

Information Note¹

- Event:** *Bio-Chemical Security 2030 - towards improved science-based multilevel governance*
- Organizers:** University of Bath, UK
- Date and venue:** 30 September-01 October 2013, Bath, UK
- Participants:** *States:* UK (Defence Science and Technology Laboratory)
International organizations: 1540 Committee Group of Experts; United Nations Institute for Disarmament Research (UNIDIR)
Non-Governmental Organizations, Industry, Academia, and Other Entities: Aston University, UK; Darmstadt University of Technology, Germany; University of Bath, UK; University of Bradford, UK; University of Sussex, UK; US National Academies of Sciences

1. Meeting objectives

The meeting was the first in a series of meetings part of a project funded by the UK Economic and Social Research Council and the UK Defense Science and Technology Laboratory under the auspices of its Science and Security Programme which aims to focus research “*on how the risks to defence and security that emerge from future developments in S&T can better be assessed and addressed and the influence of cultural, historical, ethical, economic and societal factors on how S&T is developed and utilised in future to present opportunities and threats for defence and security*”. Under this program, the 18-month project on *Bio-Chemical Security 2030* aims to explore the governance of bio-chemical security, in particular the idea that it cannot rely exclusively on top down measures agreed upon at the international level but also complementary efforts by those at the forefront of research in biology, chemistry and associated sciences- whose perceptions of science and technology (S&T) and its implications for defense and security can be expected to vary from those in government or academic security studies.

2. Background

The growing importance of S&T has been reflected in assertions within the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC) Review Conferences about the crosscutting significance of S&T in achieving the conventions’ goals. In this context, there were calls for improved review processes by NGOs, academics as well as States Parties. The common themes in this regard, for both regimes, referred to the benefits of developing and sharing best practices among States on S&T; the need for and benefits of, the BWC and CWC engaging with the scientific community; practical procedural improvements within the regimes to ensure the development of useful and issue-focused information on S&T which contribute to agreements and action; the need for clearly defined political purposes of S&T review among contributors and policy shapers.

The project on *Bio-Chemical Security 2030* will contribute inter alia to the process of S&T review by producing a series of briefing papers to be distributed at the BWC and CWC meetings of States Parties, establishing a

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“bottom-up South-west [UK] science and security governance network (SSN)”, and maintaining a website (<http://biochemsec2030.org>) for outreach and sharing of information including through social networking tools such as blogs and mini-blogs (i.e. twitter).

3. **Highlights**

Participants in the first meeting of the *Bio-Chemical Security 2030* project reviewed the process of S&T review in the CBW non-proliferation regime (specifically BWC and CWC) and other international approaches (i.e. under OIE and OECD) and discussed how the international regimes may address S&T developments and trends more effectively in order to address potential gaps in international governance.

Participants agreed that monitoring S&T developments and trends is significant in the context of implementing resolution 1540 (2004) as the resolution complements and reinforces multilateral non-proliferation regimes and also calls upon all States to promote universal adoption and full implementation of multilateral non-proliferation treaties to which they are parties, and strengthen them if necessary. Moreover, developments in S&T may create challenges in States’ effective control over biological and chemical weapons related materials and means of delivery to prevent their illicit trafficking by non-State actors [as mandated by resolution 1540 (2004)] and terrorists and criminals may exploit gaps and vulnerabilities in order to acquire technological expertise and materials. The process of globalization, illustrated by the rapid dissemination and open-sharing of S&T research results (which may arguably be considered the drive for the unprecedented pace of growth of biotechnology industry in the past two decades), has also enabled terrorists and criminal groups to reach across international borders in the same way and often using the same means that S&T collaborations or commerce and business interests are linked.

The 1540 expert suggested that a comprehensive bio-chemical security framework should involve “hard” (legislative and regulatory measures such as those required by resolution 1540) as well as “soft” security measures (codes of conduct, building a CBRN security culture and responsible conduct of science) which should be complemented by continuous and sustainable societal vigilance.

The 1540 expert informed participants about the basic obligations of resolution 1540 (2004) and the intention expressed by the Security Council “to monitor closely” its implementation and discussed the recently adopted Security Council resolution 2118 (2013) by which the Security Council decided that “*Member States shall inform immediately the Security Council of any violation of resolution 1540 (2004), including acquisition by non-State actors of chemical weapons, their means of delivery and related materials in order to take necessary measures therefore*”. In this context, as the chair of the session on “*Tracking developments in techno-science*” she encouraged participants in addition to thinking about the role of S&T in enhancing the effectiveness of CBW non-proliferation regimes and establishing appropriate domestic controls over biological and chemical weapons related materials and means of delivery to prevent their illicit trafficking by non-State actors (in the context of resolution 1540) to also consider how S&T advances lead to innovative approaches to arms control, verification and compliance monitoring in order to address future needs of the CBW non-proliferation regime.

The 1540 expert also expressed the importance of ensuring sustainability of the project, as it provided a forum for useful discussion and information dissemination.

4. **Additional comments**

For further information, please contact the 1540 Committee’s Group of Experts by e-mail at 1540experts@un.org.