



Strengthening the Bioweapons Convention

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Biotechnology is advancing rapidly and the security context is evolving. Accordingly, there is a need to strengthen the international legal regime prohibiting biological weapons.

Biological weapons (BW) have been defined by the WHO as weapons that achieve their “intended target affects through the infectivity of disease-causing microorganisms and other such entities”. These weapons are prohibited under the 1972 Biological and Toxin Weapons Convention (BWC), which was the first multilateral disarmament treaty to abolish an entire class of weapons. Despite a small number of public allegations of non-compliance, the treaty can largely be seen as successful with biological weapons seemingly excluded from the arsenals of state and non-state actors. Moreover, unlike chemical weapons, which are being used with alarming frequency, the use of biological weapons remains rare. However, biotechnology is advancing rapidly and the security context is evolving, potentially creating new opportunities for new (and old) biological weapons. Accordingly, as noted in the recently released UK Biological Security Strategy, there is a need to “maintain and enhance the international legal regime prohibiting biological weapons”.

Origins

The BWC is a product of Cold War détente that was negotiated in the early 1970s, a point at which biotechnology was of limited commercial value and biological weapons were of relatively minor military value for the nuclear-armed superpowers. The final draft text that emerged in 1972 from bilateral US-USSR negotiations was a short document that prohibited the development, production, stockpiling or otherwise acquiring or retaining biological weapons.

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Unlike the earlier [draft treaty](#) proposed by the British, the final text of the treaty contained no provision for verification. Moreover, it contains rather “loosely constructed” language in relation to international cooperation under [Article X](#) of the convention. These two factors have proved particularly problematic over the course of the evolution of the BWC.

Evolution

As early as the First BWC Review Conference in 1980, some states expressed frustration at the absence of measures to verify the provisions of the convention and build confidence in compliance, something compounded by allegations of [toxin-weapons use in South East Asia](#). The end of the Cold War provided an opportunity to substantially redress this deficit, and in the 1990s state parties sought to explore technical aspects of BW verification through the work of collective of verification experts, a process that became known as “VEREX”. This was followed in the mid-1990s by political negotiations to develop a protocol, which included provision for a verification regime for the BWC in what became known as the [Ad Hoc Group](#). Despite making some progress over the course of the mid to late 1990s, significant political differences remained, and ultimately the protocol discussions collapsed in 2001 with the United States rejecting what they saw as the “flawed” draft protocol.

The evolution of the convention has also been stifled by continued frustration over international cooperation under [Article X](#). This articles contains two paragraphs:

- One promotional paragraph that encourages the transfer for peaceful purposes of materials, equipment and knowledge along with peaceful

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cooperation “for the prevention of disease, or for other peaceful purposes”;

- A second paragraph, which that is regulatory in that it obligates states to “avoid hampering the economic or technological development of States Parties”.

Many Neutral and Non-Aligned (NAM) states from the Global South have expressed frustration over what they see as the poor implementation of the promotional aspect of this article and the incompatibility of obligations under [Article X](#) with existence of the Western-led Australia Group [export control regime](#). Many Western states, in contrast, have [pointed to](#) the extensive international cooperation and technology transfer that has been and is being undertaken, albeit largely outside the convention. Moreover, they likely regard the [Australia Group](#) as important and effective tool for preventing the proliferation of dual use biological equipment and materials.

Finally, the evolution of the BWC has been influenced by wider scientific developments and shifts in the international security discourse. Bioterrorism was not a major concern in the 1970s. However, over the course of the evolution of the convention, the ‘[deskilling](#)’ and ‘[democratization](#)’ of aspects of biology has enabled a wider range of actors to engage in biology, something evident in the expansion of the [DIY Bio movement](#). Combined with the growing salience of terrorism (particularly following the September the 11th attacks and the subsequent [Anthrax letter attacks](#) in the US in 2001) this has made bioterrorism a [more significant policy issue](#). This has resulted in growing international attention to the domestic implementation of the BWC since 2001.

Current situation

Following the collapse of protocol negotiations in 2001, the BWC has embarked upon a series of intersessional processes between the five-yearly reviews conferences. These meetings are less about negotiations; rather they are mandated “to discuss and promote common understanding and effective action” on particular selected topics. The first of these, between 2002 and 2005, exceeded the low expectations of states parties. However, over time these sets of meetings generated less common understanding and effective action than hoped, and by 2016 appeared to have passed their best before date. Accordingly, in 2017 states parties managed to agree modest changes to the format of the current intersessional process. Beginning this month, separate *Meetings of Experts* at the UN in Geneva will address topics such as, cooperation and assistance, science and technology and the rather broadly titled topic of “institutional strengthening of the convention”.

Whilst there is scope for success in the latest round of intersessional work, achieving consensus on more substantive efforts to advance biological disarmament is difficult with two interlinked spheres of recurring division.

The first addresses verification. Many from the NAM continue to maintain a principled position in support of returning to the work of the Ad Hoc Group on developing a protocol for the BWC that includes provision for the verification of the convention. Such NAM states argue the only sustainable means of strengthening the convention is through a “multilaterally negotiated, legally binding, verification protocol”. Others recognise that this protocol negotiation route is both politically closed off and technically dated so have sought take a more pragmatic, incremental approach to building the convention. This has involved looking at what can be achieved in terms of enhancing national

implementation, improving transparency and enhancing the provision of assistance in the event of a violation of the convention.

The second divisions relate to international cooperation and technology transfer. Biotechnology, of negligible financial value in the early 1970s, is now a multi-billion-dollar global industry providing a number of potential financial and societal benefits, including the prevention of disease. Correspondingly, it is reasonable that many NAM states (particularly those facing significant natural disease burdens) have increasingly called for the adoption of positive measures to promote technology transfer and international cooperation as a *quid pro quo* for further efforts to strengthen the BWC at the national level. This is compounded by the politicisation of [Article X](#) by certain states that have adeptly exploited Article X as a bargaining chip for agreement on other aspects of the BWC.

Baby Steps for the BWC?

Currently, neither states nor non-state-actors admit to having biological weapons programs, and, unlike the increasing incidents of chemical weapons use, incidents of biological weapons development and/or use are rare. However, biotechnology is growing ever more powerful with new developments in areas, such as [genome editing](#), and continues to benefit from [convergence](#) with other technological developments. Moreover, the security environment has significantly evolved since 1972 with a growth in “[New Wars-type](#)” conflicts, in which biological weapons may be seen as potentially useful tools for harming but also punishing, and terrifying local opposition. [Syria](#) provides one such example of these sorts of conflicts and raises the possibility that state (and to a lesser extent, non-state) actors, may be inspired by the use of unconventional weapons in Syria – thus far – with relative impunity.

Biological disarmament requires sustained attention if it is to remain relevant in the 21st century. There are a number of small steps through which this could be achieved, including the following six incremental measures:

- The first is enhancing the implementation of [Article X](#). Although it is inconceivable that the existing export control regime will be dismantled, there are nonetheless steps that could be explored to promote international cooperation, potentially providing real benefits to state parties. The [UK Biological Security Strategy](#) provides several examples of how international cooperation is occurring, but more from others may be required for progress in the BWC.
- Second, could be a modest expansion of the BWC Implementation Support Unit (ISU). The [IAEA has 2560 staff](#) and the [OPCW some 500](#), whereas the BWC ISU consists of [three members of staff](#). The ISU is not the same as the OPCW Technical Secretariat nor the IAEA, but a modest growth in resources to cover posts looking at, for example, international cooperation and developments in science and technology could nonetheless be beneficial.
- Third should be the development of the [UN Secretary Generals Investigatory Mechanism \(UNSGM\)](#). Although the relationship between the BWC and the UNSGM has been contested, in reality should an independent impartial investigation into an allegation of biological weapons be required, the UNSGM is the only body with the mandate and capacity to achieve this. To be fully operationalised this requires further resources and attention, something also identified as important in the recent UK Biological Security Strategy.
- Fourth and building on proposals from the [European Union](#) and the [United States](#), states parties could develop a series of procedures for consultation

and clarification on issues related to the convention in order to resolve ambiguities and build confidence in compliance with the BWC.

- Fifth, states parties could revisit the science and technology of compliance and explore changes that enable either the detection or development of biological weapons. This was last given serious attention in the multilateral arena in the early 1990s through the work of VEREX. Much has changed since then, with new sources of electronic information and developments in areas such as biosensor and satellite technology.
- Finally, states parties could develop frameworks for national implementation, including measures, such as [dual use education](#) and outreach, in order take the convention from the [international to the individual](#). Any measures need to be adapted and applied in a manner that reflects the national priorities and context.

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