

**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**

1 July 2019

English only

**2019 Meeting**

Geneva, 3–6 December 2019

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

Geneva, 31 July and 2 August 2019

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**

**Rethinking the BTWC science and technology review: A  
renewed case for a BTWC Scientific and Technological  
Experts Advisory Forum (STEAF)**

**Submitted by Germany, co-sponsored by the Netherlands and Sweden**

**I. Introduction**

1. We are witnessing rapid and revolutionary advances in life sciences, including convergences with ‘emerging’ fields such as artificial intelligence, additive manufacturing or robotics<sup>1</sup>. As a result, parallel applications of biological technology are becoming easier, cheaper, faster and more widely accessible. These developments offer unprecedented opportunities, including ways of furthering the Convention’s aims, but may also increase proliferation and security risks and have implications for the long-term viability of the BTWC.

2. Article XII of the Convention stipulates a review process taking into account any new scientific and technological developments relevant to the BTWC. It is therefore not surprising that cross-regional support for a regular science and technology review instrument has been steadily growing and has produced a rich cache of working papers.<sup>2</sup>

<sup>1</sup> See for instance “BIO PLUS X: Arms Control and the Convergence of Biology and Emerging Technologies”, 2019, Stockholm International Peace Research Institute.

<sup>2</sup> This includes but is not limited to, BWC/CONF.VII/WP.3 - Submitted by India; BWC/CONF.VII/WP.13 - Submitted by Australia, Japan and New Zealand; BWC/MSP/2013/WP.5, BWC/MSP/2015/MX/WP.11 and BWC/MSP/2015/WP.10 - Submitted by Switzerland; BWC/CONF.VIII/PC/WP.2/Rev.2 - Submitted by the Russian Federation; BWC/CONF.VIII/PC/WP.3 - Submitted by the United States of America; BWC/CONF.VIII/PC/WP.4 - Submitted by the United Kingdom of Great Britain and Northern Ireland; BWC/CONF.VIII/PC/WP.7 - Submitted by Finland, Norway and Sweden; BWC/CONF.VIII/PC/WP.8 and BWC/CONF.VIII/PC/WP.16 - Submitted by Switzerland; BWC/CONF.VIII/PC/WP.27 - Submitted by Spain; BWC/CONF.VIII/WP.12 - Submitted



3. Furthermore, experts present at the Ministerial Conference “2019. Capturing Technology. Rethinking Arms Control.”<sup>3</sup> in Berlin in March this year claimed the need to expand engagement with relevant scientific, commercial and private actors and to base policy decisions on a systematic assessment of the potential for malicious applications of advances in biotechnology and related fields. Thus, the BTWC must finally be equipped with a dedicated forum of experts able to draw in the knowledge of scientists and experts who are best placed to assess the potential for beneficial use as well as misuse of new technologies.

4. BTWC States Parties should therefore use the remainder of this intersessional process to reach common understanding on the purpose, scope, composition and working method of such a Scientific and Technological Experts Advisory Forum (STEAF). In this process we can build on the aforementioned Ministerial Conference in Berlin, previous working papers, proposals and discussions in the framework of the BTWC process.<sup>4</sup>

5. The following proposal describes how the STEAF could be established.

## **II. Proposal for a BTWC Scientific and Technological Experts Advisory Forum**

### **A. Objective and Tasks**

6. The establishment of such a Scientific and Technological Experts Advisory Forum is not a goal in itself, but forms part of a broader aspiration to encourage the inclusion of the science community in the BTWC working processes and to foster sound, science-based decision making as well as responsible research.

7. The tasks of the STEAF could include the following:

(a) The STEAF should produce a sound chances and risks analysis of developments in the field of biotechnology and their potential relevance to the goals and objectives of the BTWC including but not limited to convergences of biology and emerging technologies such as additive manufacturing, artificial intelligences or robotics.

(b) The STEAF could identify emerging risks in dual use research and developments of particular concern.

(c) As necessary, the STEAF should provide scientific and technological advice to inform BTWC States Parties and weigh in on concrete scientific or technological questions under discussion in the BTWC processes.

### **B. Organization, composition and chairmanship**

8. Since science and technology will continue to evolve, a STEAF would need to be sufficiently dynamic to adapt to changing circumstances. Furthermore, it requires broad geographical as well as professional diversity.

9. To ensure an effective forum with the right expertise, independence and legitimacy as well as a well-balanced membership the forum could consist of 21 members from all three regional groups.

10. The members of the STEAF shall be nominated on the basis of their expertise in the particular scientific fields relevant to the implementation of the BTWC. They shall serve in their individual capacity as independent experts. Their work is scientific and consultative, not political.

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by the Islamic Republic of Iran; BWC/CONF.VIII/WP.17 - Submitted by the United Kingdom of Great Britain and Northern Ireland as well as BWC/MSP/2017/WP.2 - Submitted by Switzerland.

<sup>3</sup> Berlin, 15th of March on the invitation of German Federal Foreign Minister, Heiko Maas, <https://www.rethinkingarmscontrol.de>

<sup>4</sup> <http://www.centerforhealthsecurity.org/our-work/events/2018-global-forum/index.html>.

11. Each regional group should nominate seven members for a term of five years for appointment by States Parties at each Review Conference ensuring a reasonable gender balance. Members who are for any reason prevented from taking part in the work of the STEAF for the remainder of their term shall be replaced by other experts nominated by the same regional group.

12. In cases where particular expertise is required which cannot be provided by its members, the STEAF could draw upon ad hoc external expertise from pertinent sources. A broad roster of international experts could be managed by the ISU listing up to 20 experts from each regional group on which to call for specific expertise.

13. In order to allow the STEAF to work independently, observers should not be permitted to attend meetings of the STEAF unless prior written approval has been obtained. This approval could be granted to experts from other international organizations, such as the WHO, FAO or OIE, as well as from relevant international scientific bodies.<sup>5</sup>

14. To underline the scientific, technological and independent nature of the STEAF, meetings should be chaired and all other work coordinated by an expert from within the forum's membership, elected annually by the forum, rotating between the regional groups.

15. In order to have consistent support that can assist the STEAF in understanding the BTWC processes, the annual chairpersons of the MSPs and chairpersons of the Review Conferences should provide oversight and maintain strong links with the STEAF. The ISU should provide administrative support.

### **C. Meeting Procedures**

16. The STEAF could meet annually for a period of five consecutive days. This meeting could take place prior to the subsequent MXP, allowing its output to be considered first by BTWC experts.

17. The STEAF could meet in Geneva or, in order to facilitate participation of experts from all regions, the meeting could take place in varying countries rotating among the regional groups. At the end of each annual meeting the regional group responsible to organize the next meeting could announce the subsequent location. As an alternative, countries could host the STEAF meeting on a voluntary basis.

18. In the interest of providing an overview of recent trends in science and technology, the experts will agree on their own work program, based on guiding principles agreed by BTWC States Parties during the 9<sup>th</sup> Review Conference. Furthermore, BTWC States Parties could refer specific questions on current scientific or technological topics to the STEAF.

### **D. Reporting**

19. To allow the output from the STEAF to inform BTWC States Parties, the STEAF should produce comprehensive reports of each meeting including concrete recommendations and a description of the work of STEAF recording both, agreements as well as differences of opinions among experts on the issues considered.

20. Ahead of each MSP or Review Conference, the chair will forward these STEAF reports to the BTWC States Parties via the MXP for further consideration. The BTWC States Parties shall consider these reports for possible further action.

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<sup>5</sup> See also "The Biological and Toxin Weapons Convention Considerations for a science advisory mechanism", 2016, The InterAcademy Partnership.

## **E. Remuneration, Funding**

21. The STEAF members should not be remunerated for their participation; however, reasonable expenses such as travel expenses incurred by attendance at the annual meeting should be compensated.

22. Operating expenses could be covered by the regular budget which then had to be increased in accordance with the United Nations assessment scale. Unless the BTWC States Parties agree to cover all costs by assessed contributions, a dedicated voluntary fund should be established to cover operating expenses of the STEAF.

23. Costs resulting from participation at the STEAF meeting should be borne by those countries nominating experts. In this case, a sponsorship for experts from countries that are not able to finance participation would be needed.

24. To limit the costs, English would be the working language at meetings, but all reports will be translated into all official UN languages.

## **III. Way forward**

25. Proposals on this subject should be discussed at the MXP this year with a view to find common grounds for the establishment and for the scientific and technological scope of the STEAF. Furthermore, the ISU should be asked to present a summary on possible financial implications or costs serving as a sound basis for further discussions on establishing a STEAF.

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