

PSGICC-4: Strengthening the Biological Weapons Convention

Geneva, 2-3 December 1995

Rapporteurs' Summary by Matthew Meselson and Julian Perry Robinson

This was the second of the current CBW workshop series to be hosted by the Swiss Pugwash Group. The Graduate Institute of International Studies, University of Geneva, was the venue, many participants staying across the ever-more-dangerous road at the Hotel Mon Repos. [Participating](#) by invitation were 52 people from 20 countries (Australia, Brazil, Canada, Ethiopia, Finland, France, Germany, Hungary, Iran, Israel, Italy, the Netherlands, New Zealand, Nigeria, Norway, Russia, Sweden, Switzerland, the UK and the USA), all of them doing so in their private capacities. The present record is the responsibility solely of its two authors, who were asked by the meeting to prepare a joint report. It draws extensively from a summing-up presented by one participant, Dr Graham Pearson, during the final session, but it does not necessarily reflect a consensus of the workshop as a whole, or of the Study Group.

In its choice of topic, timing and location for the workshop, the Study Group had sought to assist the work of the Ad Hoc Group of BWC States Parties which, for its third session, had reconvened in Geneva on 27 November to continue its task of, in effect, negotiating on how to strengthen the BWC. The workshop took place during the weekend separating the two weeks that comprised its new session. A number of the workshop participants were in fact members of their national delegations, some saying at the close of the workshop that they had appreciated it for the opportunity it had given them to explore with greater freedom positions and considerations that had found expression during the formal meetings of the Ad Hoc Group. Other participants welcomed the chance of learning more about the issues currently exercising the Ad Hoc Group, and thus of perhaps being able to contribute to their resolution.

The workshop began with an authoritative report on the work of the Ad Hoc Group. This had now met for a total of three weeks since its establishment by the 1994 BWC Special Conference to build on the work of VEREX (VEREX being the ad hoc group of governmental experts that had been mandated by the Third BWC Review Conference in 1991 to identify and examine potential verification measures from a scientific and technical standpoint, and which had reported to the Special Conference). The mandate of the Ad Hoc Group requires it to consider the possible content of a "legally binding instrument" for strengthening the BWC, to which end it has organized its efforts under the four different headings which the workshop also used for its agenda. The workshop learnt that a skeleton of possible content was taking shape nicely in regard to "measures to promote compliance", but that in the other three areas -- "definitions of terms and objective criteria", "confidence-building and transparency measures" and "measures related to Article X" -- progress thus far was more modest. A total of only 4-6 weeks of further work would be possible before the Fourth BWC Review Conference, set for 25 November - 13 December 1996. No doubt much would be achieved on the technical side during those weeks, but on the political side progress was less predictable. How much priority will the work receive in its competition with other items on the international agenda? Last year the NPT had been dominant; next year, perhaps the CTBT will be. And what will be the influence of whatever rate of progress towards entry into force comes to be displayed by the CWC? Realistically speaking, it did not look as though a draft Legally Binding Instrument could in fact be prepared and agreed by the Ad Hoc Group in time for the Fourth BWC Review. The Review Conference would thus most probably serve two main functions: gingering the drafting along, and deciding what to do in the meanwhile about the existing BWC confidence-building and transparency measures. On those measures, the workshop was informed that 51 states parties had made returns during 1995, increasing by 11 to 71 the total number of respondent states over the years since 1987 when the system of voluntary CBMs had been instituted. The take-up rate (only just over half of BWC states parties) still remained disappointingly low, in the opinion of all the participants that spoke on the subject.

The workshop then moved into an extended discussion of the true nature of the problem presented today by biological weapons and by the various opportunities for promoting the constraints on biological warfare. This discussion was facilitated by two contrasting initial presentations, one on what UNSCOM had been learning about the biological weapons programme of Iraq, the other on the history of the German programme prior to the end of World War II.

As to the work of UNSCOM, the workshop gathered that a full picture of Iraq's BW weaponization efforts had still to be completed, though the amount of detail available had now hugely increased. A curious aircraft drop-tank designated OM-2 found by UNSCOM at Muthanna in 1992 had looked as though it might have been an

experimental BW munition. The aircraft bomb which Iraq had declared in August 1995 as having been available with anthrax and botulin fills, the R-400, was in fact a chemical munition of 400-pound rating and thus not obviously well suited to the effective dissemination of biological payloads. So, while it was not to be doubted that Iraq had had a most active biological agent weaponization programme, it was not yet clear that the programme had produced any weapons actually capable of establishing viable biological-agent aerosols over large areas of ground. Current media portrayals were, however, suggesting that the programme had yielded horrifying new weapons of mass destruction. In this, some participants suggested, a parallel could be drawn with Allied perceptions of German biological weapons during World War II, perceptions which had done much to stimulate the British, Canadian and American BW programmes of the time. Allied intelligence, it now transpired, had been wildly wrong, the German programme in fact being small, disorganized and unproductive.

There was much in the UNSCOM experience which participants saw as relevant to the strengthening of the BWC. It had been the unexplained consumption of imported growth media which had encouraged UNSCOM to persist in its ultimately successful search for evidence, Iraqi denials notwithstanding, that a biological-weapons programme had existed. This line of inquiry had been triggered initially by UNSCOM inspectors coming upon drums of growth medium and by Iraq's declaration quite early on that it had purchased 26 tons of media, a quantity that seemed far greater than normal requirements (e.g. for diagnostic purposes in hospitals) and which Iraq was subsequently unable to explain to UNSCOM's satisfaction. It had been from one of Iraq's early declarations, too, that the existence of the biological production facility at Al-Hakam first became known to the outside world. This facility had not been among the many CBW sites bombed by Coalition forces during the Gulf War.

All of this, it was seen as the workshop proceeded deeper into its agenda, was testimony to the important role which declarations could play in a strengthened BWC regime, especially where their interaction with other measures was permissible, above all on-site inspection. The UNSCOM experience also showed how different measures could be combined during on-site inspection so as to achieve greater effectiveness: interviewing, visual observation, identification of key equipment, and auditing. Further, UNSCOM had shown that a regime comprising declarations and on-site inspections was capable of detecting aspects of behaviour or work activity that were inconsistent with the manner in which they had been described or explained by the inspected party. Thereby identified as suspicious, such aspects could then trigger the application and maintenance of political pressure until satisfactory explanations were forthcoming. UNSCOM had shown how such a regime could make cheating much more complicated for the cheater. Herein lay the possibility of deterrence of cheating as well as of resolution of compliance concerns. And if the regime was able to command sufficiently strong political pressure (as UNSCOM could), any united front which a cheating government might initially present might eventually be made to crumble. Clearly it made sense to see a strengthened BWC regime as resting on the same core measures as did the UNSCOM regime: declarations and on-site inspection.

As the workshop moved further into the matters now before the Ad Hoc Group, a number of other key points emerged, some of them under the stimulus of an authoritative presentation on the issue of smallpox virus and whether the known remaining stocks (now concentrated at locations in Russia and America) should or should not now be destroyed, an issue complicated by certain security considerations. The points were as follows:

BWC Organisation. Some sort of international organization must be established to oversee the strengthened BWC, but it will have to be a highly cost-effective body. To this end, it should utilize as far as possible and appropriate the skills and expertise of such existing international organizations as the (Provisional) Technical Secretariat of the OPCW, the WHO, the FAO, the OIE and the ICGEB. But any such collaboration, formal or informal, would have to pay the most careful regard to the aims and objectives of each of the collaborating parties so as to avoid damaging conflicts of interest.

Role of WHO. The workshop heard that the WHO has just established a new rapid-response unit to combat the growing worldwide threat of emerging diseases. While it was true that the ways in which outbreaks of disease are best investigated can have much in common with ways in which allegations of biological warfare might be investigated, the overlap between the two is not at all complete, especially as regards likely political factors. WHO has a clear role in investigating disease outbreaks. The future international organization for the BWC should be enabled to benefit from information gained by WHO in that or any other work. Most such information anyway becomes available eventually in the public domain.

Benefits for developing countries. A strengthened BWC regime will provide much greater assurance than can currently be expected by most developing countries that, should they ever appear to have fallen victim to BW attack, the international community will launch proper investigations, and take action to provide assistance. The prospect of such international action may act as a deterrent against BW attack. These are benefits from membership of the BWC which will grow in strength the more nearly global that membership becomes.

Article X. The measures for technological cooperation which BWC states parties can expect under Article X must now be developed and agreed multilaterally. Such measures have much potential as incentive for all states parties to adopt and implement the projected Legally Binding Instrument.

Sampling. Within a strengthened BWC regime, sampling and identification could become useful and appropriate tools in the hands of the organization's inspectorate. This, however, would be the case on some but not all occasions, and then only as one of a range of available tools. Biotech-industry concerns about sampling must be allayed. New ideas about the inactivation of samples have potential in this regard, and therefore merit careful consideration.

Confidence-Building Measures. The voluntary CBM system instituted in 1987 is not living up to many people's expectations. There are political realities which any attempt to improve the system must accommodate. Proposals for improvement must avoid hampering the development by the Ad Hoc Group of the Legally Binding Instrument.

Transparency. The logic underlying the existing system of voluntary CBMs is that the greater the transparency the harder will it be for potential violators to conceal activities characteristic of violation, and the easier, therefore, will it be to address compliance concerns. Once the strengthened BWC regime is in place, it will become much easier to institute effective transparency mechanisms.

Basic prohibition. The fundamental obligation upon states parties under the BWC is that they should never, in any circumstances, develop or produce microbes or toxins of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes. The full scope of this obligation must not be damaged or diminished by the projected Legally Binding Instrument.

Alleged use. Even though the BWC, as it currently stands, does not expressly prohibit use of biological weapons, the investigation of allegations of use is nevertheless a proper role for the international organization that is to oversee the strengthened BWC. There may be opportunities and benefits from the BWC organization utilizing some of the same sources of expertise that the World Health Organization draws upon for its own purposes. But that would have to be effected with great care lest one or the other organization is thereby harmed.

Core elements. The core elements of a strengthened BWC regime for which the projected Legally Binding Instrument must provide appear to be: (1) mandatory declarations, (2) short-notice on-site inspections, (3) investigations of alleged use, and (4) multilateral information sharing.

Brief discussion of what the Study Group might usefully do in the future took place during the final session of the workshop. Participants learnt that two further workshops were currently being planned. One was tentatively scheduled for 10-12 May 1996, focusing on the CWC, and would be hosted in Noordwijk by the Netherlands Pugwash Group. The second projected workshop, to be devoted primarily to the BWC implementation, would be held in Geneva either during the Ad Hoc Group meeting in July 1996 or, more probably, at the time of the subsequent Ad Hoc Group meeting in September 1996.

Participants

- Dr Hamid Bahidi-Nejad, Iran
- Ambassador Serguei Batsanov, Russia
- Dr Volker Beck, Germany
- Professor Bjorn P Berdal, Norway
- Mr Pieter van den Berg, The Netherlands
- Dr Ake Bovallius, Sweden
- Professor Francesco Calogero, Italy
- Dr Gilles Chappuis, France
- Dr Marie Chevrier, USA
- Professor Eric Claassen, The Netherlands
- Professor Malcolm Dando, UK
- Ms Chantal De Haas, The Netherlands
- Dr Annabelle Duncan, Australia
- Ms Treasa Dunworth, Ireland/New Zealand
- Dr Mark Fassler, Switzerland
- Dr David R Franz, USA
- Mr Peter Furlonger, Australia
- Dr M Henri Garrigue, France
- Professor Erhard Geissler, Germany

- Dr Oleg B Ignatiev, Russian Federation
- Dr Martin Kaplan, USA/Switzerland
- Professor Eduard Kellenberger, Switzerland
- Professor Alexander Keynan, Israel
- Ms Mitslal Kifleyesus, Ethiopia
- Mr Sergei Kisselev, Russian Federation
- Mr Thomas Kurzidem, Germany
- Mr Nicolas de Lacoste, France
- Dr James Le Duc, USA
- Dr Johan Lundin, Sweden
- Mr Donald A Mahley, USA
- Dr Brian W J Mahy, UK/USA
- Professor Jack Melling, UK
- Professor Matthew Meselson, USA
- Dr F.-X Meslin, Switzerland
- Dr Ali Akbar Mohammadi, Iran
- Dr Roque Monteleone-Neto, Brazil
- Dr Sola Ogunbanwo, Nigeria
- Dr Graham S Pearson, UK
- Dr Tony Phillips, UK
- Dr Marjatta Rautio, Finland
- Mr Julian Perry Robinson, UK
- Dr Barbara Hatch Rosenberg, USA
- Dr Martin Schutz, Switzerland
- Mr Shahrokh Shakerian, Iran
- Dr Thomas Stock, Germany
- Professor Ronald Sutherland, Canada
- Professor Alfred Tissieres, Switzerland
- Ambassador Tibor Toth, Hungary
- Mr Gordon Vachon, Canada
- Lt.Col. Risto Visakorpi, Finland
- Mr Alexander Vorobiev, Russian Federation
- Dr John Walker, UK

Working Papers

‘Incorporation of existing and enhanced Confidence Building Measures into a regime?’, by Volker Beck (Germany).

‘BW activities in Germany before and during World War II’, by Erhard Geissler (Germany).

‘The BW activity zigzag’ (chart and references), by Erhard Geissler (Germany).

‘Reducing some costs for verification of compliance with the Biological Weapons Convention (BWC)’, by Martin Kaplan (Switzerland/USA).

‘Discussion of the interpretation of the Purpose Criterion and Article X of the Biological Weapons Convention’, by Johan Lundin (Sweden).

‘Global destruction of a potential biological weapon, the smallpox virus’, by Brian W J Mahy (UK/USA).

‘Outline for an integrated approach to the problem of biological weapons’, by Matthew Meselson (USA) and Julian Perry Robinson (UK).

‘The Biological and Toxin Weapons Convention and the new emerging and re-emerging infectious diseases’, by Roque Monteleone-Neto (Brazil). ‘The Role of Declarations in a strengthened Biological and Toxin Weapons Convention (BTWC)’, by Graham S Pearson (UK).

‘Why biological warfare matters’, by Graham S Pearson (UK).

‘The feasibility and effectiveness of a system of measures to strengthen the Biological and Toxin Weapons Convention (BTWC)’, by Graham S Pearson (UK).

‘Possession of potential BW agent(s) as a trigger for declaration’, by Barbara Hatch Rosenberg (USA).

‘Sampling and analysis of proprietary microorganisms while protecting confidential proprietary information’, by Barbara Hatch Rosenberg (USA).

‘Openness: The goal of a compliance regime for the BWC’, by Barbara Hatch Rosenberg (USA).

‘Investigation of alleged use of release of biological weapons: Mechanism for initiation of an investigation’, by Barbara Hatch Rosenberg (USA).

‘A lean and mean BWC organization: Piggy-backing on what’s already there’, by Barbara Hatch Rosenberg (USA).

'The Biological Weapons Convention: Lessons from the Chemical Weapons Convention', by Thomas Stock (Germany/SIPRI) and Ronald Sutherland (Canada).