The Biological Weapons Convention: Compliance, Transparency & Confidence

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Where We Are Now

Central to the compliance structure of the Biological and Toxin Weapons Convention (BWC) are the confidence-building measures – the means by which States Parties disclose information annually. Improving this process was one of the key substantive topics of the last Review Conference in 2011, and has been an agenda item during the past two years of the intersessional process. Despite this, many perceive that the measures are not relevant for States Parties' security needs and that, as currently constituted, they do not provide useful information. This article considers the underlying and evolving purpose of the confidence-building measures, and argues that a new, expanded understanding of what builds confidence is required.

Blurred lines and the need to convey intent

In early 2000, a series of secret projects were reportedly underway in the United States to improve biodefenses. The Pentagon was buying commercially available equipment to build a small-scale germ factory to produce anthrax simulants – *Bacillus thuringiensis*, the biopesticide made at the main Iraqi bioweapons center before it was blown up by United Nations inspectors in 1997. Another US project involved genetically modifying anthrax to make a vaccine-resistant superbug. Meanwhile the CIA, in one of its projects, was building Soviet-style bio-bomblets and testing them for dissemination characteristics and performance in different atmospheric conditions (Miller et al., 2001).

Pentagon and CIA lawyers said the projects were legitimate defensive activities: building and operating a bioweapons facility helped uncover the telltale clues of distinctive patterns of equipment buying; genetically modifying anthrax was essential to check whether the current vaccines administered to soldiers were effective; and building and testing bomblets was a defensive response to specific intelligence about a possible adversary. Others disagreed, saying the projects were not permitted by the Biological and Toxin Weapons Convention (BWC), signed and ratified by the United States in 1975 (Miller et al., 2001).

The treaty permits almost any kind of research in the name of defense. Some of this work is unquestionably justifiable. Other research edges closer to the blurred line between defensive and offensive work. The trouble with distinguishing permitted biodefense projects from non-permitted projects is that it is not just about the facilities, equipment and activities, but also about the purpose or intent of those activities. An essential component in reaching a judgment of compliance with the treaty is therefore an analysis of justifications provided by states for the activities in question.

The US State Department has noted in its annual compliance report to Congress that both China and Russia are engaged in dual-use activities – such as identifying factors that enhance the virulence, toxicity, or antibiotic resistance of pathogens (including through the use of genetic engineering), synthetic production of toxins, and examining biological aerosols – but that available information does not indicate that the purpose of these activities were prohibited by the BWC (US Department of State, 2013). By keeping secret projects like building germ plants, creating superbugs, and testing germ bomblets, the United States undermines the treaty it helped to create and its own moral authority, because such activities, regardless of their legitimacy, will inevitably stir suspicion when they come to light. While there is defensive research that a nation might legitimately keep secret – such as experiments exploring the vulnerabilities of existing vaccines – the existence of such research and its general outlines should be disclosed whenever possible to allay fears and suspicions. After all, this is the main purpose of the confidence-building measures of the BWC.

The confidence-building measures

The measures themselves are essentially an annual exchange of information between States Parties; such an exchange encourages states to be transparent about their biodefense programs and to provide justification for their activities.[1] The primary

1 The information exchange is based on a set of six measures, covering research centers and laboratories, biodefense programmes, outbreaks of infectious disease, past offensive

aim of the measures is to build trust between states that no activities are taking place in breach of the convention.

They emerged in the early 1980s following the crisis of confidence among states that resulted from unresolved allegations of non-compliance, rapid developments in science and technology, and other pressures. They were conceived, developed, and agreed to at a time when it seemed plausible that a verification mechanism was going to be put in place that resembled the declarations and on-site inspections of the Chemical Weapons Convention (CWC) then under negotiation. The measures were therefore not conceived of as a verification tool, but merely as a layer within a larger "regime of compliance" (Sims, 2001). While they demonstrate compliance, they do not guarantee it.

The emphasis on seeking verification between the end of the Cold War and the Fifth BWC Review Conference in 2001 led, however, to a lack of interest in developing the measures. Political differences since 2001 meant the confidence-building measures (CBMs) remained unmodified for another decade until they were modestly reviewed at the Seventh Review Conference in 2011.

At that Conference, BWC members agreed that the CBM regime has contributed to enhancing transparency and building confidence. In the interest of maximizing transparency, and disseminating the relevant information as widely as possible, many states are now making their CBM returns publicly available or are working towards doing so. Making these submissions public can greatly enhance their function. The knowledge, experience, and expertise of civil society can contribute to the communication process and to enhancing transparency between states in several ways, including through: assisting states to collect and collate information for the CBMs; monitoring states' activities; collecting data from open sources; processing the data submitted to generate accessible information; and, ultimately, by bringing this information into the public sphere. Restricting access to CBM returns risks building suspicion rather than confidence among important stakeholders, and misses an opportunity to engage these same stakeholders in processes that might actually enhance the quality and completeness of the information submitted.

programmes, vaccine production facilities, etc.

To date, about a third (21/60) of the states that have submitted their 2014 CBMs have made them publicly available. These are: Australia, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, Germany, Japan, Latvia, Lithuania, New Zealand, Portugal, Republic of Moldova, Romania, Slovenia, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

Despite these positive developments, and despite dedicated agenda items at the 2012 and 2013 intersessional meetings on increasing CBM submissions, participation in the regime is currently the lowest in nearly a decade. While there may be many mitigating factors preventing states from participating, one key factor is the perception that CBMs are not relevant for States Parties' security needs and that, as currently constituted, CBMs do not provide useful information.

Knowledge-based risks and the need to set an example

The underlying purpose of the CBMs, as noted above, has traditionally been seen to be about conveying intent and reducing the occurrence of ambiguities, doubts and suspicions. This underlying purpose remains essential to the health of the convention. However, to give effect to that traditional purpose in today's political, security and scientific contexts requires a new, expanded understanding of what builds confidence. Confidence building in the biological field today must also be about setting appropriate examples for others to emulate.

Here's why: The traditional "artefact-centric" approach to regulating unconventional weapons – which seeks to control the materials, methods and products involved in misuse – is becoming ever-more ill-suited to the life sciences, where the technologies are less about hardware, equipment and tools, and more about people, processes and know-how. Dual-use, or multi-use, life science technologies are increasingly diffuse, globalised, and multidisciplinary, and are often based on intangible information rather than on specialised materials and equipment. This changes the definition of the problem from a material- and equipment-based threat that can be eliminated to a knowledge-based risk that must be managed.

Risk-based regulation involves a plurality of public and private actors, instruments and purposes that can be grouped into three modes of governance: "hard law", "soft law" and "informal law":

1. "Hard-law" is based on the authority of the state and accompanied by penalties for noncompliance; it includes statutory regulations, reporting requirements, and mandatory licensing, certification, and registration.
2. "Soft-law" is less formal and based on conceptions of what is socially desirable; it includes professional self-governance, codes of practice, and guidelines.
3. "Informal law" involves the emulation of successful practices and models of behaviour; it includes national and international standards, education and awareness-raising.

All three modes of governance play important roles in influencing, identifying, and inhibiting those who seek to misuse the life sciences. Truly effective management of the knowledge-based risk posed by dual-use life science technologies must therefore couple hard-law with both soft-law and informal law. So in addition to national implementation of the BWC, it is important that governments support bottom-up codes of practice initiatives; education, outreach and awareness-raising initiatives; and so on. But, at the same time, governments also have to act as the ultimate role model. Governments have to look inward at themselves and demonstrate outward to others that their own house is in order. And this is where the CBMs of the BWC come in.

The process of collecting and submitting information for CBM submissions provides a mechanism for individual governments to draw domestic stakeholders together, to focus internal inter-agency or inter-departmental coordination, and to increase their awareness and oversight of relevant national biological activity.

Complete, accurate and annual CBM submissions demonstrate to peers in government and to peers in other governments that states have their house in order. And for the growing number of States Parties making their CBMs publicly available, they also demonstrate that they have their house in order to other – equally significant – stakeholders in managing the risks that biology may be misused.

The discussion continues…

Discussions about understanding of confidence-building, the purpose and future development of the CBM regime, and how it links into the larger discussion on compliance, will continue in the lead up to the Eighth Review Conference in 2016. CBMs are not on the formal agenda for the remainder of the current intersessional cycle, but individual states are encouraging, and funding, initiatives to enable the discussion to evolve. Up first are two August workshops in Geneva: one on 'Confidence and compliance with the BWC' jointly organized by King's College London and the Geneva Centre for Security Policy, with funds from the United Kingdom Foreign & Commonwealth Office; the second on 'Open source tools for the assessment of compliance with the BWC' organized by the Research Group for Biological Arms Control in Hamburg, with funds from the German Ministry of Foreign Affairs. These workshops are closely followed by a larger, three-day conference at Wilton Park in the United Kingdom on 'BWC compliance: assessment, demonstration and practice', which will focus on whether specific effective strategies on compliance can be identified, drafted, agreed and implemented.

References:

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