

# **2nd Workshop of the HSP Pugwash Study Group on the Implementation of the Chemical and Biological Weapons Conventions**

**27-29 May 1994, The Hague and Noordwijk, The Netherlands**

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This was the first CBW workshop to be hosted by the Dutch Pugwash Group. It conducted its opening session in the Van Kleffens Conference Centre of the Ministry of Foreign Affairs of the Kingdom of the Netherlands, moving to a seaside hotel at Noordwijk for its Saturday and Sunday sessions. A total of 44 people from 15 countries participated, all 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 does not necessarily reflect a consensus of the workshop as a whole, or of the Study Group.

The Study Group for this meeting reverted to a practice which its predecessor had followed until the mid-1980s, that of focusing its workshops on narrow but topical issues, and ensuring that the participation included high proportions of specialists on those issues. The primary topic of the present workshop was the controversial question of how the provisions of the Chemical Weapons Convention (the "CWC") regarding law enforcement and domestic riot control should be understood and implemented. Other topics were also taken up, but in a less concerted fashion. One was the question -- again a matter in which technical and political considerations are intertwined -- of possible convergence between the Biological and Chemical Weapons Convention regimes.

The Workshop began with welcoming addresses from Pugwash Nederland and by the Director General for Political Affairs of the Netherlands Foreign Ministry, who identified several varieties of intellectual contribution that the Pugwash Study Group could make to implementation of the CBW conventions, also observing that CBW disarmament was not exclusively a governmental affair. The President of Pugwash responded, and drew attention in his response to the possibilities which the Chemical Weapons Convention presented as a model for dealing with nuclear weapons. The workshop then advanced into its formal agenda, but was obliged to proceed in erratic order so as to accommodate participants unable to attend the entire workshop.

The detailed deliberations of the workshop began with presentations on technical, historical and scientific aspects of disabling chemical weapons -- the category sometimes called "incapacitating" or "non-lethal" chemical weapons. "Riot control agents" fall within the category, and in his opening address our Foreign Ministry host had properly drawn attention to the undesirability of divergent interpretations, and therefore the need for a common understanding, among CWC States Parties of their obligations regarding these chemicals, especially in view of their rather commonly perceived potential as a non-lethal substitute for killer chemical weapons.

The first of the initial presentations described how the chemical warfare of World War I had been initiated with lachrymatory and sternutatory irritant agents, these soon being augmented with deadlier chemicals, and how, after the war, police forces adapted those battlefield irritants for use as "tear gas" to control civil disorder. This carried forward an interaction of civil and military requirements for disabling chemicals which continues to this day. A key development was the emergence, in 1956, of a crowd-control agent of exceptional power, the irritant CS. The tactical possibilities of this police chemical came to attract military interest, an interest which then spread to the combat potential of disabling chemicals having a longer-lasting effect, such as the novel psychochemicals and paralytics which the commercial drug houses were now encountering. CS was employed massively during the Vietnam War. Although the particular applications to which it was put there were very different indeed from those of the civil forces that were by now using the chemical for police purposes, the initial use of CS in the Vietnam War was portrayed to the outside world as somehow analogous to riot control. More recently, CS (as well as mustard and nerve gases) has been used by the forces of Saddam Hussein on battlefields of the Iraq-Iran War. Nearly half of Iraq's loaded chemical munitions for which the UN Special Commission took over responsibility after the Gulf War were CS-filled mortar projectiles, typically of 120-mm calibre. And CS-filled 128-mm rockets have been used in the fighting in former Yugoslavia. As for the longer-acting disabling chemicals (such as the anticholinergic glycolate BZ), these have thus far failed, unlike CS, to find the battlefield applications for which they were developed; but work on them continues.

Possible future developments resulting from today's rapid advances of molecular pharmacology and molecular genetics were the topic of the second presentation, which pointed to an increasingly broad scope for workable chemical disabling-weapon concepts. The candidate immobilizing and other agents that are now emerging, such as certain congeners of fentanyl (an opioid causing 'zombieism'), are being referred to in at least one country as "advanced riot control agents".

Might these historical and technical considerations be taken to indicate the existence of a serious loophole in the Chemical Weapons Convention? This was a recurrent theme in the subsequent discussion. Because of peaceful uses of toxic chemicals which the Convention explicitly protected from constraint -- such as the industrial, agricultural, medical, law-enforcement and other purposes specified in Article II.9 as "purposes not prohibited under this Convention" -- the research which might uncover new disabling chemical weapons would undoubtedly continue. Loophole there might therefore be, but participants stressed the point that the Convention in fact had an in-built safeguard against it, namely the "general purpose criterion". This is the language in Article II.1 whereby all toxic chemicals and their precursors fall within the scope of the Convention, activities involving them becoming outlawed only if they are not for "purposes not prohibited". The key, participants recognised, was that States Parties should appreciate that the general purpose criterion did indeed apply to all toxic chemicals, without exception, and that there existed a common understanding of what permitted purposes such as "law enforcement" in fact were.

The Workshop then moved on to consider the role of independent scientific advice in the implementation of the CWC, receiving first a presentation on the Scientific Advisory Board required under Article VIII, an organ which France had originally proposed in 1989. The Preparatory Commission had not yet taken up the matter, and the key issues remained to be resolved. Should the Board be proactive or merely reactive in furnishing its scientific advice: should it have an early-warning function, or simply be set to work on particular topics as they arose? Should service on the Board be honorary, thereby protecting the independence of the advice, or should it instead be salaried, thereby perhaps promoting assiduity and relevance? Should service on the Board be full-time, thus ensuring dedication, or part-time, so as to enable connections to be maintained into the larger world of scientific inquiry? Should the period of service be short or long? What types of specialism should be sought in Board members? Several participants identified specific areas in which independent advice was or would be needed, such as chemical destruction, verification technology, and updating the schedules. Discussion of possible modalities was deferred until later in the Workshop.

Participants then repaired to Noordwijk where, during an informal evening session, a video was shown setting out evidence of combat use of CS artillery weapons and hand-grenades in Croatia. This material had been submitted to the workshop by an invitee prevented from attending by ill-health. The showing stimulated discussion of the military value or lack thereof of disabling chemicals in UN and other peacekeeping operations, a topic on which substantial first-hand experience was available around the conference table.

Formal sessions resumed with presentations on the present status of the two CBW treaties. The Chemical Weapons Convention now had 157 signatory states, of which seven had thus far completed their ratification formalities, the latest one to do so being Albania. The Preparatory Commission had agreed that the permanent staff for the international oversight body (the Technical Secretariat of the Organization for the Prohibition of Chemical Weapons) should total 450-500 people, substantially fewer than had once been envisaged. Rather more than half of the staff would have verification duties, with about half of those people serving in the inspectorate. There was discussion on the rate of progress towards satisfying the CWC's preconditions for entry into force. A common feeling among participants evidently was that 1995 remained the probable year of entry into force, though some saw a possibility of slippage into 1996. It was reported that the mood at the most recent meeting between chemical industry representatives and the relevant Preparatory Commission Expert Group had, in contrast to the first such meeting, been that things seemed to be going well. Industry concerns about implementation were now directed more at the projected National Authorities than at the international structures.

As to the Biological Weapons Convention, discussion focused on (a) what the September 1994 Special Conference of states parties might achieve in its consideration of the VEREX report on possible verification measures, and (b) possible connections between the work that thereby lay ahead and implementation of the Chemical Weapons Convention. This discussion had been set in motion by a presentation on the technical aspects of biological warfare with particular reference to the possible proliferation of biological weapons. There were also presentations on the 'Vaccines for Peace' programme and on possible areas of overlap between the emergent BWC and CWC control regimes. Participants saw the establishment of a worthwhile BWC verification regime as a laborious but not impossible task: the VEREX report had indicated real possibilities for developing compliance-monitoring and transparency-promoting arrangements that would both discourage and seriously complicate a violator's task of achieving rapid breakout from the restrictions of the treaty. Perhaps as much as a decade would be needed to complete the requisite negotiations if sessions of the intergovernmental expert groups which the Special Conference was likely to mandate for the purpose had to be fitted into the regular Geneva schedule. The problem remained that

far too few states parties, especially in the South, seemed ready to take an interest in the future of the treaty. Otherwise, the major complicating factor was the nervousness of some parts of the civil biotechnology industry about proprietary information leaking out through newly introduced inspection machinery. This co-existed with the problem of how to ensure that the large stand-by facilities for producing BW vaccines now being planned by some countries would neither be misperceived nor abused. The CWC could be regarded as having set a standard for the degree of intrusiveness which BWC states parties should be able to find acceptable in the negotiations ahead. Other possibilities for constructive BWC/CWC overlaps lay in data-base and other computerized information management systems such as the OPCW Preparatory Commission was now elaborating, and in inspectorate administrative structures.

The Workshop then returned to its main agenda item, receiving a presentation on the problems of verification arising from development and production of chemicals for law enforcement and riot control. As matters stood at present, a CWC state party might feel entirely free to weaponize any chemical not on Schedule 1 if it were intended for "law enforcement". Only if such a chemical were held for "riot control purposes" (as opposed to other forms of "law enforcement") would the state party be obliged to declare its chemical identity to the international body. That was the sum total of international control provided for such chemicals under the CWC, meaning that enlightened state practice, guided by the general purpose criterion, would be the only bulwark against abuse. Participants were thus again led to recognise the crucial importance of states parties not coming to adopt divergent understandings of the relevant provisions of the CWC.

The Workshop then received two linked legal presentations. The first introduced a proposal for the content of an interpretative statement which, if generally adopted, would ensure a uniform understanding of what exactly the CWC meant by "purposes not prohibited" in regard to "law enforcement". The second presentation provided an explanation of the niceties of the proposed interpretative statement, identifying aspects that might be considered controversial by other professionals in the field. The Workshop participation included several such people, both military and legal, and they duly rose to the challenge. The point was generally accepted that the place for proposing an interpretative statement of such a kind was not at the international level (or at least not yet), for that could very well be to open a Pandora's box, but at the national level, as part of efforts to ensure that when signatory states come to ratify the Convention they do not do so on the basis of conflicting interpretations. It was in this light that debate then ensued on ways of improving the text and the accompanying argument, a process which continued after the workshop. Although the issue lies at the very heart of the emergent CWC regime, the debate was necessarily a technical one. The only serious disagreement to be reported from it was the sustained opposition of one participant to accepting that "riot control agents" might also be "chemical weapons" within the meaning of the Convention. A concrete proposal put forward was that states parties should be encouraged, possibly during the first Conference of States Parties or during the first CWC Review Conference, to declare not only their riot control agents (as Article III.1(e) obliges them to do), but also, as a confidence-building measure, any chemical they have or are developing for law-enforcement purposes by virtue of its toxic properties.

The final session of the Workshop concluded with attention to what the Study Group might usefully do in the future. One line of discussion returned the proceedings to the matter of relationships between the CWC, its implementing international organization in The Hague, and the world of scientists at large. As a possible subject for consideration at the next workshop, it was suggested that Pugwash itself might form a group of experts who could be called upon by the Preparatory Commission, including the Provisional Technical Secretariat, for scientific information and advice. The utility of such a group could be enhanced by the use of e-mail, possibly in the form of a dedicated CWC bulletin board or electronic conference on the Internet managed by a component of the Study Group.

A further area of projected future Pugwash activity concerned the BWC and the follow-up to the imminent Special Conference. It was agreed that Pugwash should distribute to participants at the Special Conference a revised version of the paper which the workshop had received on areas of overlap between the emergent BWC and CWC regimes, a paper which itself included detailed recommendations for future Pugwash work. Then, depending on the outcome of the Special Conference, the Steering Committee of the Pugwash CBW Study Group should select for adoption one or more of those recommendations.

Other specific proposals put forward included the following:

- A workshop or study on the particular problems facing developing countries in fulfilling their obligations under the Chemical Weapons Convention.
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- A workshop of relevant experts on outstanding problems of the demilitarization/detoxification of chemical warfare agents and munitions.
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- A workshop or study bringing together both forensic expertise and recent experience in dealing with allegations of use of BW or CW weapons, with a view to drawing lessons for nonuse-verification procedures.
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- A workshop on problems of reconciling activities of the Australia Group to the export/import-control obligations of the Chemical Weapons Convention.
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- A workshop on new scientific developments affecting the Chemical Weapons Convention.
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- A workshop on promoting uniform standards of interpretation and state practice concerning the CWC, especially in regard to ensuring a proper transparency for activities involving chemicals for law enforcement.
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Finally, the Steering Committee of the Study Group was urged to stand ready to reassess its priorities for future work at the moment the 65th CWC ratification came in, which was now widely expected to be in about one year's time: only six months would then remain for finalization of the CWC regime. \_