communication could later be replaced by direct interaction; states could agree to follow-up action to the information exchanges, including visits or concerted intergovernmental action such as shared standards, guidelines or practices;¹⁶ new areas could be included; voluntary exchanges could be turned into mandatory submissions by way of a regional agreement. Ultimately, a regional verification system would have to be set up. Given the intricate situation surrounding verification in the BWC, taking a regional basis for this might be more conducive, at least initially. Here, at the latest, the process would have to merge with discussions regarding chemical and nuclear weapons in the Middle East as well as other international developments (e.g. in the BWC). However, delinking the biological field from the other fields at this early stage could result in health, security and economic benefits for the individual states in the region while at the same time building confidence and fostering the goal of a Middle East free of weapons of mass destruction.

¹⁶ See also Müller/Baumgart-Ochse 2011, Weapons of Mass Destruction-Free Zone, p. 4; CNS Task Force 2011, Overview and Recommendations from Track II Technical Discussions.