Approaching the CWC Review Conference

15th Workshop of the Pugwash Study Group on the Implementation of the Chemical and Biological Weapons Conventions

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This was the fifteenth of the current workshop series on chemical and biological warfare (CBW) that Pugwash has convened in collaboration with the Harvard Sussex Program on CBW Armament and Arms Limitation (HSP) and the ninth to be hosted in the Netherlands by the Dutch Pugwash Group. The workshop was held at the Congreshotel "Oud Poelgeest". Participating by invitation were 37 people from 14 countries (Belgium, Canada, China, Cuba, Germany, India, Iran, Mexico, Netherlands, Poland, Russia, Switzerland, the UK and the USA), all of them doing so in their private capacities. The present report is the sole responsibility of its author, who was asked by the meeting to prepare a report in consultation with the Steering Committee. It does not necessarily reflect a consensus of the workshop as a whole, or of the Study Group.

The workshop was intended to provide an early opportunity for interested people from the international community to discuss what might best be done at the First Review Conference of the 1993 Chemical Weapons Convention (CWC), which is scheduled to be held in the Spring of 2003, that being in the fifth year after entry into force of the Convention.

Issues that it would be important for the Review Conference to address were duly considered by workshop participants, as well as the form to be taken by the review process as a whole. This was after an initial agenda item in which the workshop heard reports on progress in implementation of the CWC and the Biological and Toxin Weapons Convention (BWC) and related activities. The workshop closed with discussion of the future work of the Pugwash Study Group, including possible topics for further workshops.

CWC: Progress in Implementation

Recent successes of the Organization for the Prohibition of Chemical Weapons (OPCW) were identified. They include the establishment of the inspection regime for industrial facilities producing discrete organic chemicals (DOC), near completion of the 1000th inspection, adoption by the Executive Council of the UN-OPCW relationship agreement, progress in the destruction of chemical weapons in all the possessor states except Russia, and the reorganization of the International Cooperation and Assistance Division to include the Implementation Support Branch. However, five potential problems that had been overshadowed during the first four years of the Convention's implementation have in the last year emerged to trouble the Organization. The first is the delay in Russia's program of chemical weapons destruction program under civilian control in the form of the Russian Munitions Agency and increases in both budgetary allocation and political attention, a revised program

for destruction must still be submitted to the Organization. More consultations between Russia and the OPCW, and between Russia and individual member states, are required if the CWC deadlines are to be extended. The program recently approved by the Russian government expects destruction to be completed in 2012, with one percent of Russia's Category 1 chemical weapons destroyed by 2003. To achieve these ends, increased international support is a necessity.

Second, there is a need for balance in application of the verification regime. Currently 80 percent of the OPCW's resources are spent on the verification of chemical weapons destruction, while 20 percent are spent on the industrial regime. Also, inspections should be applied equally across geographic boundaries to avoid the over-inspection of certain states parties.

Third, in order to ensure the effective prohibition of chemical weapons, some of the unresolved issues with respect to chemical industry need to be addressed. Accurate statistics on the trade in scheduled chemicals, along with agreement on the declarable thresholds and definition of the relationship between the Australia Group and the CWC, will all contribute to the effective prohibition of chemical weapons worldwide.

Fourth, all states parties are obligated to enact the appropriate legal mechanisms to fully implement the Convention both nationally and internationally. Discrepancies between the states parties' domestic legislation need to be addressed. Also, more facility agreements, above the present 34, need to be concluded between the Secretariat and the states parties.

Fifth, the financial crisis that has haunted the OPCW over the course of the last six months is in the process of being resolved. Since the time of its Preparatory Commission, the OPCW has had to cope with an inherently unbalanced budget, latterly compounded by the "fictitious income" generated by the process of reimbursement for the costs of inspections carried out under Articles IV and V of the CWC. OPCW budgets have failed appropriately to take into account inflation, exchange rates, increases in the UN salary pay scale, and increases in the pace of work of the OPCW, resulting in a policy not just of zero growth but actually of negative growth. These budget realities led to a cash deficit in 2000 and a 2001 budget deficit, which has prompted the current austerity program. The austerity measures now in place within the OPCW include a hiring freeze, cuts in non-essential programming, and a policy of keeping 30 fixed-term posts vacant; however, verification and international cooperation activities are being pursued as fully as possible. The budgetary problems must be resolved, and the states parties must recognize the need for growth in the OPCW budget, before 2003, when the need for a more extensive inspection regime will become urgent with the full functioning of new chemical weapons destruction facilities in at least two states parties. Discussions between the Secretariat and the states parties on the 2003 budget are set to begin this summer.

BWC: Work of the Ad Hoc Group

A Special Conference of the States Parties to the BWC established the Ad Hoc Group (AHG) in 1994 to negotiate a protocol that would strengthen the BWC, particularly through mechanisms designed to address concerns about compliance. The Conference asked the AHG to finish its work at the earliest possible date and report to a further Special Conference. A particularly important development of the last few months coming out of the AHG negotiations in Geneva has been the release of a Composite Text by the Chairman of the AHG, Ambassador Tibor Toth (Hungary). This happened at the end of March when a substantial proportion of the draft Protocol thus far negotiated, the Rolling Text, was still in square brackets signifying

dissensus. The Composite Text represents the results of informal consultations between Ambassador Toth and the various delegations in Geneva, and his decisions on the compromises necessary for consensus. At the April/May session of the AHG, the Composite Text was formally presented to the delegations. As in the Rolling Text, the principal elements of the new draft Protocol are its provisions for declarations (now Article 4), measures to ensure submission of declarations (Article 5), declaration-followup procedures (Article 6), measures to strengthen Article III of the BWC (Article 7), consultation, clarification and cooperation (Article 8), investigations (Article 9), assistance and protection (Article 13), international cooperation (Article 14), the organization (Article 16), and national implementation measures (Article 17).

The close relationship between the CWC and the future BWC Protocol was highlighted as important for both regimes. The two regimes overlap with respect to toxins and bioregulators. Each convention uses a general purpose criterion (GPC) to define its scope. The GPC provides the mechanism both for accommodating technological change and for controlling dual-use technology; the Protocol would in no way limit the GPC. In contrast to the CWC, however, the Protocol does not address the destruction of weapons or their development, production or stockpiling since provisions regarding all of these activities are among the express obligations of the BWC itself. Instead, the Protocol includes provisions designed to deter such activities and to enhance confidence in compliance with the BWC. Also, while the CWC contains in its Schedules lists of "chemicals which have been identified for the application of verification measures", the Composite Text for the BWC Protocol includes lists of agents and toxins certain activities with which on the territory of a state party would trigger a declaration. More differences do exist in the details, but overall, the two regimes are similar and complementary. Furthermore, the Composite Text goes a considerable way in providing for complianceverification of the BWC itself-which lacked any requirement for declarations or investigationsthereby strengthening the international norm against biological weapons and enhancing deterrence. The presentation concluded with an expression of optimism that, despite the numerous and large political obstacles, a Protocol could be concluded in time for the Fifth BWC Review Conference in November of this year. States parties to the BWC were encouraged to "seize the opportunity" to take a large step toward the total worldwide elimination of the threat from weapons of mass destruction (WMD).

During subsequent discussion of this report, participants focused on the available alternatives to a Protocol, if states parties to the BWC failed to come to an agreement on a draft Protocol at or before the Fifth Review Conference. One suggestion was that the overlap between the BWC and the CWC should be built upon so as to extend the CWC verification system into biotechnological manufacturing industry.

UNMOVIC

The UN Special Commission on Iraq (UNSCOM), established in 1991 by Security Council Resolution 687 in order to verify Iraq's compliance with cease-fire obligations to dismantle and destroy its WMD programs, was evacuated from Baghdad on 15 December 1998. A series of panel discussions early the following year led to the passage of Resolution 1284 in December 1999. This resolution-from which China, France, and Russia abstained-established the UN Monitoring, Verification and Inspection Commission (UNMOVIC). UNMOVIC, under the leadership of Executive Chairman Dr. Hans Blix, was charged with continuing the work of UNSCOM. To date, the main work of UNMOVIC has been training, since they have yet to be allowed to enter Iraq. Four such training sessions have been held, in New York, Paris, Vienna, and Ottawa; over 400 potential inspectors have participated. These sessions cover both general

topics and specialized knowledge, such as sampling and analysis. The staff of the New York office, including a number of lawyers, has drafted an operating handbook and established a legal basis for UNMOVIC's work in Iraq, as well as formulating a comprehensive health and safety policy. UNMOVIC has also completed extensive work on the import/export lists for Iraq and in the area of site definition and categorization; it also reports on a quarterly basis to the UN Security Council.

There is still much work to accomplish before UNMOVIC enters Iraq, which appears to be a long-term prospect. Even so, UNMOVIC is prepared to begin to pursue its mission in the country on short notice. Outside of the technical questions surrounding the extent and sophistication of Iraq's WMD programs, UNMOVIC faces the formidable consequences of Iraqi noncooperation, the impact of the projected BWC Protocol (Iraq is a state party to the BWC, which it was required to ratify under the terms of the cease-fire), and the difficulty of maintaining staff continuity if the current situation continues as is for years or even decades. In the report that was given to the workshop, the following conclusions were drawn from recent events in Iraq, and from UNMOVIC's work so far: that Iraq is not disarmed of weapons covered by the cease-fire agreement; that politics and not inspections will determine Iraqi compliance with the relevant UN resolutions; that the CWC and BWC will struggle to survive without significant progress in disarming Iraq; and that the failure of the international community to accomplish this task will continue to be viewed as a flaw inherent to multilateral verification and inspection.

International Criminalization of CBW Armament

The reports segment of the workshop concluded with an update on the HSP proposal that an international criminal law be created that would be applicable to the weaponization of biological or chemical agents. The HSP draft convention to this end was published in the December 1998 issue of The CBW Conventions Bulletin. The draft would make it a crime under international law for any individual, regardless of citizenship or official position, to order, direct, or knowingly to render substantial assistance in the development, production, acquisition, stockpiling, retention, transfer or use of biological or chemical weapons, to threaten the use of such weapons, or to create or retain facilities intended for the production of such weapons. Any person who knowingly commits any of the prohibited acts anywhere, worldwide, would face the risk of apprehension, prosecution, and punishment if found in a state party to the proposed convention.

The HSP draft is modeled on recent international conventions now in force that seek to establish universal jurisdiction for such crimes as aircraft hijacking, torture, hostage taking, theft of nuclear materials, and harming internationally protected persons. These conventions, like the HSP draft convention, do not establish international tribunals but instead provide for the specified offenses to be adjudicated in national courts on the territory where the alleged offender is found or to which such person may be extradited. In contrast, the International Criminal Court (ICC), expected to be established in The Hague, can accept a case only if the state which has jurisdiction over that case is unable or fails to carry out the investigation or prosecution. As regards chemical weapons, the ICC Statute prohibits, under the category of war crimes, the employment of "poison or poisoned weapons" and of "asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices". The ICC Statute contains no explicit reference to biological weapons, and it applies only to actual use, not to development, production, stockpiling or transfer. So far, the drafters of the HSP convention have encountered much private support and no serious objection from the various government officials with

whom they have held discussions on the draft. However, no government has yet taken the lead in seeking to refer the draft convention to the Sixth (Legal) Committee of the UN General Assembly for negotiation, to be followed by signature and ratification by states. Work in this regard, that is finding a group of governments interested in sponsoring the draft, or one similar to it, is expected to gain pace in the coming months. As well, funds are being raised to translate the draft convention into the six official UN languages-English, French, Spanish, Chinese, Arabic, and Russian-and to complete an extensive legal commentary to accompany the convention text.

The First CWC Review Conference (2003)

The CWC requires under Article VIII, paragraph 22, that the "Conference shall not later than one year after the expiry of the fifth and the tenth year after the entry into force of this Convention, and at such other times within that time period as may be decided upon, convene in special sessions to undertake reviews of the operation of this Convention. Such reviews shall take into account any relevant scientific and technological developments. At intervals of five years thereafter, unless otherwise decided upon, further sessions of the Conference shall be convened with the same objective." The Verification Annex to the CWC additionally requires in Part IX, paragraph 26 that "at the first special session of the Conference . . . the provisions of this Part of the Verification Annex [pursuant to the regime for other chemical production facilities] shall be re-examined in the light of a comprehensive review of the overall verification regime for the chemical industry on the basis of experience gained. The Conference shall then make recommendations so as to improve the effectiveness of the verification regime." The CWC enters its fifth year in April 2001, and it is expected that the first special session or "Review Conference" for the CWC will take place in the spring of 2003.

The fact that the OPCW has organs that, in effect, continuously review the operation of the CWC means-so it was generally agreed among the workshop participants-that the Review Conference process should be concentrated on the larger issues that tend to evade day-to-day attention. What most needed review, in other words, was longer-term strategy for implementation of the Convention. Further, the process should provide opportunity for groups that mostly lie outside the OPCW institutions to express their views to the OPCW in expectation of being heard-groups that are either affected by the Convention or otherwise have a constructive interest in its proper application. Such groups exist in industry, in academia, and in other non-governmental organizations (NGOs) and organs of civil society.

This general theme-that the Review Conference should complement, not replicate, review activities that take place anyway within the OPCW-recurred throughout the presentations on the component issues and their discussion, which are now summarized in turn.

Experience from other Review Conferences

Workshop participants were first presented with an overview of the conduct of past review conferences for multilateral treaties comparable to the CWC, such as the BWC and the NPT.

Three review conferences for the BWC have been held since the first in 1980; the fifth will be held from 19 November to 7 December 2001. These sessions have examined scientific and technological developments of relevance not only to Article I of the Convention, but also to all articles. From the review conferences, extended understandings of the original definitions and obligations of the BWC have come about. The approach taken at the BWC review conferences

has been to address the preamble and each article of the Convention individually, systematically combing through the Convention. The Conference results in a Final Declaration reflecting the consensus of the states parties. The Review Conference typically lasts for three weeks; six months in advance of the start of the Review Conference a preparatory committee meets for 2-3 days to draft an agenda and invite states parties to submit information on implementation of the Convention, scientific and technological developments, and working papers.

NGOs have played a discernible role in the BWC review conferences and in the AHG negotiations. At the last BWC review conference, NGOs that had demonstrated "serious intentions" were able to make statements during a special informal session, and there has been discussion within the preparatory committee for the next BWC review conference toward allowing NGOs to submit written material as well as to speak during plenary sessions.

As to the role that NGOs might play in the review process for the CWC First Review Conference, some participants held that NGOs should use their influence to lobby for official recognition at the First Review Conference as well as a degree of participation in it. Other participants observed that it might be more useful for NGOs to become active in substantive aspects of the review process, or, in capitals, to engage themselves in the policy-shaping work associated with the process. Noted as a promising example of substantive OPCW-NGO cooperation was the recent undertaking by the International Union of Pure and Applied Chemistry (IUPAC) to review relevant scientific and technological developments for the OPCW.

The NPT review mechanism has been in place since 1975 and thus is a very different process. Yet, it was highlighted that NGOs have been able to attend not only the extension or review conferences themselves but also to participate in the preparatory committee meetings.

The workshop was later told of three specific NGO projects.

First, preparations are now far advanced for a CWC Appeal. This document, on which there has been extensive consultation, will appeal to states parties to uphold the international norm with respect to chemical weapons and generate political and financial support for the OPCW. The Appeal is being circulated for signature among those who took part in the negotiations in Geneva that gave birth to the CWC and other current and former ambassadors and government leaders.

Second, an Internet discussion forum is being established for the benefit of those in academia and elsewhere in the NGO community who conduct research into issues of chemical and biological weapons and their worldwide control and elimination. The forum is intended to stimulate debate on policy, to design and pursue research questions, and to disseminate information relating to the CWC and the BWC.

Third, there is an initiative for representations to be made to the OPCW, initially through a coalition letter to the Director-General, expressing the desire of NGOs to play a larger role in the implementation of the Convention, the work of the OPCW, and consequently in both the review process and the 2003 Review Conference. One proposal for consideration is amendment of the rules of procedure to allow greater participation by NGOs in the annual Conference of the States Parties and thus in special sessions like the Review Conference. NGOs would, under this proposal, be able both to submit written material and to make statements to the assembled

states parties. In concert with this request is a desire, shared by the chemical industry associations and other NGOs, for greater transparency on the part of the OPCW.

Issues for the First CWC Review Conference

There was no disagreement with the view expressed that the first four years of the CWC regime had been successful. Despite the repercussions of the current financial crisis, there is no real "crisis of confidence" in the CWC regime. Instead, current problems have highlighted the need for states parties to make a financial commitment to the OPCW. The workshop did not, however, regard the financial crisis as a fitting topic for the agenda of the First Review Conference. Some participants considered universality, compliance, and destruction of Russia's chemical weapons stockpile examples of topics more suited to such a forum. Also, the challenge inspection mechanism, not yet invoked, needed to be explored and some sort of accommodation achieved over the Australia Group. Other participants, while not disagreeing that these questions, and also ones relating to the industry regime, might be addressed constructively during the Review Conference, saw the review process more as opportunity for strategic assessment. In this respect, it was the overall vitality of the regime in the face of changes in its environment that should be given express attention, not the shorter-term issues that were in any case bound to become the day-to-day business of OPCW organs if they were not so already. Robustness towards political change required continuing review of the structure and modus operandi of the OPCW institutions. Robustness towards technological change required sustained attention to implementation of the GPC in the light of advances in science and technology.

The workshop was reminded that the OPCW was a frontrunner organization in the field of multilateral disarmament, meaning that the First Review Conference of the CWC will be viewed as a signifier, not only of the Convention's success, but also of the future prospects for similar arms agreements-the BWC Protocol, the CTBT, and so on. For this reason, particular care should be put into preparations for the review, beginning as soon as possible. It was noted that the OPCW Technical Secretariat has announced its intention of starting its own work on the formal review process in 2002, and the Executive Council has recently proposed the formation of a working group in order to coordinate work toward the Review Conference. It was agreed that these mechanisms should now set about the task of categorizing those issues identified as key to the review, thus constructing a framework for discussions at the Review Conference itself.

Advances in Science and Technology

The use of a GPC in both the CWC and the BWC ensures that all past, present and future chemical and biological warfare agents are subject to the prohibitions of the two treaties. Moreover, because of the breadth of definition set out in the CWC for the "toxic chemicals" that it covers, the CWC GPC overlaps significantly with that of the BWC. Participants noted the increasing salience of this consideration to (a) the rapidly increasing understanding of life processes at the molecular level, and hence the fading of distinctions between biology and chemistry, and (b) the increasingly uncertain prospects for a BWC compliance-verification system comparable to that of the CWC. The workshop agreed that, so vital is the GPC to the future of the treaty regime, the importance of implementing it properly must be reaffirmed during the First CWC Review Conference.

Discussion turned to factors that operated to compromise the GPC. The application of chemical "riot control agents" was considered in this regard, for, although such agents are unquestionably among the toxic chemicals to which the CWC applies its GPC, their use as a "method of warfare" is nevertheless the subject of a special prohibition in Article I.5 that is separate from the general prohibition of use of chemical weapons contained in Article I.1(b). The fact that such separate treatment has been accorded to no other category of dual-use chemical has led to claims that riot-control agents somehow lie beyond the GPC, thereby implying that the criterion is actually of only limited application. It was pointed out that the historical record of the CWC negotiation provided negligible support for any such claim, yet several participants continued to dwell on the negative impact of this apparent ambiguity. They recommended that the provision of the CWC that allows the use of toxic chemicals for "[1]aw enforcement including domestic riot control purposes", Article II.9(d), be given particular attention during the CWC review process.

A further compromising factor addressed by participants was the increasing investment in nonlethal weapons-technology now evident in countries that were becoming intolerant of deaths among their combat forces. There was discussion of the pressure upon the GPC that was being created by the desire to preserve an open option on use of non-lethal chemical weapons. One of the workshop papers described an episode from the 1960s in which the promise then encapsulated by incapacitating chemical weapons caused the British government not only to abandon its no-first-use policy on chemical weapons but also to restart, in secret, its development of the weapons, lethal as well as non-lethal. Partly it was in part the start of CBW arms-control talks in Geneva that had brought this little-known happening to a halt.

The huge advances in humankind's understanding of genetics in recent years has given scientists access to a gigantic store of knowledge on the human genetic code. Through genomics, this knowledge has the potential to bring about the development of new, more targeted, and thus more effective agents, including the horrific prospect of ethnic weapons or agents that attack specific strains of plants or animals. These developments have great implications for industry, academia, and both the BWC and CWC. Through the mechanisms of combinatorial chemistry, researchers might identify upwards of 50,000 highly toxic compounds per year. A handful of these would turn out to be applicable for purposes of biological or chemical warfare. Furthermore, programs that had failed in the past to produce usable agents might now succeed: genomics and proteomics might, for example, lead to the development of novel agents applicable to law enforcement or to non-lethal weapons. Although apparently benign, research in these areas could induce development of delivery systems for more malignant or even lethal agents There was, therefore, a proposal that the definition of "munitions" and "devices" in the CWC should be further developed and strengthened.

It was also proposed that the Review Conference concentrate on means of delivery to discriminate between intended military use and use for domestic riot control or other forms of law enforcement. The suggestion here was that delivery systems useful for law enforcement would likely be inconsistent with military utility. If certain delivery systems-those likely to be used in large-scale conflict-were prohibited, then the chances of legitimate scientific research being diverted for purposes prohibited under either the CWC or the BWC would be diminished. However, some participants pointed out that this differentiation was not effective enough since it would create a loophole permitting research, development, production, and testing at high levels, just one step below full-out weaponization. Participants identified a need to increase awareness of the GPC and the overall protection it provides. One way of implementing the GPC, should scientific advance lead to discovery of regime-endangering new agents, would be

to amend the Schedules. But this was seen by several participants as an unwieldy and possibly counter-productive approach. Instead, the importance of the GPC should be reaffirmed by the OPCW at every opportunity, thereby causing it to enter the implementation culture of the CWC National Authorities. It was stated that, too often, the OPCW, even the Executive Council, acted as though the GPC did not exist.

Regime for Chemical Industry

The GPC ensures that normal operations of the chemical industry worldwide, including those areas where the potential is high for chemical weapons development, remain unharmed by the strictures of the treaty. Workshop participants were informed of the seriousness with which the industry takes its role within the CWC regime. In the course of implementation, industry's original concerns for the protection of confidential business information (CBI) have decreased and are no longer of great relevance, even though recent developments, such as the pursuit of the inspection regime for DOC facilities, have enlarged industry's responsibility and also the number of important questions in need of answers. Coherent policies need to be put in place both in respect to the threshold requirements for declarations of Schedule 2A and 2A* chemicals and the transfer of Schedule 3 chemicals. "Managed access" procedures need to be accepted as part of the inspection process and the definition of a "plant site" is the subject of continuing consultations between the Secretariat and certain states parties. Industry continues to voice a desire for greater communication with the OPCW and a better system for consultations, as well as greater transparency on the part of the OPCW. It was, however, emphasized that many of the most serious conflicts between the chemical industry and the OPCW have been successfully resolved.

Participants were also told of the difficulties encountered in ensuring the completeness of a state party's industry declarations. These problems arise from complex ownership and production arrangements at industrial facilities, the co-location of declared and undeclared sites, and the definition of what is declarable. Currently, many states parties think only in terms of final production and not processing when assessing concentration limits and declaration thresholds.

On export controls, industry continues to be opposed to further restrictions on trade in Scheduled chemicals, although such measures would have only a minimal impact and are a viable tool in the pursuit of universality. Of the 50 states not party to the Convention, only six use Schedule 2 or 3 chemicals. Therefore, to restrict transfers of these agents both to and from these states would not significantly damage the cause of international trade. Despite the obvious benefit accrued from a 100 percent match between import and export data, such an achievement is nearly impossible. Industry would like to emphasize the role played by international programs, run by industry itself, designed to monitor and track the global travels of its products.

National Implementation Measures

The question was put to the workshop of how much of the monitoring of compliance with the Convention is actually carried out by the OCPW. In reality, the National Authorities are entrusted with much of the responsibility for ensuring compliance. For this reason, all states parties must designate national authorities-to date only 109 have done so-and these bodies must function as more than post offices and escorts. The need for strong, effective, implementing legislation was also stressed-only 55 states parties have enacted such legislation. The OPCW

needs to provide comprehensive support to states parties and national authorities in their efforts to fully implement the CWC. As the Convention matures, the national authorities will be expected to assume more responsibility, especially in areas where the division of labor between them and the Secretariat is currently undefined, notably implementation of the GPC. A fully functioning network of national authorities must therefore be established as soon as possible. At the Review Conference, the role of national authorities vis-à-vis the OCPW and the Convention needs to be revisited.

Role of the Scientific Advisory Board

The workshop heard that, in the past, the SAB had been seen, and used, by both the Secretariat and the states parties, as a "dumping ground" for awkward ostensibly technical issues. However, the SAB is well placed to contribute substantively to the Review Conference, as it has been actively discussing the review process over the past year. The SAB has also been in contact with outside bodies, like IUPAC, about their relationship with the Convention and their role in the review process. Participants involved in the IUPAC review noted that the project has yet to identify specific issues of substance, and has so far been a procedural exercise. There are a small number of broad issues-science and technology, verification and destruction technologies, industry verification-and an ever-expanding list of more detailed topics that IUPAC faces as it embarks upon its review of the scientific and technological foundations of the Convention. Concerns were raised about how the IUPAC findings would be received and how any conclusions or recommendations would be implemented. The call was made for all those involved in these issues to submit information or material that may prove helpful to IUPAC.

International Cooperation and Assistance

The purpose of Article XI of the CWC-international cooperation and assistance for the peaceful uses of chemistry-is to ensure that developing countries without past or present chemical weapons programs or significant chemical industry stand to benefit from membership in the OPCW. This in turn promotes the universality of the Convention. In its implementation, the CWC must avoid hampering the scientific and economic development of its states parties and encourage international trade for peaceful purposes. The workshop was told that, in order to accomplish this task, some members of the Executive Council have proposed the establishment of an International Cooperation Committee-similar to the one proposed in the BWC Protocol Composite Text-that would oversee the implementation of this Article. However, the issue has been the subject of fierce debates in the Executive Council, as other states parties (mostly members of the Australia Group) do not think that such a body is necessary and that the International Cooperation and Assistance Division of the OPCW to strike a balance between disarmament and development.

The continued existence of the Australia Group-which was described to the workshop as an informal group of states that coordinate their national export policies and restrict transfers to states that they feel pose a proliferation risk-is seen as an obstacle to achieving the object of purpose of Article XI by some state parties. States parties have been divided over whether the continued existence of the Australia Group does or does not undermine Article XI of the CWC, which instructs states parties "not [to] maintain among themselves any restriction, including those in any international agreements, incompatible with the obligations undertaken under this Convention, which would restrict or impede trade and the development and promotion of

scientific and technological knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes". Members of the Australia Group insist that their practices do not contravene the Convention, and that only when the CWC's provisions for control of exports and imports of chemical agents are being fully implemented to the satisfaction of Group members, and they are certain that the CWC is precluding proliferation, will the Australia Group be disbanded.

In support of the Australia Group's position, workshop participants were informed that less than one-third of states parties are in compliance with the Convention's provisions on national implementation, and that only a minority of states parties have fully integrated the use of enduse certificates into their national export control regimes. There is a consensus among states parties that Article XI needs to be applied in a more coherent manner. International cooperation activities continue to suffer without a decision in the Executive Council on the establishment of an International Cooperation Committee, which will certainly be influenced by any provisions made for such a body within the framework of the projected BWC Protocol. It was proposed that, in preparation for the First Review Conference, the OPCW should take actions to enforce its own policies on trade in Scheduled chemicals (i.e. bans on Schedule 2 transfers to states not party, and the requirement for end-use certificates when transferring Schedule 3 chemicals) and strengthen such policies where necessary to ensure non-proliferation.

There was discussion of the importance of the Review Conference as a forum in which to examine OPCW preparations to provide protection and/or assistance to states parties in the event of an accidental or intentional release of chemical agents. One of the main issues in this context is the threat of use by non-state actors, or chemical terrorism. The workshop heard that the Secretariat has recently drafted a strategic concept for the provision of assistance, including responses to acts of terrorism, but there are still many gaps to be bridged in its implementation. For example, only 56 states parties have made either bilateral or unilateral offers of assistance. The voluntary fund for assistance stood at about NLG 1.3 million as of 31 December 2000, the result of pledges by 25 states parties. There is also the question of how, in accordance with Article X.4, states are to declare any chemical defense or protective programs pursued nationally.

Destruction of Chemical Weapons

The major difficulties encountered in the destruction of chemical weapons are in Russia, so participants were told. These problems were said to stem from a lack of financial resources rather than from internal or external politics. The recently revised destruction program increases the budgetary allocation six-fold to just over 3 billion rubles and provides for the complete destruction of the stockpiles of chemical weapons at Gorny (1160 agent-tons) and Shchuch'ye (5440 agent-tons), representing a combined total of 16.5 percent of Russia's total stockpile. The last year has seen significant progress: the opening of the Central Analytical Chemical Weapons Destruction Laboratory, the designation of the State Commission on Chemical Disarmament, the start of Category 2 and 3 destruction activities, and the revision of the original 1996 program for destruction. However, much work remains to be done and increased international funding, including the release of funding for the construction of a large-scale destruction facility at Shchuch'ye by the U.S. Congress, will be needed to complete the destruction of chemical weapons in Russia. It was stated that this goal could only be achieved through extensive cooperation of governments with support from citizens groups, other NGOs,

the expert community and the mass media. It was proposed that the Review Conference should explore the ways in which the OPCW may be able to move destruction efforts in Russia ahead.

The workshop was told that other possessor states-the United States, India, and a state party of withheld identity-are in compliance with the Convention's destruction deadlines. Very few problems have been associated with these destruction programs. In the coming year, additional chemical weapons destruction facilities are planned to go into operation in at least two of these states, necessitating the allocation of greater OPCW resources to the monitoring and inspection regime for such facilities.

Summary

To summarize, the workshop was able to identify many issue areas in need of attention both during the review process and at the 2003 Review Conference. These issues apply to the practical implementation of the Convention, as well as to the political environment in which this implementation must occur. Specific actions recommended during the workshop include:

- focussing the review process on the strategic aspects of CWC implementation rather than on the specific shorter-term issues that are likely to engage organs of the OPCW in their routine business;
- reaffirming the central importance of the GPC and considering how its implementation could be improved;
- assessing the impact of recent advances in science and technology on implementation of the Convention;
- revisiting the law enforcement provisions of the CWC;
- promoting decisions on many of the unresolved issues under Article VI, such as low concentration thresholds and boundaries of production, prior to the convening of the Review Conference;
- promoting full implementation of Articles X and XI, including engagement with the states of the Australia Group in order to address their concerns about proliferation of chemical weapons, while at the same time pursuing the demands of developing states parties for development and greater exchanges of technology;
- supporting any moves toward the destruction of Russia's chemical weapons stockpile, and helping Russia to collect international aid for this project; and,
- changing the rules of procedure to allow greater involvement of the chemical industry and other affected NGOs in the review process and the First Review Conference itself.

Future Work of the Study Group

The workshop learnt that the Study Group will next meet in Geneva during 24-25 November, which falls at the end of the first week of the Fifth BWC Review Conference. It was accordingly proposed that the workshop should focus on the prospects for the projected BWC Protocol. A further workshop, focussed on the CWC, is envisaged in 2002, it's timing dependent upon the date of the seventh OPCW Conference of the States Parties. Meanwhile, participants considered it of utmost importance for Pugwash and other NGOs to strive to influence the CWC review process through all possible channels.

Workshop participants also recommended that the Study Group should address the moral dimension of the work of Pugwash and of the CBW disarmament regimes, a topic

that has received some attention recently within the Secretariats of both the United Nations and the OCPW. The general opinion of participants was that now is a watershed moment for multilateral arms control and disarmament regimes. In the next two years, the world will come to a decision on strengthening the BWC; it will review the first five years of implementation of the CWC; and, hopefully, it will begin implementing other similar treaties.