

**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**

26 November 2021

English only

2020 Meeting

Geneva, 22-25 November 2021

Item 6 of the agenda

**Consideration of the factual reports of the Meetings of Experts
reflecting their deliberations, including possible outcomes**

**Concept note and chart produced by the Chairperson of the
2020 Meeting of Experts on Review of Developments in the
Field of Science and Technology Related to the Convention**

Submitted by Japan

1. An informal consultation was held by the Chair of MX2 19-20 August 2021. This informal consultation was open to all States Parties to attend and followed the traditional MX2 Agenda in order to facilitate discussions on any MX2 topic as so desired. During this event, the attached document was circulated to participants, a chart outlining elements from States Parties' ideas and positions relating to the topic of a science and technology (S&T) review mechanism. The attached chart identifies the existing, broad areas of convergence and divergence on this topic, using only language from official working papers submitted from 2015-2021 and from MX2-related events hosted by the Chair in 2021.

2. This chart was discussed at the informal consultation and the following points were commonly referred to in the discussions:

(a) There is an agreed need for a continuous review of scientific and technological developments of relevance to the Convention.

(b) There is substantial and wide-spread support expressed by States Parties on the need to establish some form of an S&T review mechanism within the BWC framework.

(c) Many States Parties are also of the view that the Ninth Review Conference should pursue agreement on the need for an S&T review mechanism.

(d) Many States Parties noted that the establishment of an S&T review mechanism would benefit all States Parties and also have the strong potential to improve the implementation of all Articles of the Convention.

(e) Many States Parties believe that when working towards substantive progress regarding an S&T review mechanism, States Parties should prioritize the following key elements to form the core principles of any mechanism: objectives/mandate, outputs, participation/composition, and independence. Some States Parties believe that the issue of resources should also be included in this list of priority areas. It was also noted by several States Parties that the elements are all interconnected to a degree.

3. Objectives/mandate: the following aspects are often referred to as the main issues to be considered:

(a) The overall purpose, what do States Parties want from a mechanism and what form should this take (i.e. a forum, committee, group(s) of experts);



(b) The issues of focus, what kinds of questions would the mechanism seek to answer;

(c) The method of determining priorities and questions to be addressed.

4. Outputs: there are several potential and not necessarily mutually exclusive options often referred to:

(a) Reports that plainly reflect the activities and discussions of the mechanism;

(b) Recommendations of some kind that would be submitted to States Parties (this was very commonly referred to as a valuable possible output of a mechanism).

5. Participation/composition: this is commonly referred to as an area particularly in need of work by States Parties. The following broad categories have been referred to that encompass the several potential and not necessarily mutually exclusive options:

(a) Open-ended approach that enables participation from all States Parties;

(b) Limited participation approach that focuses on enabling practicality/manageability;

(c) Hybrid approach containing elements of both above options (in principle, many States Parties supported the idea of finding some kind of hybrid approach in order to balance the important principles of inclusivity and practicality).

6. Independence: this is widely and commonly supported by States Parties to be a critical element of any review mechanism, what needs to be considered in relation to this is:

(a) How to ensure independence through several elements of a mechanism.

(b) Many States Parties stressed that since the previous MX2 in 2019, there has been much evolution on substantive ideas, positions and proposals regarding this topic, especially on some of the most difficult issues including participation/composition. This development has been especially reflected in and come as a result of the research project conducted by UNIDIR and the cross-regional expert workshops hosted by the Federation of American Scientists (FAS). The outputs of these projects are potentially integral to converging views related to an S&T review mechanism and thus should be fed into the formal BWC process. Regarding this point, working papers have been submitted to the MX2 by the USA in collaboration with the FAS (BWC/MSP/2020/MX.2/WP.7) and by Germany (BWC/MSP/2020/MX.2/WP.5*).

Annex

Chair's Chart outlining ideas regarding Science and Technology Review Mechanism put forward by States Parties

<i>Category of element of an S&T review mechanism</i>	<i>Areas of broad convergence</i>	<i>Areas in need of further development</i>
1. Objective/Mandate a) Overall purpose b) Issues of focus c) Determining priorities and questions to be addressed	a) Overall purpose Must address both advantages/benefits and disadvantages/risks of S&T developments (DEU 2019; RUS 2021; CHE 2015 and 2016; IRN 2019; FIN, NOR, SWE 2016; ESP 2016; UK 2016)	a) Overall purpose Russian Federation 2021 - "The functions of the Committee include the following: (a) Assess and report to States Parties developments in scientific and technological fields relevant to the Convention: (b) Assess and report on any developments in scientific and technological fields relevant to the Convention upon request of States Parties; (c) Co-ordinate the efforts of the working groups temporarily established in accordance with paragraphs 9 and 10 of these terms of reference; (d) Make recommendations taking into account any new scientific and technological developments relevant to the Convention for the purpose of assisting States Parties in their review of the operation of the Convention pursuant to its article XII." UK 2016 - "A group of government experts... to review and assess S&T developments... identify and submit appropriate proposals to enhance the effective implementation". Iran 2016 - "A dedicated Session of Governmental Experts... [with] a linkage between the technical issues and policy considerations". Germany (co-sponsored by Sweden and the Netherlands) 2019 - A "Scientific and Technological Experts Advisory Forum (STEAF)" to review S&T developments and "as necessary... provide S&T advice" to States Parties "and weigh in on concrete S&T questions under discussion" within the BWC. Finland, Norway, Sweden 2016 - "A more structured scientific open-ended group... to develop concrete recommendations to the States Parties". USA 2016 - "An S&T review body should produce useful products... that directly support the review of the operation of the Convention..."

<i>Category of element of an S&T review mechanism</i>	<i>Areas of broad convergence</i>	<i>Areas in need of further development</i>
		<p>Australia, Japan, Netherlands, UK 2017 – “Invite experts from relevant international organizations... to participate in a future S&T review process and make recommendations to States Parties”</p> <p>Switzerland 2015 – “a dedicated structure, such as an open-ended working group, that provides for a more systematic examination of S&T developments and their bearings on the BCW”</p> <p>b) Issues of focus</p> <p>Russian Federation 2021 – “(i) new science and technology developments that have potential for uses contrary to the provisions of the Convention;</p> <p>(ii) new science and technology developments that have potential benefits for the Convention, including those of special relevance to disease surveillance, diagnosis and mitigation;</p> <p>(iii) possible measures for strengthening national biological risk management, as appropriate, in research and development involving new science and technology developments of relevance to the Convention;</p> <p>(iv) voluntary codes of conduct and other measures to encourage responsible conduct by scientists, academia and industry;</p> <p>(v) education and awareness-raising about risks and benefits of life sciences and biotechnology;</p> <p>(vi) science- and technology-related developments relevant to the activities of multilateral organizations such as the WHO, OIE, FAO, IPPC and OPCW;</p> <p>(vii) any other science and technology developments of relevance to the Convention.”</p> <p>Finland, Norway, Sweden 2016 - “continuously evaluating the developments... and addressing specific topics”</p> <p>Australia, Japan, Netherlands, UK 2017 – “how better prevent the spread of biological agents and toxins, deal with dual-use issues (both knowledge and technologies) and response effectively to sudden outbreaks posing public health emergencies”</p> <p>Switzerland 2015 – “Could review advances in identified scientific fields or disciplines...alternatively, it could be tasked with focusing on specific implications...</p> <p>UK 2016 – “Review and assess S&T developments and how they may impact on the operation of the Convention”.</p> <p>c) Determining priorities and questions to be addressed</p>

2. Outputs
a) Possible types of outputs
b) Consideration of outputs

b) Consideration of outputs
All outputs, including any possible recommendation by the mechanism to be reviewed/considered by States Parties (CHE 2015; UK 2016; RUS 2021; FIN,

a) Possible types of outputs
i) Technical/Annual/Factual reports

UK 2016 - "Technical reports on its meetings, and on relevant topics of its choosing... to provide a more robust and comprehensive technical basis to inform deliberations of other meetings in the intersessional period".

Russian Federation 2021 - "The Committee provides to States Parties an annual report of its activities including an account of its contributions during the year. The report includes the reports of the temporary

Germany 2021 - "The mandate should not be too focused and narrow, in establishing such a body BTWC members should agree only on a kind of framework document outlining the scope and the tasks. This could then be elaborated further in the years to come, we don't need the perfect solution at the beginning".

Germany (co-sponsored by Sweden and the Netherlands) 2019 - The experts to "agree on their own work program, based on guiding principles agreed by" Review Conference, in addition, "States Parties could refer specific questions on current S&T topics to the STEAF".

UK 2016 - "The group will respond to tasking from the annual Meeting of States Parties when advice or assessments are required on any specific topic... the Group will set its own agenda and invite relevant subject matter experts".

Iran 2016 - "The agenda and program of work" to be decided by either Meeting of States Parties or Review Conference.

USA 2016 - "...could provide increased capacity for States Parties by offering broader technical expertise... and by answering specific technical questions posed to it... body should be nimble and able to address a wide range of issues. It could, for example, produce work products decided annually by States Parties."

Switzerland 2015 - "Mandate 'States Parties could decide at the preceding review conference or Meeting of States Parties; technical experts involved in the process could propose or agree upon what to review; the ISU could help shape the work... or some hybrid form could be considered, for example where the board areas of focus are identified by States Parties but the details are filled in by the experts"

Russian Federation 2021 - "A provisional agenda for each meeting of the Committee is prepared by its Chair. The Committee adopts an agenda for each of its meetings on the basis of the provisional agenda submitted by the Chair. The provisional agenda may be revised, as necessary, by deferring, deleting or amending items on the agenda. The States Parties may include in the agenda of the Committee any item related to its terms of reference".

Category of element of an S&T review mechanism	Areas of broad convergence	Areas in need of further development
NOR, SWE 2016; USA 2016; IRN 2016)	<p>working groups covering the same period. All such reports are adopted by consensus. The conclusions and recommendations are developed through a consensus process. If consensus on the conclusions and recommendations cannot be achieved, the report reflects any minority view(s), as appropriate.”</p> <p>USA 2016 - “Useful products written in plain language... that directly support the review of the operation of the Convention... for example... work products decided annually by States Parties.”</p> <p>Switzerland 2015 - Options of “regular” reports that either “capture the views of experts... [or] could be purely factual focusing on consensus evidence... will need to include scientific findings where consensus exists”.</p> <p>Germany (co-sponsored by Sweden and the Netherlands) 2019 - “Comprehensive reports of each meeting including concrete recommendations and a description of the work of the STEAF recording both, agreements as well as differences of opinion among experts...ahead of each Meeting of States Parties or Review Conference, the chair will forward these STEAF reports to the BTWC States Parties [to] consider these report for possible further action”.</p> <p>ii) Recommendations</p> <p>Russian Federation 2021 – “Make recommendations taking into account any new scientific and technological developments relevant to the Convention for the purpose of assisting States Parties in their review of the operation of the Convention pursuant to its article XII”.</p> <p>UK 2016 – “appropriate proposals to enhance the effective implementation... where agreed by consensus, to the annual Meeting of States Parties”.</p> <p>Germany (co-sponsored by Sweden and the Netherlands) 2019 - “Comprehensive reports of each meeting including concrete recommendations and a description of the work of the STEAF recording both, agreements as well as differences of opinion among experts...ahead of each Meeting of States Parties or Review Conference, the chair will forward these STEAF reports to the BTWC States Parties [to] consider these report for possible further action”.</p> <p>Finland, Norway, Sweden 2016 - “Concrete recommendations to the States Parties”.</p> <p>Iran 2016 - “Factual reports... dedicated each year on certain focused areas decided in advance by the States Parties based on their needs... to the annual MSP. This might then be formulated into policy recommendations by the States Parties and submitted to the next Review Conference for its consideration.”.</p> <p>Switzerland 2015 – “might make recommendations based on technical discussions... Meeting of States Parties might consider the report”.</p>	

<i>Category of element of an S&T review mechanism</i>	<i>Areas of broad convergence</i>	<i>Areas in need of further development</i>
		Australia, Japan, Netherlands, UK 2017 – “make recommendations to States Parties”.
3. Participation /Composition a) Broad types of model b) Participant selection/rotation	b) Participant selection/rotation The need for diverse geographical representation (FIN, NOR, SWE 2016; UK 2019; CHE 2015; RUS 2021; DEU 2019; USA 2016) Members of mechanism to serve five-year terms (DEU 2019; RUS 2021)	a) Broad types of model i) Open model Finland, Norway, Sweden 2016 - “More structured scientific open-ended group”. Iran 2016 - “open to all States Parties... each delegation might be composed of both technical and political experts”. USA 2016 – “States Parties could nominate technical experts... It could also be possible to invite cutting-edge specialists from academia or industry when necessary... and too narrow a focus could limit the capacity of an S&T body... should be... representative of all States Parties”. UK 2016 – “access to a wide range of expertise... and be open to all States Parties experts wishing to participate”. ii) Closed model Germany (co-sponsored by Sweden and the Netherlands) 2019 - STEAF consisting of 21 members and a “broad roster of international experts... managed by the ISU listing up to 20 experts from each regional group on which to call for specific expertise”. Russian Federation 2021 – “The Committee consists of [20] members ...” iii) Hybrid model Switzerland 2015 - Core working group within the wider group that would call for case-by-case-basis contributions of expertise from outside the group when needed. Germany 2021 - “The STEAF would need to be sufficiently dynamic to adapt to changing circumstances... the composition should be flexible... broad roster of experts managed by the ISU listing experts from each regional group on which to call for specific expertise if needed. In cases where a particular expertise is required which cannot be provided by its members, the body could draw upon ad-hoc external expertise from such lists or other pertinent sources... we will have to work in the direction of a more open-ended of hybrid model... and such a roster idea could have its place in there”. Switzerland 2016 - Table of options compiled using mechanism proposals from various States Parties:

Options for group composition

<i>Option 1</i>	<i>Option 2</i>	<i>Option 3</i>	<i>Option 4</i>	<i>Option 5</i>
Open to all States Parties that nominate scientific experts	Open to all States Parties that nominate max. 1 - 2 (to be determined) scientific experts	Half (to be determined) of the States Parties of each regional group (participating states to be decided by consensus in each regional group) nominate 1 scientific expert each	Open to all States Parties that nominate max. 1 - 2 (to be determined) scientific experts allocated to a certain number of sub-working groups focusing on specific topics (to be determined)	20 - 25 (to be determined) scientific experts appointed by the regional groups (to be decided by consensus in each regional group / ratio between the regional groups to be determined)
Capacity to invite outside expertise				
Hybrid model based on a combination of different options				

b) Participant selection/rotation

Russian Federation 2021 – “The Committee consists of [20] members appointed by the three regional groups of States Parties to the Convention: Group of the Non-Aligned Movement and Other States, Western Group, and Eastern European Group... States Parties may establish temporary working groups of scientific experts to provide recommendations on specific scientific and technological issues relevant to the Convention. Additionally, if the Committee deems it advisable, its Chair may propose to States Parties to establish such temporary working groups. Each working group shall be chaired by a member of the Committee appointed for that purpose by its Chair with other members concurring. Chair of the Committee shall appoint members of temporary working groups from experts proposed by States Parties and/or suggested by members of the Committee”.

Germany (co-sponsored by Sweden and the Netherlands) 2019 – “Each regional group should nominate seven members for appointment... at each Review Conference”.

Iran 2016 - “Open to all States Parties... each delegation might be composed of both technical and political experts”.

<i>Category of element of an S&T review mechanism</i>	<i>Areas of broad convergence</i>	<i>Areas in need of further development</i>
		<p>USA 2016 - “States Parties could nominate [1-2] technical experts... each year to provide specific expertise for the upcoming year’s work plan... It could also be possible to invite cutting-edge specialists from academia or industry when necessary... The Chair, with the assistance of the ISU, could ensure that those appointed have relevant technical credential”.</p> <p>Finland, Norway, Sweden 2016 - “States Parties to nominate national experts possessing know-how on specific topics”.</p> <p>Australia, Japan, Netherlands, UK 2017 - “Invite experts from relevant international organizations such as WHO, OIE and FAO”.</p> <p>Spain 2016 - “Technical experts... nominated by States Parties according to the expertise needed... The Chairman could eventually invite specialists if so required by a particular issue. Likewise, specialized working groups may be organized if need be”.</p> <p>Switzerland 2015 – States Parties could develop rotation between regional groups to arrange nomination of experts.</p>
<p>4. Independence</p> <p>a) The need for a mechanism to be independent/technical in nature</p> <p>b) How to achieve independence</p>	<p>a) The need for a mechanism to be independent/technical in nature (CHE 2015, 2016; DEU 2019; FIN, NOR, SWE 2016; RUS 2021; ESP 2016; USA 2016; AUS, JPN, NDL, UK 2017; UK 2016)</p>	<p>b) How to achieve independence - question of how to achieve independence through the objectives/mandate, participation/composition and methodologies of activities of a possible review mechanism</p>
<p>5. Leadership</p> <p>a) The need for dedicated leadership</p> <p>b) Appointment of leadership</p>	<p>a) The need for dedicated leadership Chair position needed (RUS 2021; DEU 2019; UK 2016; USA 2016; ESP 2016; CHE 2015)</p>	<p>b) Appointment of leadership</p> <p>Russian Federation 2021 - “The Committee appoints by consensus on annual basis a Chair and a Vice-Chair from among its members”</p> <p>Germany (co-sponsored by Sweden and the Netherlands) 2019 - “Chair... [to be] an expert from within the forum’s membership, elected annually by the forum, rotating between regional groups”</p> <p>UK 2016 - “The group will be Chaired by a scientific expert nominated and agreed by the States Parties”</p>

<i>Category of element of an S&T review mechanism</i>	<i>Areas of broad convergence</i>	<i>Areas in need of further development</i>
		Switzerland 2015 - “a facilitator, or Friend of the ...might be elected by States Parties for the entire duration of the next intersessional period or for a shorter duration, perhaps a single year... alternatively... could have its own Chair, perhaps chosen from amongst the experts using some form of consensus mechanism or election...hybrid model could be considered” and States Parties could develop rotation between regional groups to arrange nomination of leadership.
6. Methodology of activities a) Meetings b) Consensus	<p>a) Meetings</p> <p>To take place at least annually (DEU 2019; RUS 2021; UK 2016; USA 2016), before the MXs (DEU 2019; UK 2016)</p> <p>To consist of one week (DEU 2019; RUS 2021; UK 2016)</p> <p>b) Consensus</p> <p>Reporting on both areas of consensus and divergence of members (RUS 2021; DEU 2019)</p>	<p>a) Meetings</p> <p>- question of more logistical considerations</p>
7. Institutional support a) Need for institutional support b) Type of institutional support	<p>a) Need for institutional support</p> <p>The need for strong institutional support and the possibility for the ISU to provide this (USA 2016; UK 2016; ESP 2016; CHE 2015; FIN, NOR, SWE 2016; RUS 2021)</p> <p>b) Type of institutional support</p>	<p>b) Type of institutional support</p> <p>- question of this being a full time/part time role</p> <p>- question of this being an administrative/substantive role</p> <p>- question of this being a UN ‘political officer’ or ‘scientific officer’ (UK 2016 – “A scientific officer to be based in the ISU”)</p>

Category of element of an S&T review mechanism	Areas of broad convergence	Areas in need of further development								
	Establish a specific role within the ISU (USA 2016; UK 2016; ESP 2016)									
8. Funding		<p>Russian Federation 2021 - “Authorizes the Implementation Support Unit (ISU) to set up and administer a trust fund for voluntary contributions received to assist the Committee in its activities; Decides to add one full time staff member to the ISU, funded by States Parties”</p> <p>Germany (co-sponsored by Sweden and the Netherlands) 2019 - “Operating expenses could be covered by the regular budget which then has to be increased in accordance with the UN 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... costs resulting from participation at the STEAF meeting should be borne by those countries nominated experts.”</p> <p>USA 2016 – “While additional costs will be incurred, they should be kept as low as possible by using, for example, free meeting space for one annual in-person meeting and email... and teleconferences for the body’s communications throughout the year.”</p> <p>Switzerland 2016 - Table of options compiled using mechanism proposals from various States Parties</p> <p>Options for funding of participation</p> <table><tr><th>Option 1</th><th>Option 2</th><th>Option 3</th><th>Option 4</th></tr><tr><td>States Parties fund the experts they nominate</td><td>A voluntary trust fund is established to sponsor the participation of experts from developing countries</td><td>An official sponsorship programme is established based on assessed contributions to fund the participation of experts from developing countries</td><td>Participation of all experts is financed by assessed contributions NB: This option probably only applies in the case of a limited group size</td></tr></table> <p>Hybrid model based on a combination of different options</p>	Option 1	Option 2	Option 3	Option 4	States Parties fund the experts they nominate	A voluntary trust fund is established to sponsor the participation of experts from developing countries	An official sponsorship programme is established based on assessed contributions to fund the participation of experts from developing countries	Participation of all experts is financed by assessed contributions NB: This option probably only applies in the case of a limited group size
Option 1	Option 2	Option 3	Option 4							
States Parties fund the experts they nominate	A voluntary trust fund is established to sponsor the participation of experts from developing countries	An official sponsorship programme is established based on assessed contributions to fund the participation of experts from developing countries	Participation of all experts is financed by assessed contributions NB: This option probably only applies in the case of a limited group size							

<i>Category of element of an S&T review mechanism</i>	<i>Areas of broad convergence</i>	<i>Areas in need of further development</i>
---------------------------------------------------------------	-----------------------------------	---------------------------------------------

References

Germany 2019 (co-sponsored by Chile, Sweden and the Netherlands) – BWC/MSP/2019/MX.2/WP.1

Germany 2021 - Quotes by Mr Thomas Goebel, Head, Biological & Chemical Weapons Disarmament Unit, Germany MOFA speaking at MX2 Webinar, 29 June 2021, time stamp 41.32 minutes and 41.51 minutes

Russian Federation 2021 – Draft working paper to be submitted to MX2 titled ‘Strengthening the Biological Weapons Convention Proposal for the establishment of a Scientific Advisory Committee’

Australia, Japan, the Netherlands, United Kingdom 2017 – BWC/MSP/2017/WP.15

Iran 2019 – BWC/MSP/2019/MX.2/WP.5

United Kingdom 2016 – BWC/CONF.VIII/PC/WP.4

Finland, Norway, Sweden 2016 – BWC/CONF.VIII/PC/WP.7

Spain 2016 – BWC/CONF.VIII/PC/WP.27

Switzerland 2015 – BWC/MSP/2015/WP.10

Switzerland 2016 – BWC/CONF.VIII/PC/WP.16

United States of America 2016 – BWC/CONF.VIII/PC/WP.3
