

Wednesday 16th August 2023

## Working Group discussions on scientific and technological (S&T) developments

The Working Group (WG) on the strengthening of the 1972 Biological and Toxin Weapons Convention (BWC/BTWC) completed three days of discussion on Tuesday on ‘Measures on scientific and technological developments relevant to the Convention’. Although the topic was measures, much of the discussion was on the possible mechanism and on S&T areas of relevance to the BWC. As Wednesday is allocated for discussion of a possible mechanism to enhance implementation of the review of S&T developments, some of the points made specifically on issues around a mechanism will be held over to the following report.

To assist with discussions, Grisselle Rodríguez (Panama), Peter Ahabwe/Musa Kwehangana (Uganda), Vincent Bodson (Belgium) and Ljupčo Gjorgjinski (North Macedonia) have been appointed as facilitators/Friends of the Chair (FoCs) on these issues; the last of these was also a facilitator in this issue area during the Ninth Review Conference (2022). A working paper submitted by North Macedonia at the closing of the Review Conference (BWC/CONF.IX/WP.65) was cited by many delegations as a basis for future work on the possible mechanism. The FoCs produced a ‘food for thought’ paper which was circulated during Tuesday morning that drew from that working paper.

There have been a number of working papers submitted to this session of the Working Group that have highlighted S&T developments relevant to the BWC. The three referred to most often in plenary were WP.4 (US), WP.8 (UK) and WP.12 (Iran). Those focused on the possible mechanism will be cited in the next report. The official webpage for the Second Session can be found at <https://meetings.unoda.org/meeting/67451>. Official BWC documents are also available via <https://documents.un.org>.

There were long pauses during the plenary as there was more time available than requests for the floor and so some of the time was used to carry out further informal consultations. One NGO requested the floor and was allowed to speak at the end of the proceedings for the morning meeting on Monday. To save time later in the week, part of the time on Monday afternoon was used to further examine the draft procedural report.

### **Panel discussions and technical presentations**

Discussions on this topic were started on Friday morning with panel presentations. These were given by John Reeder, World Health Organization (WHO); Sarah Clapham, Organization for the Prohibition of Chemical Weapons (OPCW); Peter McGrath, The World Academy of Sciences (TWAS)/InterAcademy Partnership (IAP); and Madison Wimmers, World Organization for Animal Health (WOAH, formerly OIE). There was a technical presentation on Monday afternoon by Sayed Ashraf, International Atomic Energy Agency (IAEA). A panel on Tuesday morning consisted of Maricela Muñoz and Martin Müller, Geneva Science and Diplomacy Anticipator (GESDA); and Nicolas Seidler, Geneva Science-Policy Interface (GSPI). Each time there were opportunities for questions, much of which were taken up with how topics were selected for examination, how those giving advice were selected or appointed, and how advice processes were funded. These fed into discussions on the possible mechanism.

### **Substantive points**

As well as discussion around the panels and presentations, there were many statements and interventions by delegations from the floor over the three days. There was widespread recognition in the large amount of work on S&T issues that had been carried out previously, culminating in the work of the last Review Conference. Of the measures discussed that were not the possible mechanism, the most prominent was codes of conduct. There were many references to the Tianjin guidelines.

While much of the discussion related directly to the possible mechanism, the overarching principles of S&T advice were also discussed. There were many statements suggesting that any form of scientific advice needs to avoid politics. [Note: one of the challenges of science advice within governance processes has been the provision of advice that is appropriate to the policy context without being active within political discussions. Many of the challenging decisions within the BWC context are at the confluence of economic, legal and political issues as well as scientific or technical ones. It is rare for a decision to be exclusively on S&T grounds.] There were many references to the need for independence of advice, and for advice to be drawn from a diverse array of sources. It was also noted that there was a need for any policy processes receiving advice to be able to make use of the advice for practical action.

There were a number of overlaps or synergies identified with other aspects of BWC. The need for an understanding of the changing S&T context in order for national implementation measures to be kept up to date was recognized. This also applies to any multilateral arrangements that might be adopted in the future in relation to compliance and verification measures to strengthen the BWC. However, the aspect of the BWC that drew the most attention was that of interactions with the issues of international cooperation and assistance (ICA) – the topic of much of the first week of the Working Group. The need for any S&T arrangements under the BWC to examine benefits as well as risks was emphasised by many delegations. Just as in the first week, there were questions raised about where the BWC should find its ‘niche’ in relation to other international bodies that also have arrangements for coordinating or providing S&T advice. The practical overlap with the OPCW where there are toxins that fall within the definitions of what is controlled by the BWC and by the Chemical Weapons Convention (CWC) was noted.

### **Themes of S&T developments**

In understanding the issues of how to handle the dual-use nature of S&T developments in order to manage the risks while harnessing the benefits, a number of themes were referred to. This included new technological possibilities, but also a recognition that many formerly expensive activities can now be carried out at a fraction of the previous cost. This means that biological techniques are being adopted across more sectors of industry. It also makes some biological techniques available to people to carry out their own experiments. There were reminders that the BWC is concerned not only with weapons that could be used against humans, but also against animals and plants. This meant that S&T developments relevant to all of these need to be monitored.

Examples were cited in which advances in disciplines outside of the life sciences can change aspects of risks and benefits within the areas relevant to the BWC. The most often cited of these was that of artificial intelligence (AI). There were positive aspects noted in which AI tools could be used to find new and cheaper paths to developing novel therapeutic drugs with the negative aspects that these could also find new and cheaper paths to make pathogens (disease-causing micro-organisms) more infectious or more resistant to treatments. Another positive noted from AI was its potential contribution to other systems such as disease detection and surveillance where new tools for pattern recognition may identify signals of possible outbreaks earlier than is currently possible.

*These reports have been produced for all BWC meetings with NGO registration since the Sixth Review Conference (2006). They are available from <https://www.bwpp.org/reports.html> and <https://www.cbw-events.org.uk/bwc-rep.html>. A subscription link is available on each page. Financial support for reporting from the WG Second Session has been gratefully received from Global Affairs Canada. The reports are written by Richard Guthrie, CBW Events, who is solely responsible for their contents <[richard@cbw-events.org.uk](mailto:richard@cbw-events.org.uk)>.*