

Thursday 13th August 2015

## The third day: scientific and technological developments

The 2015 Meeting of Experts (MX) of the Biological and Toxin Weapons Convention (BWC/BTWC) continued on Wednesday on the topic of ‘Review of developments in the field of science and technology related to the Convention’ with a focus on ‘advances in production, dispersal and delivery technologies of biological agents and toxins’. A first draft of the procedural section of the Report of the Meeting was circulated in the afternoon. New working papers, including some relevant to Thursday’s topic, were either posted to the ISU website during Wednesday or were circulated in hard copy. As with Tuesday’s topic, time was allocated to the overall topic with additional time set aside for specific sub-topics with specific time had been allocated immediately after the lunch break for presentations by international bodies and Guests of the Meeting (GoMs). Like the Article X discussions, most delegations included their comments on the sub-topics within their general statements

The morning started with Russia exercising a right of reply to respond to suggestions made by Ukraine on Tuesday that its biosecurity circumstances had been affected by the loss of an anti-plague laboratory on Crimea and with loss of control of territory in the south-east of the country. Russia used its right of reply to outline the view of its government that the current government in Kiev was not legitimate. Ukraine requested a right of reply to the Russian reply, which prompted a further reply in return, and so on. These exchanges took up nearly half an hour at the beginning of the day, some further minutes at the end of the morning session and again at the end of the afternoon session. In discussions in the corridors, it was clear that many delegations, even those with sympathies with one side of this interaction or the other, felt these exchanges had gone on for too long. The right of reply mechanism states: ‘the reply shall be as brief as possible’ [Rule 19].

Once the working session formally started, general remarks on the topic were given by: Iran (for the non-aligned), Switzerland, India, Russia, China, USA, Cuba and Australia. Under the various sub-topics, the floor was taken by the UK and the Netherlands. [Where a delegation took the floor more than once, only the first time is noted in this list.] The international bodies and GoMs presenting after lunch were the Scientific Advisory Board of the Organization for the Prohibition of Chemical Weapons, the CDC Uganda Virus Research Institute, the Inter-Academy Panel, and the Georgia Institute of Technology.

### Overarching points

There was considerable overlap with other topics discussed within this MX. New developments in the life sciences can lead to cheaper and more readily available tools for diagnosis and treatment of diseases and this has implications for discussions on Article X. There are similar connections with Article VII. However, new understandings about the processes that sustain life that lead to these positive developments might also be used to intervene in those life processes to cause harm, either deliberately or inadvertently. Hence, S&T developments should influence how national implementation is carried out in order to

ensure that such implementation remains relevant to the challenges. This potential for new S&T developments to cause either good or harm was highlighted in a presentation by Switzerland on the CRISPR/Cas system that allows for new means of intervention in the processes in living cells ranging from bacteria to cells in the human body.

The rapid pace of developments means that just to list the areas of S&T developments raised in the MX would, of itself, fill the two pages of this daily report. References were made by delegations to working papers of this MX (for example, WP.5, 6, 8, 9, 11, 12 and 15).

With this year's meeting being the last in the current inter-sessional process, a number of delegations have started to consider whether there are ways to improve the review of S&T issues beyond the Eighth BWC Review Conference to be held in 2016. A number of introductory statements on Monday had indicated desires to improve S&T review arrangements. The creation of some form of science advisory board or the creation of a new form of inter-sessional working practice that would focus on S&T issues have been suggested. Switzerland spoke to its working paper (WP.11) on the subject. It would seem that delegations are open to exploring new arrangements in this area with the usual caveats such as resource implications. The integration of S&T developments into policy processes has historically been challenging whether those processes are national or multinational.

### **Selected sub-topic themes**

On *new developments of concern*, the issue of 'gain of function' research was most prominent, as in earlier years. On *new developments with potential benefits*, there were hopes that new developments would be able to lead to more treatments being made available in more locations for more people. The Georgia Tech presentation was on new micro-needle methods of delivery vaccines, which research indicates may overcome many problems of conventional vaccine delivery, including a much reduced need for refrigeration to keep the vaccine in a viable condition. On *strengthening national biological research risk management*, both the Netherlands and the USA highlighted key points of the development of their biosecurity systems that had been discussed at their lunchtime side event. On *codes of conduct*, some delegations reiterated that while the types of content codes might have could be discussed within BWC meetings, implementation of codes should be done on a national basis.

### **Side events**

There were three side events on Tuesday. A breakfast event was convened by the Federation of American Scientists (FAS) on 'Use of Microbial Forensics in Attribution Decision Making (The Science-Policy Interface)'. Presentations were given by Chris Bidwell (FAS) and Randall Murch (Virginia Tech).

Two lunchtime events were held in parallel. One, on 'National Measures to Address Dual Use Research', was convened by the USA and the Netherlands. Presentations were given by Ayse Aydin (Netherlands), Herawati Sudoyo (Indonesian Academy of Sciences), Zalini Yunus (Malaysia), Susan Collier-Monarez (USA). The event was chaired by Christopher Park (USA) with opening remarks given by Ambassador Henk Cor van der Kwast (Netherlands) and Ambassador Robert Wood (USA). The other, convened by the UN Institute for Disarmament Research (UNIDIR) and France, was on 'From the Geneva Protocol to the UNSG mechanism : Lessons Learned and Opportunities'. Presentations were given by Nikita Smidovich (UN Office for Disarmament Affairs), Nicolas Coussière (France), Anna-Lena Johansson (Sweden), and Cedric Invernizzi (Switzerland). Introductory remarks were given by Louis Riquet (France) and Kerstin Vignard (UNIDIR).

*This is the fourth report from the Meeting of Experts for the Biological and Toxin Weapons Convention which is being held from 10 to 14 August 2015 in Geneva.*

*The reports are prepared by Richard Guthrie on behalf of the BioWeapons Prevention Project (BWPP) and are available via the the BWPP website at <[www.bwpp.org](http://www.bwpp.org)>. The author can be contacted during the Meeting of Experts on +41 76 507 1026 or <[richard@cbw-events.org.uk](mailto:richard@cbw-events.org.uk)>.*