

8. Reducing security threats from chemical and biological materials

Overview

In 2012 states continued to develop strategies to prevent and remediate the effects of the possible misuse of toxic chemicals and of biological materials. Some of these activities are carried out in the context of environmental and human health, and others in the security and defence spheres. The principal legal instruments against chemical and biological warfare, the 1993 Chemical Weapons Convention (CWC) and the 1972 Biological and Toxin Weapons Convention (BTWC), inform the consideration of chemical and biological threats and responses. These include understanding of past programmes, allegations of the use of biological or chemical weapons, the nature of possible standby programmes, and efforts to ensure that science and technology are not misused as a method of warfare or for other hostile purposes.

In Syria, a government official responded to the numerous reports of suspected chemical weapon stockpiles (see section III in this chapter) by stating that the country possesses such weapons but would only use them against outside forces, not against its own people. Russia noted that, while Syria is not a party to the CWC, it is nevertheless obligated to refrain from using such weapons under the terms of the 1925 Geneva Protocol, to which it is a party. A number of states, including Israel, Jordan, Turkey, the United Kingdom and the United States, reportedly consulted on options to monitor and secure suspected chemical weapon sites in Syria in order to prevent use of these weapons or their falling into the possession of third parties. The United Nations Secretary-General and the Director-General of the Organisation for the Prohibition of Chemical Weapons (OPCW) conferred on the political and technical implications of the possible use of Syrian chemical weapons under their respective mandates.

The states parties to the BTWC met twice during 2012 in the first of a series of four intersessional meetings of experts and parties agreed by the 2011 Seventh Review Conference (see section I). The exercise consists of an exchange of views and information on capacity-building measures, on the implications of developments in science and technology for the regime, on effective national implementation of the convention's provisions, and on enhancing transparency and confidence among the parties. The Implementation Support Unit began implementing a database project to match

offers and requests for assistance and cooperation. In comparison to the CWC, however, the regime's institutional capacity remained limited.

Russia and the USA were unable to meet their final April 2012 deadlines for completing the destruction of their declared chemical weapon stockpiles (see section II). In Libya, the OPCW inspected the country's previously undeclared chemical weapons. Elsewhere, the destruction of old and abandoned chemical weapons, including those abandoned by Japan in China during World War II, continued. The states parties to the CWC also discussed the future nature and focus of the regime in the lead-up to the Third CWC Review Conference, to be held in April 2013. The verification of the destruction of chemical weapons nevertheless remained the primary operational focus of the regime.

During 2012 the security and life sciences communities debated the appropriateness of publishing research, completed in 2011, on the transmissibility of avian influenza among ferrets (see section IV). The underlying concern was that such research could be misapplied for hostile purposes, such as by changing avian influenza virus to a form suitable for aerosol transmission between humans. A specially convened World Health Organization (WHO) committee of two research groups—based in the Netherlands and the USA, respectively—also discussed the issue. The Netherlands considered imposing export controls on findings in the research methodology section of the Dutch-based group, but then abandoned the plan. The US National Science Advisory Board for Biosecurity (NSABB) reversed its previous opposition to publication, stating that the researchers had modified the draft findings in a manner that allowed it to support publication. Both papers were published in 2012.

The threats enumerated above will remain important considerations for maintaining international peace and security, and these concerns should be informed by their corresponding political, technical, historical and legal contexts. To do so will help to maintain and strengthen international peace and security. For example, it is important that all allegations of biological or chemical weapon use are authoritatively addressed (e.g. through the UN Secretary-General's authority to investigate alleged use or the OPCW's mandate to investigate CWC violations through on-site inspections). The parties to the BTWC could also attempt to understand better how some advances in science and technology affect the convention. Finally, the parties to both regimes should be alert to paradigm shifts that could require corresponding changes in how the provisions of both are understood, interpreted and implemented.

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