
Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction

17 August 2021

English only

2020 Meeting

Geneva, 22-25 November 2021

Meeting of Experts on Review of developments in the field of science and technology related to the Convention

Geneva, 1-2 September 2021

Item 4 of the provisional agenda

Review of science and technology developments relevant to the Convention, including for the enhanced implementation of all articles of the Convention as well as the identification of potential benefits and risks of new science and technology developments relevant to the Convention, with a particular attention to positive implications

Exploring Science and Technology Review Mechanisms under the Biological Weapons Convention

Submitted by Germany

I. Introduction

1. Since the Biological Weapons Convention (BWC) opened for signature in 1972, biology and other converging disciplines have advanced considerably. These changes could have profound implications for a science-based disarmament agreement like the BWC.
2. To address changes in biology and biotechnology, BWC States Parties have established processes to review developments in science and technology, including annual expert meetings on this topic. However, shortcomings are evident in the current approaches and many BWC States Parties have expressed support for a more systematic review of science and technology under the Convention.
3. Such support is further reflected in the results of a voluntary UNIDIR survey of all BWC States Parties in which 39 of the 42 respondents indicated support for a mechanism to more systematically review science and technology of relevance to the BWC.¹

* Reissued for technical reasons on 2 September 2021.

¹ See: J. Reville, A. Anand and G. Persi Paoli, Exploring Science and Technology Review Mechanisms Under the Biological Weapons Convention, Geneva, Switzerland: UNIDIR, 2021. <https://doi.org/10.37559/SECTEC/2021/SandReviews/01>.



4. Not all States Parties support the idea of a BWC science and technology review mechanism. Nor do those that support such a mechanism necessarily agree on its details. As such, BWC States Parties may need to build a common understanding around *why* States Parties require a review, *who* the review is for, and *how* any outputs or advice will be used. Clarity around these questions can enable States Parties to develop a mechanism that best suits their needs.

II. Objectives

5. Science and technology review mechanisms can be action-oriented and provide recommendations or information-oriented providing information on developments in science and technology. While an S&T review body can combine these functions, it is important to have clarity on the objective(s) of any mechanism.

6. It will also be important to develop a shared understanding of what topics a mechanism would address. Responses to the UNIDIR survey suggest that any BWC science and technology review body may need to cover a range of different issues. All respondents to the UNIDIR survey agreed that it would be “important” or “essential” for any mechanism to address risks posed by advances in science and technology. A significant number of respondents also identified scientific and technological implications for addressing compliance, potential benefits of scientific and technological developments, national implementation, assistance under Article VII and international cooperation under Article X as “important” or “essential” issues to address.

7. Addressing all these different issues through a single mechanism is possible. Moreover, developments in these different areas will evolve at varying rates and could therefore potentially be addressed within different time frames. However, if a wider range of topics are to be addressed, a wider range of expertise will be required.

8. Based on past discussions or working papers there are also differing views regarding how specific priority areas and questions should be determined (and who should do this). If there is appetite for some form of review mechanism, BWC States Parties will need to develop a process suited to the convention. Such a process will need to find a balance between, on the one hand, collectively agreeing topics for discussion in advance and, on the other, ensuring the necessary flexibility to address unanticipated issues should they emerge. It will also be useful to consider processes to translate policy questions into questions that can feasibly be addressed by a scientific body.

III. Composition and participation

9. Based on survey results, working papers and wider discussion the composition of any review body appears to be an area in which States Parties views diverge.

10. Some favor limiting participation to a select number of experts. This limited participation model has precedent in the OPCW’s Scientific Advisory Board (SAB), which consists of 25 participants. In the UNIDIR survey, over half of the respondents favored limiting participation. The category of 10-30 participants received particularly strong support. This is illustrated in figure 1 below.

11. Others favor an open-ended model of participation. In this model, participants from all States parties could participate in a mechanism. In the UNIDIR survey, 12 respondents favored some form of an ‘open-ended’ model of participation. Additional qualitative responses also indicated explicit support for the open-ended model.

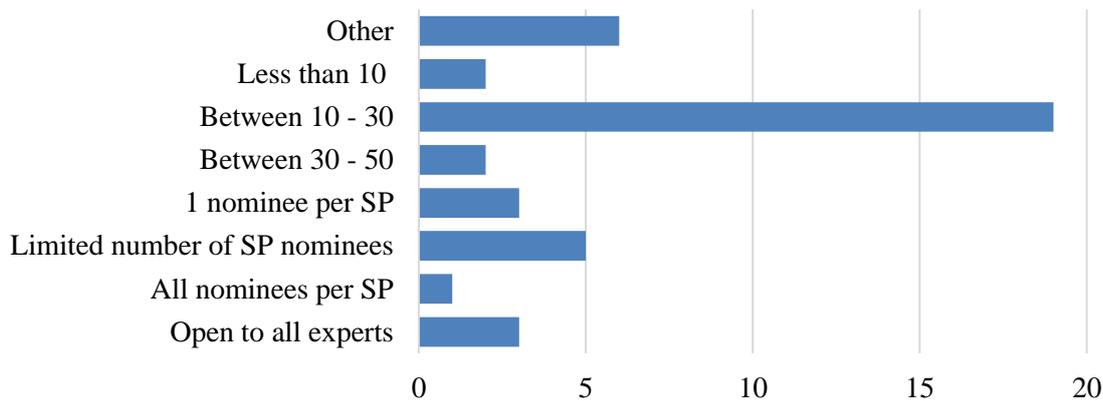


Figure 1 Respondents' views on the number of participants in a BWC science and technology review mechanism

12. Both approaches have advantages and disadvantages. The limited participation model could provide consistency, with expert participants developing a more detailed and nuanced understanding of the BWC policy over time. In turn, this could help provide more informed recommendations if so desired.

13. Opening participation would provide wider range of expertise thereby generating a more adaptable mechanism capable of addressing new or emerging issues. An open-ended body could also allow for wider knowledge exchange and facilitate inclusivity by allowing all States Parties to participate in any discussion under the mechanism.

A Hybrid approach?

14. Past reports on this topic have, on occasion, presented the limited-participation and open-ended approaches as a binary choice. However, States Parties could potentially combine elements of these two models to generate a hybrid process for reviewing science and technology of relevance to the BWC.

15. There are several possible variants on such a hybrid approach.² To provide one example, an open-ended technically focused meeting could be organized that was open to all nominated, qualified experts. A rapporteur from the ISU could then develop a factual technical report drawing on insights from the proceedings. The report would be transmitted to BWC States Parties and a BWC S&T body comprised of a limited number of 20 qualified experts nominated by States Parties and selected by the chair of the MSP (with support from the ISU), based on expertise, disciplinary diversity and geographical and gender representation.

16. A hybrid model would entail additional costs and require a considerable logistical and organizational effort. However, the process could mitigate some of the concerns around both the limited participation and open-ended models while reaping some of the benefits of these two approaches.

² See FAS. 2021. "Presentation of workshop outcomes", Biological Weapons Convention – Meetings of Experts Informal Webinar (June 2021). <https://meetings.unoda.org/section/bwc-mx-2020-mx2-webinar2/>.

IV. Independence

17. For a mechanism to be credible and effective, participants must remain free from outside political or commercial influence. States Parties will therefore need to consider what measures can be applied to ensure the independence of a review mechanism, particularly if some form of limited participation model is preferred. There are several possible options here. The UNIDIR survey found strong support for the inclusion of explicit instructions for participants on the technical focus of a mechanism. Many survey respondents also supported participant declarations on acting in an independent capacity or declarations on competing interests. Just under half of the Survey respondents supported some form of evaluation of participants' technical credentials.

Other Issues

18. If there is sufficient support for an S&T review mechanism, States Parties will further need to consider several other issues, including the:

- (a) leadership structure of a review mechanism;
- (b) frequency, type and location(s) of its meetings;
- (c) type of institutional support provided to the mechanism;
- (d) funding of a mechanism; and
- (e) written and other outputs produced by a mechanism.

19. The Ninth BWC Review Conference presents a unique opportunity for States Parties to establish a more systematic review of science and technology under the Convention. However, to achieve this, the issues identified above require further consideration and consultation ahead of the Ninth Review Conference, when States Parties will have the opportunity to determine the future direction of the Convention. Such discussion will also need to take into account that many of these issues are interconnected; a decision around one issue will have implications for others. For example, if a mechanism is required to cover a wide range of topics, then a broader range of expertise is needed.

20. States parties should also keep in mind that not all States parties support an S&T Review Mechanism. The views of *all* States Parties will be important to consider as discussion on an S&T review mechanism cannot be detached from the wider politics of the BWC. This underlines the fundamental importance of all States Parties preparing early for success at the Ninth Review Conference to strengthen the BWC in a period of considerable change in the security and scientific contexts.
