



Friday 3rd September 2021

MX2 on scientific and technological developments: summary of proceedings

The second of the 2020 Meetings of Experts (MXs) to the 1972 Biological and Toxin Weapons Convention (BWC/BTWC) opened on Wednesday morning with Kazuhiro Nakai (Japan) in the Chair. The topic for this two-day meeting was 'Review of Developments in the Field of Science and Technology Related to the Convention'. Report 2 of this series provides some background to this MX. MX2 materials, including documents, presentations and statements are posted by the BWC Implementation Support Unit (ISU) to https://meetings.unoda.org/section/bwc-mx-2020-mx2/

As with MX1, many delegates viewed the meeting remotely through the public UN WebTV https://media.un.org/en/webtv/, either live or via the recordings. Some interventions were made remotely, either through a video link or by being pre-recorded.

During the second day a short collective statement by some non-governmental organizations was given on MX2 issues. As part of efforts to promote language diversity, this was presented in Arabic.

Before the meeting, the Chair circulated a concept note accompanying a chart he had prepared tabulating the various proposals for a mechanism or process for review of scientific and technological (S&T) developments. This chart had been prepared for informal consultations held by the Chair on 19-20 August and the concept note outlined points commonly referred to in the informal consultations.

In his opening comments, the Chair looked toward the Ninth Review Conference and emphasised the need for 'tangible and concrete outcomes' from the Review Conference 'to prove the BWC's relevance to the international community in the wake of the ongoing pandemic' and that there was therefore a need to move from exchange of views to convergence of positions.

Of the 12 available working hours during Wednesday and Thursday, a little under 9 were used for the substantive discussions with about half an hour used for opening formalities and adoption of the report. In terms of international diplomacy, this is very effective use of time.

Thematic discussion

As the formal reports of each MX lists the speakers under each agenda item, these will not be listed here. The themes chosen for reporting here are based on the agenda items of the meeting, but may include points relevant to a theme raised under another agenda item.

An enhanced process for S&T review – This was one part of an agenda item but which had so many papers submitted that the Chair decided to collect these together for a thematic discussion. Russia, speaking to WP.4, noted this paper is an update to its 2015 proposal for a Scientific Advisory Committee. Germany spoke to WP.5 with a technical presentation by UNIDIR which explored the implications of various policy options – a panel selected in some way in order to create a board or committee; an open-ended structure involving experts from all states parties willing to participate; and a hybrid of the two. The USA spoke to its paper [WP.7] which includes as an annex the report of a series of seminars organized by the Federation of American Scientists (FAS) with US Government funding. Jenifer Mackby of the FAS, as a Guest of the Meeting (GoM),

presented understandings generated from the seminars. Switzerland introduced parts of WP.10 noting that what had previously seemed to be a binary choice between two models of advisory process was now transforming into a search for a balance between inclusiveness and manageability in a hybrid arrangement. Iran [WP.11] suggested that S&T review has become more extensive since the start of the current inter-sessional work programme and the creation of MX2. In a sign of the how adoption of an S&T review process might be part of a package of measures at the Review Conference, Iran made specific reference to the possible parallel adoption of a cooperation committee. There was a long discussion on these papers, with many interventions in support of an enhanced S&T review although some divergence of views expressed in relation to procedural or organizational aspects. A few common criteria emerged within expressions of support, including: independence; transparency; a focus on technical rather than political issues; balanced geographical representation; gender balance; and a spread of participating disciplines. The possibilities of a hybrid model as outlined in the UNIDIR research and expanded upon in the FAS seminars received support in a number of interventions. A number of interventions stressed that S&T review was relevant to all operational aspects of the Convention.

S&T developments, identification of benefits and risks – The USA introduced its paper [WP.9] which describes how some recent advances in the life sciences proved beneficial in countering COVID-19. Cuba introduced WP.12 suggesting the advances in the life sciences illustrate the need for a legally binding instrument to enhance all aspects of the Convention. There were technical presentations from France and India on gene drives for mosquito eradication and on technology convergences, respectively.

Biological risk assessment and management – The USA spoke to WP.1 on the concept of governance emphasising that assessing benefits needs as much attention as assessing risks. Belgium introduced WP.2 [co-sponsored by Austria, Chile, France, Germany, Iraq, Ireland, Netherlands, Spain and Thailand], on the ISO 35001 standard on 'Biorisk management for laboratories and other related organizations'. The UK [WP.3] outlined the need for guiding principles for biological risk assessment and management. A further US paper [WP.8] reports on a workshop of experts from G7 countries which discussed evidence-based and transparent laboratory biorisk management practices and how they could be advanced. Switzerland [WP.10] noted that biorisk management complemented codes of conduct. A GoM presentation from iGEM highlighted the competition's risk management activities. Technical presentations from the World Health Organization and the Netherlands Biosecurity Office explored questions of risk management. In discussion, concerns were raised about whether industry standards could disadvantage lower-resourced countries.

Voluntary model code of conduct – China and Pakistan, as co-authors, and Brazil, as co-sponsor, all spoke to WP.6 on the Tianjin Biosecurity Guidelines for Codes of Conduct for Scientists. Tianjin University, Johns Hopkins Center for Health Security and the InterAcademy Partnership, who had each been involved with development of the guidelines, addressed the MX as GoMs. There was a technical presentation from the WHO. It was noted how the Hague Ethical Guidelines in chemistry were an inspiration for these new guidelines. In discussion the voluntary nature of these codes was emphasised. Benefits of a global model which could be flexible and adaptable to national contexts were noted.

Activities of relevant multilateral organizations – The Organization for the Prohibition of Chemical Weapons (OPCW) gave a technical presentation on the work of its Scientific Advisory Board. One aspect covered was a Temporary Working Group on Biotoxins. Toxins, as poisonous chemical substances produced by living things, fall within the scope of both the BWC and the Chemical Weapons Convention.

This is the seventh in a series of reports for the Meetings of Experts for the BWC which are scheduled to be held from 30 August to 8 September 2021 in Geneva. These reports have been produced for all BWC meetings since the Sixth Review Conference in 2006 by the BioWeapons Prevention Project (BWPP). They are posted to http://www.bwpp.org/reports.html and http://www.cbw-events.org.uk/bwc-rep.html. An email subscription link is available on each page. The reports are prepared by Richard Guthrie, CBW Events, who is solely responsible for their content. He can be contacted via richard@cbw-events.org.uk.