



**18th Workshop of the Pugwash Study Group
on the Implementation of the Chemical and
Biological Weapons Conventions:
The Resumption of the Fifth BWC Review
Conference 2002 and Beyond**
Geneva, Switzerland, 9-10 November 2002

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This was the ninth of the current Pugwash workshop series on chemical and biological warfare (CBW) to be held in Geneva. It was jointly convened by the Harvard Sussex Program on CBW Armament and Arms Limitation (HSP) and the Swiss Pugwash Group. The meetings were held on the premises of the Graduate Institute of International Studies, University of Geneva.

Fifty-six people attended the workshop, by invitation and in their personal capacities, from 19 countries (Australia, Belgium, Egypt, France, Germany, Hungary, India, Iran, Israel, Italy, Japan, New Zealand, Pakistan, Russia, South Africa, Sweden, Switzerland, the United Kingdom and the United States of America). This report of the workshop 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 focus of the workshop was, once again, the Fifth Biological Weapons Convention (BWC) Review Conference, due to resume after a year's adjournment on Monday 11 November 2002, the day following the closing of the workshop.

The meeting opened with a welcome by the new Secretary General of the Pugwash Conferences, Professor Paolo Cotta-Ramusino of Italy, and the observation that this was the fiftieth international meeting of the PSGICC and its predecessor CBW study groups, the initial focus of the study group in 1964 being on matters relating to Biological Weapons (BW).

In addition to the various reports on developments outside the BWC during the previous year, the main items for discussion by the workshop under the rubric of the Resumption of the Fifth BWC Review Conference 2002 included: developments since the adjournment of the Review Conference in December 2001; key issues for the resumed session, namely a final declaration

and future meetings of the States Parties; taking stock of the situation, including the role of civil society; and topics that might be addressed at future meetings of the States Parties. Participants also addressed themselves to the future work of the Pugwash Study Group on the implementation of the CBW Conventions.

CWC: Progress in Implementation

A report was given on developments since June 2002 within the Organisation for the Prohibition of Chemical Weapons (OPCW). Issues covered included: the appointment of a new Director-General; the seventh session of the Conference of the States Parties to the CWC; internal Secretariat problems; the forthcoming First Review Conference; progress in CW destruction; verification activities; and implementation of the CWC.

The first item noted was the appointment of a new Director-General of the OPCW, Rogelio Pfirter of Argentina, by a Special Session of the Conference of the States Parties in late July. It was observed that the period preceding his appointment, including the termination of the previous Director-General's term of office, had been a painful one for the Organisation and a number of member states. It had also been a unique situation for an international organisation. Since then, relations between member states and the Technical Secretariat were reported to have markedly improved - this has been aided by the Director-General having been active both in The Hague and in his travels to States Parties. For the first time in many years, the OPCW, represented by the Director-General, attended the First Committee in New York, which he addressed, the Director-General also being due to address the full General Assembly in November. Staff morale within the Organisation was also reported to be improving with this new phase in the OPCW's history.

Second, the seventh session of the Conference of the States Parties in October was reported to have been more productive and effective than any others save the first session in May 1997. The Conference took a number of decisions, the most important of which was an increase in the OPCW's budget for 2003 by almost 10 per cent. The Director-General was also authorised to withhold the distribution of the prospective cash surplus for 2001. However, the financial decisions taken by the Conference along these lines were *ad hoc* in nature, rather than addressing fundamental structural issues. It was noted that the OPCW had also received several voluntary contributions, including a US\$2 million contribution from the United States. In short, the current

financial situation was considered to be improving, enabling the OPCW to conduct a full programme of activities.

Several political decisions relating to the Russian Federation were taken at the Conference: the Conference finalised a lengthy and painful process of consideration and approval of Russian conversion requests - 24 chemical weapon production facilities (CWPFs) had been declared by Russia, of which six were to be destroyed and 18 were the subject of conversion requests. While some States Parties were of the opinion that conversion of CWPFs under the CWC was for exceptional situations only and therefore should not be granted for two-thirds of the Russian CWPFs, in the end Russia had received approval to convert. The other major decision taken was in respect of the Russian request for an extension of intermediate and final deadlines for destruction of Category 1 CW stockpiles. Last summer the Russian Federation had produced a revised destruction programme that would see a five year extension of the final destruction deadline. The Conference agreed "in principle" to an extension of the first two intermediate deadlines, the details of which were to be established by the Executive Council in December - the remaining deadlines will be considered at the next session of the Conference in October 2003. The result, however, is that the Russian Federation is now not in technical non-compliance with the CWC.

Third, the participants' attention was drawn to internal problems within the Secretariat. While these existed within the Secretariat, they had been created together with member states through the Staff Rules and budgetary decisions. Resolving these problems will take some time, but attention is now being focussed on them.

Increasing attention is being given to the first CWC Review Conference, which will take place in The Hague in late April and early May 2003. The Working Group for preparations for the Review Conference is now moving to more substantive discussions and papers and proposals from member states are beginning to arrive, including three papers from the United States. The hope was expressed that this will lead to a political declaration and more specific decisions by the Review Conference, but that the Review Conference would not try to resolve technical issues. Finally, a possible need for changes to the rules of attendance of NGOs at the Review Conference was said to be being considered - participants at the workshop expressed their desire to contribute constructively to the Review process and to attend.

The CW destruction process was reported to be lagging. It is hoped that the Gorny facility in the Russian Federation, built with German assistance, will be online early in 2003 so that Russia can meet the first deadline for destruction of one per cent of Category 1 CW stockpiles. While the United States has made no requests for assistance with its destruction programme, there have been indications that it too might experience delays.

Verification activities, on the other hand, were reported to be progressing smoothly and issues from earlier inspections were being addressed. Discussion has been taking place on overall verification activities in relation to the most efficient use of resources, 70 per cent of which are spent on continuous monitoring of destruction. Another issue being discussed is the distribution of Article VI inspections.

In terms of implementation of, and compliance with, the CWC, it was noted that many member states could not report that they had national implementing legislation or National Authorities, while those which had implementing legislation might not necessarily have sufficiently comprehensive legislation.

Participants raised the issue of the recent Moscow hostage crisis and the role of the OPCW. It was stated that the OPCW had watched the situation unfold, particularly after the news of the use of gas, and had made contact with the Russian authorities fairly early on. There had been reports that one State Party had been about to officially request clarification in respect of the Moscow events in the Executive Council, but this did not occur. The official Russian position is that what happened had nothing to do with the CWC and no State Party was known to be taking an official position that there had been any violation of the CWC in respect of the Russian actions. Three issues pertinent to the CWC were considered to have been raised by the Moscow hostage crisis: (i) the applicability of the CWC to internal conflicts; (ii) new categories of chemical substances for law enforcement purposes, not being riot control agents; and (iii) whether the Review Conference would address either of these issues. The first was considered by one participant not to apply to the Moscow crisis, as it was a law enforcement situation, not an internal conflict; the second point was thought to be valid; and at this stage there was no proposal to address the issues related to the Moscow hostage crisis at the Review Conference.

Finally, participants queried whether Iraq had made any indication of acceding to the CWC, Iraq having, for the first time, attended the seventh session of the Conference this year as an observer.

UNMOVIC

The workshop then turned its attention to issues related to UNMOVIC and inspections in Iraq, the situation in respect of Iraq having recently changed with the adoption on 8 November of UN Security Council Resolution 1441 (2002).

In response to questions about measures to ensure the safety of the UN inspectors and their possible extraction if their work was obstructed, it was reported that security had been addressed by Dr Blix with General Al Sa'adi of Iraq, and that there was an obligation on Iraq to ensure the inspectors' safety. In the past, UNSCOM had had extraction plans, and it was assumed that these would remain in place for UNMOVIC. As regards security of UNMOVIC teams, the understanding was that while no inspections would be coercive, there would be UN guards and UNMOVIC would have bases outside Baghdad. While the unpredictability of Iraq was acknowledged, it was considered that Iraq probably would accept Resolution 1441 within the timeframe set.

Participants noted the gap in time since there had been inspectors in Iraq, commenting on the sharp learning curve experienced by UNSCOM during previous inspections and noting a need for a continuity of expertise and knowledge in inspectors. UNMOVIC has attempted to gain UNSCOM's knowledge through two years of studying the UNSCOM archives and database. In addition, six training courses for inspectors have been conducted and some 30 per cent of UNMOVIC were previously with UNSCOM - while, in general, the inner core of Chief Inspectors will not be there, some will be present as monitors. There is a question as to how Dr Blix will interpret Resolution 1441 regarding the requirement to ensure that inspection teams are composed of "the most qualified and experienced experts available" - this may provide the opportunity for other ex-UNSCOM personnel to be involved.

Noting that Iraq had previously said that it did not possess any WMD, and now is required to make final declarations within 30 days (if it accepts the Resolution), it was observed that there was no intention of providing Iraq with any 'exit' or face-saving strategy. There is a requirement in the Resolution for total disclosure of weapons programmes, not simply weapons. Importance was placed by the workshop on the unanimity of the Security Council Resolution this time - this was thought to convey the message to Iraq that it would not be able to exploit any differences of opinion in the Security Council.

CBW Criminalization

Two reports were given to the workshop on progress in CBW criminalization, one focussing on national measures, the other on international measures.

The first focussed on criminalization of the inchoate CBW crimes, the preliminary steps of acquiring CB materials, production and planning to use them. The problems of distinguishing between criminal and non-criminal acts of possessing CB agents were noted, the conclusion being that a licensing system for access to chemical and biological agents was required. This would create a rebuttable presumption of non-criminality.

Observing the difficulties of achieving international criminalization, the presentation emphasised the progress that could be made through tough national penal measures. It was noted that most states have general prohibitions on homicide, on the operation of criminal networks and money laundering, which should be sufficiently broad to deal with CBW related crimes. Areas thought to need attention were the wrongful diversion of chemical agents and legally requiring laboratories to implement adequate biosecurity standards, with penalties for failure. In addition, attention should focus on the ability to carry out legal prosecutions (Article VII of the CWC and Article IV of the BWC) and the strengthening of co-operation in respect of trans-national crime. It was also considered that carrying out some forms of CB research should be criminalized and that the legal authorisation and capability of the police to detect and surveil wrongful activities must be ensured. In terms of surveillance, the conclusion was that an international convention was not required, instead the capabilities of international organisations such as the World Customs Organisation, Interpol and Europol could be drawn on. In essence, national criminalization was presented as a broad set of measures for regulating CBW activities, not simply targeting non-state actors but also acting as a brake on state activities.

In terms of how to move forward on criminalization, it was noted that the expert group meetings contemplated by the Tóth proposal (described below) would consider national measures for implementation and biosecurity, both aspects of criminalization. A possible workshop, to be held in Geneva in anticipation of the meetings of the group of experts, was being considered as an aid to structure the debate and move criminalization forward. In response to the presentation, one suggestion was that security of pathogens might be more effectively addressed through adjustments to existing requirements to protect public health and the environment, rather than as part of national implementation measures for the BWC and CWC.

Second, an update was provided to the workshop on the HSP Draft Convention to Prohibit Biological and Chemical Weapons Under International Criminal Law. Since the last meeting, it was reported that the Swiss representation at the first session of the Fifth BWC Review Conference had spoken of the need for international criminalization. There had been discussion of the HSP proposal, introduced by the Netherlands, at the public international law working group of the Council of the European Union. On 31 January, the proposal had been referred for consideration by national governments. In addition, a new Convention on Criminalization of CBW, referring to the HSP proposal, was the seventh of 11 steps outlined in the April 2002 UK Green Paper on measures to strengthen the BWC. The presentation highlighted the difference between national and universal criminal jurisdiction, with the benefits of universal jurisdiction emphasised.

Opinions were divided as to the level of support for universal jurisdiction within the international community, observations being made that the new International Criminal Court operates on the principle of complementary, rather than universal, jurisdiction. On the other hand, it was noted that there are seven international Conventions establishing universal jurisdiction, with one new Convention (on Terrorist Bombings) pending, all of which are supported by the United States. It was reported that some states were interested in pursuing the issue in the Sixth Committee, however, there are some problems with that, including whether a topic which has been viewed as falling into the First Committee's ambit would be able to be shifted to the Sixth Committee.

The Fifth BWC Review Conference (Part I)

It was reported that, last year, the Fifth Review Conference had been conceived of as a forum to which a report would have been made on the work of the Ad Hoc Group, which had been negotiating a Protocol to strengthen the effectiveness and improve the implementation of the BWC. The failure of the Ad Hoc Group in July 2001, however, meant that States Parties were in an uncertain position when the Fifth Review Conference convened in November. The Review Conference opened with a General Debate in which States Parties had made statements which included disappointment about the Ad Hoc Group negotiations and concerns about compliance with the BWC. Three main issues emerged as requiring resolution in order for the Conference to reach a consensus Final Declaration:

1. The status and future of the Ad Hoc Group;
2. How to deal with accusations regarding compliance with the BWC; and

3. If there was to be no Protocol, where to go from here and how to follow up on what had been done.

Two weeks were spent in the Committee of the Whole, then proceeding to the Drafting Committee to prepare a draft Final Declaration developed from those of previous Review Conferences. However, late on the final day of the Review Conference, the United States produced a controversial new proposal calling for termination of the Ad Hoc Group and its mandate. Given the stage of the Review Conference, the President proposed, and it was agreed, to suspend the Conference for a year until November 2002.

At the time of the 18th Pugwash workshop, the Fifth Review Conference was scheduled to run for a period of two weeks, starting with a plenary meeting on 11 November. While much work had been done over the last 12 months, the outcome of the Fifth Review Conference was considered still to be very unclear.

The Resumption of the Fifth BWC Review Conference 2002 and Beyond

Developments since the adjournment in December 2001

The workshop heard an outline of the work conducted by the President of the Fifth Review Conference, Amb. Tibor Tóth, since December 2001 and his proposal for the reconvened session. On the morning of Monday 11 November, a draft decision would be put before the Conference focussing on one item: follow-up. This was described as a mid-term strategy programme, mixing both process and substance. The Tóth proposal is for five issues to be the subject of three annual meetings of States Parties, each of one week's duration, to be held between 2003 and 2005:

1. adoption of national measures to implement the prohibitions in the BWC, including the enactment of penal legislation (for discussion in 2003);
2. national mechanisms regarding the security and oversight of pathogenic micro-organisms and toxins (for discussion in 2003);
3. enhancing international capabilities with respect to cases of alleged use of BW or suspicious disease outbreaks (for discussion in 2004);
4. national and international efforts and mechanisms for surveillance, detection, diagnosis and combating infectious diseases in humans, animals and plants (for discussion in 2004); and
5. codes of conduct for scientists (for discussion in 2005).

It is proposed that each of the annual sessions will be preceded by a two-week meeting of experts.

The background to the Tóth proposal was the three failures in July, August and December 2001; failure to agree on a Protocol, failure of the Ad Hoc Group to report to the Fifth Review Conference and the suspension of the Review Conference. In December last year, the situation was tenuous, with a request for the termination of the Ad Hoc Group. Since then, there have been three rounds of consultations by the President of the Fifth Review Conference and much quiet diplomacy. While in spring and summer this year, the consultations appeared to favour the Tóth proposal, in September the position seemed hopeless, with the United States indicating that it did not want there to be any 'real' Review Conference.

Analysing the proposal, the presenter outlined five legitimate concerns that had been raised by States Parties. The first concern relates to the absence of a Final Declaration. In terms of the situation in December 2001, while over 90 per cent of a Final Declaration could have been consolidated from work at the Review Conference, there were a number of outstanding issues, on any one of which the Final Declaration could have foundered. Those issues included: the description of what happened in respect of the Ad Hoc Group; whether or not the Ad Hoc Group should continue its work; compliance with the BWC; and export control regimes. By 7 December 2001, it was clear that it would be impossible to resolve the issues relating to the Ad Hoc Group and compliance. The absence of a Final Declaration was considered to be a substantial loss and an indication that the position at the Fifth Review Conference was negatively different to that at previous Review Conferences. The resulting dilemma is whether the Conference should try to produce an outcome which is a mix of procedure and substance. However, it was emphasised that the Tóth proposal is not a 'better than nothing' approach. The second concern is that the Tóth proposal is a 'selective' approach; that is, because the proposal identifies items to be discussed in the years until 2006, this by definition narrows the scope of application of the BWC. However, there are three precedents for a focussed approach: the 1986 decision on CBM declarations; the 1991 tasking of VEREX to examine possible verification measures; and the 1994 establishment by the Special Conference of the Ad Hoc Group. The Tóth proposal is seen as a mid-term strategy with an annual programme of work. The third criticism, one that had been voiced primarily by non-aligned states, is that there is a lack of co-operation and multilateralism in the proposal. While it was acknowledged that there

could be more co-operation in the package, it was emphasised that the situation has to be viewed in context. At least two items provide concrete spin-offs which historically are within Article X provisions, items which have been in both the draft Protocol and previous Final Declarations. The efforts at balancing co-operation and compliance in the Tóth proposal were highlighted, although it was also noted that there was little emphasis on compliance measures and thus the balance appears different to some States Parties. The fact that the co-operation items in the Tóth proposal are fewer than those in the draft Protocol was acknowledged.

Fourth, there are concerns about the lack of legally binding mechanisms in terms of compliance. The reference point for the Tóth proposal was said to be the IAEA regime between 1957 and 1968, before the NPT was in place. The question is whether, in the absence of an agreement by States Parties on compliance measures, the Tóth proposal is an acceptable compromise as a mid-term strategy. In analysing the need for legally binding mechanisms, comparisons were drawn with the CW and nuclear regimes, looking at the layers of safety provided by activities during the many years prior to entry into force of the CWC and the NPT.

The fifth and final concern is that, even if the Tóth proposal is accepted, it may be nothing but an empty shell. The Tóth proposal could mean only three weeks a year of meetings on the five issues contained in the proposal - by 2006, it is conceivable that all focus would be gone and previous progress will be lost. However, it was suggested that the annual two-week meetings of the experts could be preceded by other efforts, including seminars or papers, not necessarily done on an official basis.

The workshop also received a paper setting out options and uncertainties relating to the resumption of the Review Conference in the context of developments since December 2001. Tracking the statements and actions of both the United States and other States Parties to the BWC, the conclusion was that the United States' position had not shifted since December 2001 but that other States Parties had reiterated their wish for a resumed Fifth Review Conference leading to a programme of further work. Five options for a resumed Review Conference were outlined: agreement on a Final Declaration, either by consensus or a vote; agreement on a procedural report containing agreed language from the 2001 Draft Final Declaration; agreement on a short statement concluding the Review Conference and attaching a paper on follow-up; agreement on a further adjournment of the Review Conference; and ending the adjourned Review Conference without agreement. The conclusion was that the situation demanded efforts

focussing on agreement on a Final Declaration. The BWC Review Conferences have already developed, through Final Declarations, extended understandings which had begun to strengthen the regime; serious damage to this cumulative process was thought likely if the Fifth Review Conference failed to build upon this. Arguments for and against the Review Conference departing from tradition and taking a vote were also addressed, the position ultimately taken being that, while voting is best avoided, if it is necessary to rescue the Review Conference from the intransigence of one state, it should be adopted.

Subsequent discussion raised the idea that the US position might be fairly encouraging in terms of follow-up measures and might have developed somewhat in the last two months prior to the Review Conference. Compliance with the BWC was identified as a central concern of the United States, with debate focussing on whether anything since the Protocol, including the UK Green Paper, had dealt with the issue of compliance adequately. Other concerns expressed by the workshop included ensuring that discussion at the Review Conference meetings in future years was not limited to simply procedural matters. In more substantive terms, it was thought that, since the United States was unlikely to support measures agreed by a vote not going in its favour, the Review Conference might not be able to pursue measures requiring substantial financial resources to implement them. At a more general level, participants also discussed the nature and value of multilateralism and whether any outcome of the Review Conference was necessarily better than no outcome. A follow-up process would, however, at least keep the issues on the agenda and preserve national and international BW links. The impact of a hypothetical US withdrawal from the BWC was also discussed with respect to the impact on those States Parties who had deposited instruments of ratification with the United States, the conclusion being that this would not spell disaster; the UNDDA could probably take note of the ratifications and future States Parties could deposit instruments in London or Moscow.

The key issues for the resumption

Final declaration

A paper was presented to the workshop on the importance of a Final Declaration, underlining that, by the afternoon of 7 December 2001, the Final Declaration was said to be 95 per cent complete. The benefits of a Final Declaration, including the reaffirmation of norms, agreed extended understandings and a clear red-light to possessor states, were contrasted with the consequences and message sent if there is no Final Declaration. In short, it was stated that the

Review Conference needs to be seen to have progressed and that States Parties should act, using the vote mechanism if necessary. In discussion on this matter, one point raised in the workshop was that the content of previous final declarations would not, and should not, just disappear, meaning that there is not necessarily a need to simply reaffirm previous final declarations.

Future meetings

The workshop received a presentation on a realistic inter-Review-Conference Strategy, which outlined five strategies available to States Parties to strengthen the BWC and identified states as either 'reformist' or 'minimalist' in their approaches to the BWC. Analysing the strategies, it was concluded that agreement of a Protocol to the BWC could not be taken forward at the present time. The reformist agenda of establishing legally binding mechanisms was also thought to have come to an end for the time being, with no group of States Parties prepared to carry it forward. The third strategy of *ad hoc* and special measures, involving agreements outside the BWC, was thought unlikely to be able to generate agreement to raise one problem above all others by the States Parties as a whole. However, smaller groups of like-minded States Parties could address such an issue by mutual agreement. Fourth, external frameworks and measures outside the Treaty regime, such as concerted action within the European Union (EU) and export control regimes, were thought to offer some possibilities. However, there are dangers associated with this - measures outside the BWC might not be seen as strengthening the Convention itself, and such measures are unlikely to be truly multilateral and involve all States Parties - there will therefore not be an even implementation of obligations. Finally, the fifth strategy is to pursue politically-binding agreements and obligations. While this approach has proved useful in the past, the disadvantages include the quality of the measure itself (i.e. the lack of a legal obligation) and its nature as a fall-back mechanism.

In sum, only the external measures and politically binding measures were thought to offer a feasible strategy to strengthen the BWC before 2006. Any measures taken, however, need to be linked back to the BWC in order to demonstrate the strengthening of the regime. The necessity of meetings between 2002 and the Sixth Review Conference in 2006 was again highlighted, with the observation that such inter-Review Conference meetings were not uncommon in other regimes.

Following the presentation, the workshop discussed the need for care in relation to activities outside the BWC regime, in that they can create disconnects from the Convention. Some

activities that it was thought should be contemplated in respect of reinforcing the BWC regime included: member states using their good offices to push for ratifications to the BWC in the aim of universality; member states abandoning their existing reservations to the 1925 Geneva Protocol; and the importance of continuing CBMs and declarations. The concern was also raised that States Parties' expanding programmes on biodefence, while initially innocent, may lead to operational planning.

A paper was also presented on follow-up to the Fifth Review Conference. For there to be considered to be at least a minimum result from the Review Conference, it was considered that there would need to be a Final Declaration and follow-up meetings, making mandatory the most important CBMs, such as biodefence programmes and vaccine producers, agreement on the extended CBMs from November 2001 and some form of permanent UN office or official to handle these items. Other areas that it was thought needed to be addressed further included: the possibility of a framework Convention banning bioterrorism, linking proposed legislation on the criminalising of CBW, the Convention on the physical protection of dangerous pathogens etc; involvement in discussion of the biotechnology and pharmaceutical industry; increasing States Parties' confidence in terms of biodefence programmes; initiating discussion on an international licence/certificate for scientists; and scientific discussion of US and other proposals, such as the UK Green Paper. It was noted that the Swedish Pugwash group would be prepared to promote meetings taking an initiative in one or several of these areas.

Considerable subsequent discussion amongst workshop participants focussed on CBMs, with a challenge being raised as to the value of CBMs and perceptions that they are neither accurate nor complete. In particular, the argument was made that the role of CBMs should be re-evaluated now that there will be no BWC Protocol, one concern being that they are only politically binding. In response, it was suggested that if all the EU states submitted CBMs, as called for in the EU list of concrete measures, and if the Andean Community did likewise, having identified the importance of CBMs, this would move CBMs from being a piecemeal measure to something of more value - allied to this was the suggestion of having an individual responsible for collating and arranging for translations of CBMs. Others observed the domestic utility of CBMs, for example in the United States, by keeping all relevant activities, including any which might be questionable, ventilated through national information channels between those working on biodefence and those implementing the BWC within the US administration. CBMs were

acknowledged, by their very nature, to be unable to address all the suspicions of foreign states, because all of the information provided comes from the State Party. However, they remain of value through providing potential explanations for possible suspicions before they are expressed and through the fact that they go on record.

Given the failure of the Protocol negotiations, CBMs were thought by some to be more important than they were previously and that States Parties should be encouraged to implement and enhance them. States could emulate Canada in unilaterally adopting extended CBMs or post their CBMs on the internet, as Australia has done. One point made was that a sharp distinction should not be drawn between what is done inside and outside the Convention, noting that Canada's actions in respect of the extended CBMs would not be thought to be outside what had been agreed by States Parties. For example, there is no reason why individual States Parties should not help each other to extend their CBMs or to co-operate in terms of national implementation; these actions would not be "outside" the BWC.

Taking stock, including the role of civil society

Reiterating the value of taking stock in terms of assigning priorities for the future, the workshop heard a presentation emphasising state actors as the major engine in the biotechnology field. States, rather than non-state actors, were thought to be most likely to set the course of the future because of their ability to reinterpret and change norms. Analysing both tyrannies and democracies, tyrannies were thought to be potentially interested in both lethal (for external conflicts) and less than lethal (for internal use) technologies, while democracies were considered more likely to be interested in non-lethal weapons (NLW). Concern was expressed about the unclear legal status of NLW.

The presentation then turned to topics which might require attention in terms of state conduct in the coming years. It was considered that efforts toward universality, and the withdrawal of Geneva Protocol reservations, were necessary, while increased disease surveillance efforts should be left entirely in the hands of the WHO and national and regional authorities. In respect of the introduction of Codes of Conduct, concerns were raised that, while worth having, they could absorb much time and effort; however, they could help to promote the necessary education about prohibited activities. National criminal legislation was thought of lesser importance in deterring state action, as were national controls on pathogens. The difficulties of oversight of genetic engineering were highlighted, while the importance of revised and extended CBMs was

again emphasised. Assistance in the event, or threat of use, of BW was thought necessary, as was a new Convention to criminalize CBW - such a Convention must apply to state acts and include the use of non-lethal chemical or biological agents prohibited by the CWC and BWC. However, care needs to be taken to ensure that there are no gaps between the definitions of CW and BW in such a Convention and those in the CWC and BWC. A new Convention on physical protection of dangerous pathogens could also be considered of use to limit the shipment of dangerous agents.

The importance of education and understanding of the terms of the Convention was noted.

Workshop participants agreed on the necessity of outreach and education in the CBW arena to combat the lack of understanding, with the suggestion raised as to whether there might not with advantage be a BW equivalent prior to the Sixth Review Conference of the IUPAC workshop held in Bergen in July 2001 on the impact of recent developments in science on the CWC.

Much discussion followed on the value of Codes of Conduct. Some participants considered them mostly ineffective, noting war crimes by Nazi physicians and the activities of the Japanese Unit 731 and concluding that politics often trumped morality. Thus, while of long-term use in education and articulating norms, Codes of Conduct should not be viewed as an end in themselves. Others, while agreeing that they are not necessarily of deterrent effect, observed that a declaration was issued to Japanese doctors involved with Unit 731 that Japan's interests required them to put aside their moral code, thus implying that a Code of Conduct did have some moral strength. One issue is whether it would be possible to have a universal harmonised code, or whether a Code would have to be national and culture-specific. Previous efforts and suggestions in respect of Codes of Conduct were noted by the Group, and it was emphasised that any Code of Conduct should be kept simple and should be generated within the scientific community, rather than dictated from outside. The workshop noted that the Tóth proposal included Codes of Conduct as the item for discussion by States Parties in 2005.

The issue of universality was also dwelt on by the workshop, with some participants considering that the negotiation of the BW Protocol could have been a distraction from implementation of the BWC and efforts towards universality. While it was conceded that there had not been a formal concerted process by States Parties as a whole towards universality, the efforts of the EU and states such as Australia were noted. A possible drawback from universality was, however, also noted, with observations made that one State Party which had been required to ratify the BWC

had contributed to the thwarting of consensus decision-making, as occurred at the 1996 Review Conference; this point caused some debate within the workshop. While the negotiation of the Protocol was not universally viewed as a possible distraction, it was considered that issues such as universality and CBMs, which would have been taken into account by the Protocol, now needed renewed attention.

Clarification was sought as to the current legal effect of reservations to the Geneva Protocol, given that the prohibitions contained within the Geneva Protocol have entered into customary international law. It was considered that the norm reflected state practice and centred on non-use under the Geneva Protocol - removing reservations would thus strengthen the norm. The disparity was noted between the BWC, which prohibits development, production and stockpiling BW, and reservations to the Geneva Protocol which implies a right to use BW in certain circumstances and thus to retain BW stocks. Accordingly, there is a need to withdraw reservations to the Geneva Protocol to remove the contradictions. It was observed that the Final Declarations of the Third and Fourth BWC Review Conferences had reiterated the importance of removing reservations to the Geneva Protocol.

One point raised in discussion was the importance of making a distinction between how to prevent further deterioration of the BWC Review Conference situation in the next two weeks and how to strengthen the regime in general. In the long term, it was emphasised that, since the end of the Cold War, the traditional arms control community needed to expand its horizons and talk to other communities, including NGOs.

The workshop heard an analysis of why the United States no longer supported the Protocol, examining the three reasons that the United States had given: that it was inadequate to detect covert proliferation; that it would unacceptably jeopardize commercial proprietary secrets; and that it would endanger the US biodefence program. None of these was considered an adequate explanation. The presentation hypothesised that the US government views global CBW proliferation as inevitable, and highlighted the likelihood that the United States is developing military applications of biotechnology, a slippery slope which, it was considered, others may follow and from which there may be no reversal. The workshop noted a US mentality of unilateralism, rather than multilateralism, and an opposition to legally-binding (rather than politically-binding) instruments. Observations were made that it may not be correct to talk of a

single, coherent, US policy. At this stage, the US programme is probably best characterised as biodefence, rather than containing offensive elements.

A report was then made to the workshop on research conducted, under the Freedom of Information Act, over the last 18 months into the US Joint Non-Lethal Weapons Directorate (JNLWD) programme. JNLWD programmes have, apparently, been underway since 1995. While there has been an increase in media attention on this issue in the United States since the Moscow hostage crisis, proponents of NLW were said to have used the events in Moscow as a rationale for needing better research.

Following this, the concept of a "lethal" weapon was explored. It was stated that the lethality of a weapon is measurable and determined more by its use than its inherent nature, whether conventional or non-conventional. Thus, the argument was presented that using "lethal" and "non-lethal" labels for weapons could sanction the use of NLW. The dangers of NLW in armed conflict were highlighted, including the possible erosion of international humanitarian law and the increase in lethality in warfare. It was considered that a better phrase than NLW would be "new weapons", as these are required to be subjected to legal scrutiny under Article 36 of Additional Protocol 1 to the 1949 Geneva Conventions.

Substantial discussion then centred on the issue of NLW. One item of interest to participants included the date when US NLW programmes commenced, some stating that it (referring not so much to CBW weapons as to other forms of NLW) had originated in the early 1990s. As an explanation for why the US withdrew support for a Protocol, the stated existence of US agencies with projects which "raised questions" was noted. A distinction was drawn between international armed conflict and law enforcement situations; it was, however, noted that states often frame armed conflict as law enforcement situations, which can allow human rights abuses. It was observed that the BWC uses the broad language of "hostile purposes", which would surely mean that any type of weapon, lethal or non-lethal, fell within the scope of the treaty. One concern in respect of non-lethal CBW weapons (for law enforcement purposes) is that they may justify the development of munitions to deliver toxic or infective agents, thus making it difficult to distinguish between legal and illegal military programmes.

Much attention again focussed on the use of gas in the Moscow hostage crisis. Issues raised included: the usefulness of the general purpose criterion and the concept of "intent" in respect of NLW; whether there had been a violation of the CWC; the use of NLW in enhancing the

subsequent use of conventional weapons (i.e. the shooting of the hostage-takers) and inviting an escalation of conflict in battle; and, in general, the need for NLW to be put on the international agenda. Attention was drawn to Article II of the CWC, which includes law enforcement under the definition of "purposes not prohibited", and various prohibitions in the CWC, including the prohibition on engaging in military preparations to use CW. Pharmacological information was also provided to the workshop regarding the predictability of mortality in cases where someone is aiming for 90-95 per cent incapacitation by a gas.

The role of civil society

The workshop was updated on a new initiative, the BioWeapons Prevention Project (BWPP), created by concerned NGOs in the wake of the premature closure of the BWC Fifth Review Conference in 2001. The organisations involved in the BWPP are the Department of Peace Studies at the University of Bradford, VERTIC, BASIC, FAS, the Graduate Institute of International Studies (PSIS), the Harvard Sussex Program, INES and the Centre on Conflict Resolution in South Africa. The aim is to create a global network of organisations interested in bioweapons prevention. One facet of the project will be the regular publication of a *BioWeapons Monitor*, including reports on government compliance and international and national initiatives and information on BW. The initiative was launched in the Palais des Nations on 11 November.

Topics for future meetings of the States Parties

The workshop then turned to topics for future meetings of the States Parties to the BWC, including: universality and withdrawal of Geneva Protocol Reservations; increased disease surveillance efforts; Codes of Conduct for professional bodies; national criminal legislation; national controls on pathogens; oversight of genetic engineering; revised and extended CBMs, assistance in the event of, or threat of use of, BW; a new Convention to criminalize CBW; a new Convention on physical protection of dangerous pathogens; and other subjects.

Having already discussed universality and Codes of Conduct in some detail, the group noted a proposal for a joint initiative by the depositaries of the BWC, the Geneva Protocol and the CWC, with the UNDDA preparing an annual regional tabulation of membership. Attention was also drawn to the FAS Working Group paper on *Recommendations for a Code of Conduct for Biodefence Programs* due to be issued and the need for serious discussion on how biodefence activities should be conducted.

The workshop received a presentation on the WHO's overall strategy for dealing with BW. In May 2002, the issue of CBW was addressed by the World Health Assembly and the Executive Board, resulting in a resolution (WHA55.16) endorsed by 191 member states and calling for action by member states and activities by the WHO in respect of preparedness for CBW attacks. It was reported that the WHO already has a strategy within which CBW is addressed, the *Global Health Security: Epidemic Alert and Response*. This is based on a global partnership and the WHO "network of networks" approach. There are three pillars to the strategy: (i) to contain known risks (epidemic diseases); (ii) to respond to the unexpected; and (iii) to improve preparedness. Amongst the measures pursued by the WHO are development of national action plans for surveillance and early warning systems, strengthening laboratory capacity, the UN Disaster Management Training Programme which has a training module on terrorism, and developing systems for using informal information and intelligence. WHO is working on updating the legal framework, currently contained in the 1969 International Health Regulations and covering only three diseases. The plan is that a revision of the International Health Regulations, containing revised and updated core concepts, will be presented to the WHA in 2004-2005.

The workshop agreed that the WHO should not go outside its humanitarian mandate to venture into verification or security tasks, as this might jeopardise its neutrality. Concerns were also raised as to the preparedness of the other international organisations such as FAO and OIE for deliberate attacks on animals and plants. It was noted that the FAO and OIE do not yet have the mandate from member states that the WHO has.

The ICRC appeal on Biotechnology, Weapons and Humanity, launched in September 2002, was outlined for the group, as were the public health principles that can be implemented to limit deliberately spread diseases, the thesis being that deliberately spread diseases equate to the effects of armed violence. It was emphasised that no single measure would be effective on its own - there is, instead, a need to merge a web of prevention with a web of deterrence. The need for plant and animal disease surveillance was also noted.

On national criminal legislation, it was noted that VERTIC is conducting a survey, given the lack of a central collection of public information regarding domestic implementation of the BW prohibitions. A questionnaire has been issued to governments on the topic, but so far only 11 responses have been received. In addition to this, VERTIC has been able to collect information

through other sources on 65 countries, of which 15 were reported to have fairly comprehensive legislation. VERTIC has also been collecting the texts of legislation, which it hopes to publish as an annex to its report, due out in February 2003. The report will be published in the first edition of the *BioWeapons Monitor*. As a result of this survey, the need was identified for legal assistance in drafting legislation, particularly from regional groups. Separately, the EU was also reported to be exploring this issue.

In discussions on national controls on pathogens, participants observed that the definition of a "pathogen" was difficult and that, given time, it was possible to isolate almost any pathogen save smallpox. The proposal is for health authorities to augment the rules on controlling access to pathogens within a state.

When looking at oversight of Genetic Engineering, the term "GE" was thought too narrow by some participants, who considered that it should include genomic techniques also - another suggestion was "molecular biotechnology". The activities and regulatory legislation underway in the United States were discussed, including those attempting to control access of students of some nationalities to laboratories - concerns were raised as to how to conduct oversight of GE without infringing human rights. There needs to be a balance between regulation and safety controls on the one hand, and academic and industry freedom to research. One proposal was for an international database of all scientists working in the field of genetic engineering. The different levels of physical security requirements for plant and human pathogens were noted. On CBMs, the current method of submission and collation of CBMs, and the lack of a database, is inadequate and of limited usefulness to States Parties. Suggestions were for CBMs to be provided on a secure website, or by disk for distribution to States Parties, or for states to put them up on the internet, as Australia had done. However, some State Party governments have made assurances to firms submitting data that the declarations would not be made public. That it is, however, in general possible for declarations to be made public was thought clear from the Ottawa Convention, under which Article 7 transparency reports are submitted electronically to the UNDDA and then published on the internet. The South African proposal for mandatory CBMs was noted, as was the opposition to this by NAM and, given the failure of the Protocol negotiations, the likelihood is that this proposal will not be taken forward at the present time. In discussions on assistance in the event of, or threat of, BW, it was noted that Article X of the CWC provides for assistance to be provided to states, rather than victims. It was also clarified

that the Technical Secretariat in The Hague is not the body which provides assistance; rather, it is up to member states who have offered assistance, the Technical Secretariat facilitating this and communicating needs. The ICRC was also reported not to be trained or equipped to deal with the use of CBW, though some certain quantities of drugs are available. Some participants expressed concern that nothing similar to Scorpio, which had been available during the first Gulf War, was available today to assist in the event of, or threat of, BW.

One benefit of a Convention to criminalize CBW was thought to be that it makes individuals in governments accountable. In terms of how to take criminalization forward, one suggestion was for the EU to take this to the Sixth Committee. Others thought this should be done outside the Sixth Committee, and without inviting the US to participate, so that it could not be blocked at an early stage. Another possible new Convention discussed was on the physical protection of pathogens. One issue identified was the relationship of this proposal to the Convention on Biological Diversity and the Cartagena Biosafety Protocol.

Finally, a presentation was given on an agenda for the future, in which the presenter highlighted a paradigm shift from weapons elimination to the suppression of proliferation. Actions in support of the existing BWC regime, and those in support of a future legally-binding instrument were explored, as were questions for a future research agenda. One question raised was how to progress without an "OPBW" or small international organisation with a physical structure to shoulder the burden.

The future work of the Study Group

A number of items were identified by participants that might be addressed in future Study Group meetings. These include: education; the role of civil society; domestic and international law; CBMs; regional and cross-regional measures and co-operation; verification and the BWC; the relationship between the BWC and the CWC; "Non-Lethal" weapons; lessons from events in Iraq; making use of the Protocol negotiations; and policing and self-policing of the scientific community.

The next meeting of the Study Group is planned for 26-27 April 2003, in the Netherlands. The workshop will directly precede the First Special Session of the Conference of the States Parties to review the operations of the Chemical Weapons Convention (the First Review Conference) to be held over a period of two weeks in The Hague.

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