

PSGICC-10: The BWC Protocol negotiation: unresolved issues

Geneva, 28-29 November 1998

Rapporteurs' Summary by Daniel Feakes

This was the fifth of the current Pugwash CBW workshop series, held in collaboration with the Harvard Sussex Program, to be hosted by the Swiss Pugwash Group. Financial assistance was provided by the Swiss government and by the Canton of Geneva. The meetings were held in the premises of the Graduate Institute of International Studies, University of Geneva. [Participating](#) by invitation were some 33 people from 13 countries (Brazil, China, Germany, India, Iran, Israel, Italy, Japan, Nigeria, 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.

In its discussions the workshop focused on the negotiations for a legally binding protocol to strengthen the Biological Weapons Convention (BWC) which are being conducted by the Ad-Hoc Group (AHG) in Geneva. The main topic of discussion at the workshop was those issues upon which final agreement has not yet been reached, the so-called unresolved issues. The discussions were greatly facilitated by the presence of a number of AHG delegates who gave their views on the current status of the negotiations. The workshop heard that during 1998 high-level political impetus had been building in support of the negotiations in the AHG, but it was noted that this momentum needed to be reflected in the progress of the AHG itself. Focusing as it did on the unresolved issues the workshop highlighted the many difficult issues which still face the negotiators before a final version of the verification protocol can be agreed.

A great deal of discussion in the workshop concentrated on the compliance measures which are included in the current draft of the verification protocol. The workshop was told that an integrated package of compliance measures should include national declarations, visits and investigations. However, it was apparent from the accompanying discussion that on a wide range of conceptual and technical issues relating to compliance measures delegations held divergent views. Discussion then moved on to the likely shape and structure of a future BWC organisation and the lessons which the evolution of the Organisation for the Prohibition of Chemical Weapons (OPCW) could have for a BWC organisation. The discussion was helped by the presence among the participants of a number of OPCW staff members. The workshop also considered some other unresolved AHG issues, including non-transfer measures, the national implementation of the protocol and international cooperation. The workshop finally considered the future prospects for the AHG. It was suggested that a window of opportunity exists to finalise the negotiations during 1999, although some participants felt that there might not be sufficient negotiating time to address all the remaining unresolved issues during 1999.

Reports from international CBW bodies

As is the custom within the Study Group, the workshop opened with reports on the work of international bodies relevant to the implementation of the CBW conventions.

The BWC Ad Hoc Group

The workshop heard that at its most recent session (its twelfth) the AHG had agreed to convene five sessions during 1999 - in January, April, July, September/October and December. This amounts to 16 weeks of negotiating time, compared with 11 weeks in 1998, reflecting a perceived sense of urgency among national delegations. The twelfth session of the AHG produced a new version of the rolling text {BWC/AD HOC GROUP/43, 15 October 1998} incorporating the work of various friends of the chair. However, there are still a large number of square brackets in the rolling text, therefore some of the friends of the chair have produced "clean-text" versions of various protocol articles containing proposals for the removal of square brackets. These texts are reproduced in Annex IV to the AHG's latest procedural report. This annex is seen by some as a positive development as it indicates progress towards a final draft of the protocol. However, the annex is considered to be an alternative text by others who argue that consensus on a final draft will not be reached until all the unresolved issues in the rolling text have been addressed. It was suggested that an opportunity exists for the completion of the negotiations before the attention of national arms control experts is occupied by the NPT Review Conference in 2000 and before the BWC Review

Conference in 2001. However, other participants doubted that this was a realistic proposition considering the number and complexity of the unresolved issues.

The workshop then heard a range of practical suggestions for ways in which the AHG could advance its work. Among these was the idea that the biotechnology and pharmaceutical industries should be much more closely involved in the negotiations, thereby enabling them to be better informed about the detail of the emerging protocol and encouraging their interaction with delegates. Of the 141 States Parties to the BWC it was noted that only around 60 regularly send delegations to attend AHG sessions. In order to encourage the universality of the future verification protocol it was suggested that regional meetings be convened to increase awareness of the negotiations. It was also suggested that research institutes and non-governmental organisations could be encouraged to interact more frequently with the AHG delegates. As for the working methods of the AHG itself it was recommended to move away from the production of an ever-longer rolling text and towards a more focused negotiating format under which the rolling text is pruned and square brackets removed. Such a move, the workshop heard, should be encouraged by political initiatives taken by individual countries such as the sending of high-level officials to attend AHG sessions.

The OPCW

The workshop then heard a report on the progress in implementation of the Chemical Weapons Convention (CWC) and the challenges which face its implementing body, the OPCW. With 121 States Parties the CWC is already a widely supported international treaty but efforts are underway to increase the membership of the OPCW still further. However, in a number of regions this has proved to be particularly difficult (for example in the Middle East and central and southern Africa and with respect to individual countries such as North Korea and Yugoslavia). The workshop was told that States Parties to the CWC are under two principal obligations - to submit accurate declarations to the OPCW and to receive inspections. On the subject of the declaration regime it was stated that the timelines laid down in the CWC were too short, which partially explains why only 84 States Parties have submitted their initial declarations. In the OPCW's experience the submission of incomplete declarations and those with omissions and mistakes has not been a major problem because mechanisms exist to deal with such situations. A more significant problem was caused by the absence of the USA's industrial declarations. During 1998 chemical industries outside the USA which were receiving inspections called on their governments to take action to ensure that American companies did not gain an unfair competitive advantage from this situation. On a positive note, the workshop heard that the US Congress had recently passed the required implementing legislation, although internal regulatory procedures mean that US industrial declarations still might not be submitted until late 1999. Turning to inspections the workshop was told that States Parties had been able to influence the CWC's inspection regime through adjustments to the OPCW's budget for inspection activities. Within the OPCW a culture of understanding has developed for the problems experienced by the declared chemical weapons possessors and the delays in the destruction programmes of some of these possessor states are not considered as a critical issue at the present time.

The workshop heard that the credibility of the CWC's verification regime is still not as strong as some would like. One reason is that many States Parties feel that not enough scrutiny has been applied to the results and effectiveness of verification activities. The mechanism for disseminating information on the results and effectiveness of verification activities to States Parties for their own analysis has not yet been perfected, especially as regards inspection results. Debate is currently ongoing as to what information should be disseminated to ensure that the principles of transparency and confidentiality are respected. Secondly, the workshop heard that it has become apparent that some States Parties are trying to re-interpret CWC provisions relating to inspection procedures, for example on the inviolability of notes taken by inspectors and by placing restrictions on the off-site analysis of samples. Regarding Articles X and XI of the CWC which relate to assistance and international cooperation the workshop heard that after a slow start their implementation is also now underway. Pledges of assistance made by States Parties under Article X have mainly been very vague and the Technical Secretariat is now discussing details with the relevant States Parties. A number of specific promotional programmes have been launched under Article XI. It has been possible to some extent to decouple these programmes from the wider political issue of export control regimes.

OPCW Scientific Advisory Board

The workshop also heard a report on the establishment of the OPCW's Scientific Advisory Board (SAB). Although the CWC entered into force in April 1997 the SAB was not established until July 1998 and only held its first meeting in September 1998. The workshop was told that this delay reflects the fact that there is still a degree of controversy as to whether such a body is necessary and also reflects the OPCW's initial focus on short-term implementation related issues rather than long-term scientific matters. The OPCW experienced numerous difficulties in selecting the members of the SAB. Rather than being chosen directly by the OPCW Director-General, he had to select appointees from nominations submitted by States Parties. Initially, the nominees lacked a sufficiently broad

range of knowledge and experience. When making his selection, the Director-General also had to pay attention to the principle of balanced regional representation. The 20 nominees eventually selected to serve as members of the SAB have extremely varied backgrounds. The workshop was told that three issues have been referred to the SAB by States Parties. The Director-General himself has referred a further two issues to the SAB, and its members have decided on their own initiative to address a sixth issue. To address these issues four temporary working groups have been established. The workshop was told that these groups would conduct the substantive work of the SAB, while the full Board would meet only once or twice a year.

Some workshop participants expressed their concern at developments which appear to undermine the independence and credibility of the SAB. There is a danger that the SAB could be used by States Parties as a means of putting off decisions on difficult issues and that the questions put to the SAB would be phrased to elicit a particular answer. The workshop was told that it is up to the SAB to defend its credibility and that, if necessary, it is able to state that it does not believe there is a scientific case to answer. The workshop also heard that the terms of reference of the SAB had been drafted in such a way by States Parties that they could be seen as restricting the Board's independence. This has been done mainly through the financing of the SAB - the terms of reference provide no funding for meetings of the SAB's temporary working groups, only for one annual session of the full SAB. One important area in which the SAB is beginning to work and is able to take its own initiative relates to changes in the Schedules of chemicals covered by the CWC. The workshop heard that the question of whether the BWC protocol should include provision for a similar body and whether it faces the same challenges as the SAB is not really a matter of science and technology, but is more dependent upon political and legal considerations.

UNSCOM

The next report heard by the workshop concerned the recent activities of the UN Special Commission on Iraq (UNSCOM) and its increasingly difficult relationship with the Iraqi government. Although UNSCOM has successfully demonstrated Iraqi non-compliance and has had further recent successes in uncovering Iraqi chemical, biological and missile programmes, its work has become increasingly politicised and many of the key issues relating to the elimination of Iraq's weapons of mass destruction (WMD) programmes have become blurred. The workshop heard that over a period of 18 months four international reviews of Iraq's declarations on biological weapons have been undertaken, each of which has reached the conclusion that the information provided was inconsistent and that the declarations could therefore not be verified. With respect to the biological weapons programme it was shown that Iraqi declarations contradicted each other and were not consistent. On the chemical weapons side, the recent sampling and analysis of shells filled with mustard gas, showing 94-97 per cent pure agent, undermined Iraqi claims that all its agents had degraded and the analysis of samples taken from missile warheads invalidated Iraqi claims that it had never weaponised VX. However, workshop participants expressed some surprise that UNSCOM does not appear to have followed some of the basic principles of forensic work when analysing the warhead samples. The workshop was told that UNSCOM's strategy is based on concentrating on the verification of Iraq's advanced capabilities in order to have confidence in its other less advanced capabilities.

Despite UNSCOM's recent technical successes, the workshop heard that its role was being undermined as its work became increasingly politicised. A number of workshop participants argued that politicisation was inevitable as soon as UNSCOM became an enforcement rather than monitoring operation and that judgements of compliance are always going to be political. Some workshop participants questioned whether the style of UNSCOM's new Executive Chairman and its investigations of what Iraq regarded as sensitive sites such as its secret service apparatus were partly to blame for the breakdown in relations. However, others considered that Iraq's continued demonstrated unwillingness to cooperate fully with UNSCOM was the main stumbling block. They observed that the secret service apparatus had been in UNSCOM's focus primarily because of its central role in Iraq's heavily resourced concealment efforts, the investigation of which had necessarily been ordered by the first Executive Chairman of UNSCOM. The workshop was told that increasing politicisation has also been reflected within the UN Security Council where discord amongst the P-5 on the way to deal with Iraq has grown. The report to the workshop concluded that UNSCOM's increasing success in uncovering Iraq's WMD programmes had forced the Iraqis to take more determined action to thwart its work. Alongside the refusal to cooperate with UNSCOM, this approach also includes trying to convince the world that it has abandoned its programmes without providing the UN with the information to verify these claims. It was widely accepted by participants at the workshop that Iraq had an elaborate deception plan in operation and that only a political decision by the Iraqi government could finally end the WMD programmes. Workshop participants suggested that the UNSCOM experience holds a number of lessons for the BWC protocol, for example on the importance of a forensic approach in sampling and analysis, although others pointed out that while UNSCOM is about disarmament, the BWC protocol is about prevention.

International criminalisation of CBW

The last report updated participants on developments in the field of international law which relate to chemical and biological warfare. The workshop was told that since 1995 the Harvard Sussex Program has been studying ways in which the principles of international criminal law could be applied to violations of the CWC and BWC. After taking advice from an international group of legal authorities the Harvard Sussex Program has produced a draft convention which would make it an offence for any person, regardless of official position, to order, direct or knowingly to participate or render substantial assistance in the development, production, acquisition, stockpiling, retention, transfer or use of biological or chemical weapons or to threaten the use of such weapons. This formulation goes beyond the provisions of the 1998 Convention for the Suppression of Terrorist Bombings or the Statute of the International Criminal Court (ICC) and, in that it applies to individuals rather than states, it also strengthens and augments the CWC and BWC prohibitions. The workshop noted that the obligation which the proposed convention would place on its States Parties, to establish criminal jurisdiction and to extradite or adjudicate, is not unprecedented and is already included in a number of widely supported international conventions. By applying international criminal law to hold individual offenders responsible and punishable for violations anywhere in the world, the proposed convention would make such people *hostes humani generis*, enemies of all humanity. This would thus strengthen the international and cross-cultural norm against chemical and biological weapons and would deter potential offenders, whether official or unofficial.

The workshop heard that the proposed convention would be published in the December 1998 issue of the *CBW Conventions Bulletin* and discussed at conferences and in private meetings with senior officials of governments and international organisations. The sponsorship of a number of states would be sought to introduce a resolution in the UN General Assembly referring the proposed convention to the Sixth Committee for the negotiation of an agreed text. Following such a negotiation the workshop was told that the agreed text would be submitted for the commendation of the General Assembly and thereafter opened for signature. A number of workshop participants expressed interest in the proposed convention, although some were sceptical as to whether it would actually succeed. On a practical level it was pointed out that very few States Parties to the CWC had carried out their obligations with respect to national implementation and that there was very little impetus within the AHG to strengthen the penal provisions of the BWC. Participants wondered whether such a convention would divert attention from the implementation of the CWC and an eventual BWC protocol. Other participants asked whether the CWC, BWC and ICC statute did not already adequately address the crimes under discussion. More general concerns centred on designing the proposed convention so that it was able to keep pace with changes in technology and whether the proposed treaty might buttress the hegemony of those states which possess nuclear weapons.

Compliance measures

Moving on into its main agendum, "The BWC Protocol Negotiation: Unresolved Issues", the workshop was told that the essential elements of an effective verification regime - declarations, visits and investigations - are included in the current rolling text and received a detailed overview of the current status of each element from observers and from some of the AHG delegates present. However, it became clear during the course of the discussion that major conceptual and technical issues are yet to be resolved within the AHG.

Declarations

On the subject of declarations the workshop heard that the principal aim is to have declarations from those facilities of *most* relevance to the BWC, not from all facilities of *possible* relevance. To facilitate this the AHG is working on a list of declaration triggers. Although attention in the AHG is now focusing on the information to be provided by States Parties in declarations it is apparent that there are divergent views within the AHG on whether declarations should include detailed facility information or only minimal information. Most workshop participants agreed that declaration requirements must be unambiguous, including where appropriate definitions of specific terms and list of agents to be declared. In order to avoid the problems experienced by the OPCW with regard to low concentration thresholds, States Parties must be clear on what has to be declared to ensure there are no differences of interpretation. Another principle, and another lesson learnt from the OPCW, is to avoid overloading either States Parties or the BWC organisation with information.

The workshop was told that the rolling text provides for a range of clarification procedures between a State Party submitting its declaration and receiving on-site visits. Once submitted, declarations would be processed and analysed by experts at the BWC organisation. If any ambiguities are discovered within the declarations, the BWC organisation can raise the issue bilaterally with the State Party concerned. Other States Parties can also take up issues bilaterally or ask the BWC organisation to do so. Clarification procedures differ for declared and undeclared facilities, but both procedures share a graduated approach beginning with seeking clarification in writing from the State Party, through consultations at the offices of the national authority, and leading possibly to an on-site clarification visit. These graduated clarification procedures are similar to those incorporated in the CWC.

Visits

The workshop heard that on-site visits are considered by many to be an integral part of the verification architecture of a BWC protocol. The current rolling text includes provision for three types of visit - random, clarification and voluntary request. Of these, it is random visits which are currently the most contentious within the AHG and discussion within the workshop consequently focused on them. According to the October 1998 rolling text the purpose of random visits is limited to confirming that States Parties' declarations are consistent with their obligations under the BWC protocol. The number of random visits per year would be no more than 50 a year divided equally among the 5 regional groups with the qualification that no State Party would receive more than 10 visits in 5 years. Random visits would last for a maximum of 2 days and team size would be limited to 4 or 6 people. The report of the visit would be confidential. The view was expressed that provision for a number of random visits means that a State Party intent on violating the BWC protocol has to either hide the activity in a declared facility and take the risk of it being discovered, or has to make the immense effort to hide the activity at an undeclared location where it might be spotted by other means. The inclusion of random visits in the protocol would provide an incentive to States Parties to ensure that their declarations were both complete and accurate as they know they could be checked, which leads to another function of random visits, that of auditing already submitted declarations.

However, not all of the AHG negotiators yet accept the concept of random visits. The workshop heard that there are some in the biotechnology and pharmaceutical industries, notably the US pharmaceutical industry association PhRMA, who oppose the concept of non-challenge visits, while supporting the efforts being made in the AHG to strengthen the BWC. It was recalled that even with the active support of the Chemical Manufacturers' Association ratification of the CWC in the USA was difficult. In this light and with active opposition from PhRMA ratification of the BWC protocol in the USA could be almost impossible. However, both PhRMA and its European counterpart, EFPIA, support voluntary "familiarisation" visits to facilities. PhRMA and EFPIA suggest that such voluntary visits could have an educational role for inspectors, but argue that such visits must not aim at resolving questions about declarations. The workshop recognised the importance of gaining support from the biotechnological and pharmaceutical industries for the BWC protocol. On this point, workshop participants noted that the global biotechnology and pharmaceutical industries are not a homogenous bloc and that the negative attitudes of both PhRMA and EFPIA towards random visits are not universally shared.

Investigations

The October 1998 version of the rolling text also includes provision for three types of investigation - field, facility and Article III (non-transfer) investigations. Field investigations would address alleged uses of biological weapons, while facility investigations would cover any other alleged breach of obligations under the BWC. The third category of investigations would deal with concerns that a transfer had taken place in violation of Article III of the BWC. While the principle of investigations appears to be generally accepted amongst AHG delegates and the biotechnology and pharmaceutical industries, a number of practical issues remain unresolved. Particularly important is how to distinguish between natural outbreaks of disease and other outbreaks and the extent of the BWC organisation's role in monitoring natural outbreaks of disease. The questions of what information should be submitted with an investigation request and on the decision-making mechanism used by the Executive Council to decide whether an investigation should go ahead are, as yet, not finalised. Whether the decision to launch an investigation is based on a "red light" or a "green light" procedure will affect the chances of a request being approved by the Council. The workshop heard that another issue requiring further negotiation relates to how the transition from a field to a facility investigation might be effected.

The workshop also had a general discussion of the purpose of compliance measures under the BWC protocol. The workshop heard that the principal aim of verification is not to uncover the "smoking gun" itself but to uncover enough uncertainties and ambiguities about a State Party's compliance that action can be taken to rectify the situation. The BWC protocol should also include measures which make the task of hiding violations as difficult as possible, thereby increasing the chances that they will be discovered. However, it was also stated that the matter of following up on uncertainties, ambiguities and questions of non-compliance depends mainly upon the political will of the international community. On the negative attitude of American industry associations towards on-site visits, workshop participants recognised that there would be benefit from meetings arranged between those negotiating the protocol, industry representatives and in particular with chemical industry representatives whose members have been receiving on-site inspections with few problems for over 18 months.

The BWC organisation

Article IX of the rolling text deals with the establishment of an international organisation to oversee the implementation of the BWC protocol. It is widely accepted that such an organisation will be an integral part of the eventual protocol but a number of organisational issues remain unresolved. Two papers were presented to the

workshop on this subject. The first provided a detailed overview of the cost and structure of a BWC organisation including a spreadsheet program upon which the estimates were based. The paper outlined a baseline structure for a BWC organisation with a staff of 233 people and an annual cost of approximately USD 30 million. However, participants noted that the final size and structure of the staff of a BWC organisation also depends greatly upon questions of status vis-à-vis other international organisations and upon achieving an equitable regional balance among its staff members. The estimates in the paper were based on a wide range of parameters, including data from the OPCW, the predicted activities of a BWC organisation, the number of facility declarations, the number of visits and investigations, inspector capacity, sample analysis, administrative functions, auxiliary staff and salary scale. Based on the experience of the OPCW and estimates of the number of facilities to be declared under a BWC protocol, it was estimated that the organisation would employ around 70 inspectors carrying out approximately 100 visits per year.

The second paper observed the experiences of the OPCW during its first year and a half of operations. It noted, for example, the additional burden placed on declaration-processing by the lack of an electronic processing system and by the submission of a huge amount of declaration data with high classification. The paper emphasised the importance of factors besides those related directly to verification activities, in forming a realistic impression of the shape of an eventual BWC organisation. Such factors are primarily although not exclusively of an administrative and political nature. For example, the OPCW has become overburdened with legal work on agreements with States Parties and international organisations. Additionally, requests for the translation of documents into all six of the official languages are growing. It was noted that the 500 staff members of the OPCW cannot simply be divided between 200 inspectors and 300 administrative staff. Of the 300 most are verification experts and inspection planners, only around 100 are purely administrative personnel. The paper concluded that in the light of their close inter-relationship it would be logical for the BWC organisation to be co-located with the OPCW. However, it was recognised that while logical, such a solution is unlikely due to a range of political and even personal factors. It seemed at the time that there were currently three possible locations for the seat of the organisation, namely Geneva, The Hague or Vienna. Another question which has yet to be resolved by the AHG relates to the establishment of an international epidemiological network and whether it would be an integral part of the organisation.

International cooperation measures

Article X of the BWC is intended to promote scientific and technical exchanges while at the same time avoiding the hampering of economic and technological development. The AHG is currently working on devising institutional mechanisms to implement Article X and on the encouragement of cooperative relationships between States Parties and between the BWC organisation and other relevant international organisations. Specific measures being considered include strengthening disease surveillance, the promotion of biosafety and national regulations, the improved national control of pathogens and the promotion of pharmaceutical good manufacturing practices. It was emphasised that the BWC protocol must provide benefits for both developing and developed countries. Some workshop participants stated that only with a strong international cooperation pillar would the BWC protocol be able to achieve universality.

Non-transfer measures

The workshop heard a brief report on the status of the AHG negotiations on measures to improve the implementation of Article III of the BWC which deals with the non-transfer of agents, toxins, weapons, equipment and means of delivery. It was reported that the rolling text incorporates guidelines for the submission of information by States Parties on transfers of dual-use microbial and other biological agents, toxins and equipment. Under these guidelines States Parties would be obliged to provide to the BWC organisation information on the transfer of specific agents/toxins, equipment for use in a BL-4 facility and technology related to delivery systems. The rolling text also states that transfers of such items to non-States Parties require prior approval. It also obliges States Parties to submit to the BWC organisation information on their national laws and regulations relating to the transfer of equipment. The workshop heard that there are a number of national, regional and international precedents for restrictions on the transfer of certain items. Nationally, the USA and many European countries have implemented regulations, while the EU has regional controls in place. There are also a number of relevant multilateral regimes, for example the import-export mechanism for transfers to Iraq, the Prior Informed Consent procedure for banned and severely restricted chemicals and an advance informed agreement on the transfer of living modified organisms is imminent, the workshop was told.

National implementation measures

The workshop was told that the BWC protocol has to be legally binding nationally to be effective. Both the BWC itself and the rolling text make provision for national implementation but it was reported that the language currently included in the rolling text is actually weaker than that in the CWC. The sections on penal legislation and on the

establishment or designation of a national authority are still within square brackets, indicating that mutually agreed language is yet to be found. The workshop heard that the experience of the OPCW shows that national measures have been enacted variably and slowly by States Parties (of 121 States Parties to the CWC only 40 have submitted information on their national implementing measures). It appears that the AHG has yet to learn from the experience of the OPCW.

The workshop also heard that national measures are an important part of the regime to control dual-use technology under both the CWC and BWC. The CWC's mechanism for dealing with the dual-use problem rests on four elements: the general purpose criterion; national measures; international declarations; and an international inspectorate. To date most attention within the AHG has focused on the international measures (such as declarations by States Parties to the BWC organisation and inspections by the organisation). However, the workshop was told that national measures have a vital role to play in controlling dual-use technologies. The workshop noted that the CWC requires strong national authorities and obliges States Parties to take measures allowing the national authorities to collect information from their chemical industries in order to implement the stipulations of the treaty throughout the scope of the general purpose criterion. Despite the importance of national measures, especially for the control of dual-use technology, the AHG appears to have neglected their consideration, perhaps because of focusing on other elements of the protocol.

Other elements of the regime

The workshop held a brief discussion of the role which definitions of terms and of lists of agents should play in the BWC protocol. Some participants warned that care needed to be taken to ensure that such definitions and lists did not limit the scope of the BWC protocol, or of the BWC itself. Others made the point that definitions and lists would not restrict the scope of the BWC and its protocol but would be used purely to facilitate the practical implementation of the protocol. For example, definitions and lists of agents could be used in relation to national declarations to avoid there being any ambiguity about what States Parties are obliged to declare. However, the workshop heard that there is a lack of consensus on whether there is a further need for definitions and other uses of a list of agents, for example in disease outbreaks, or whether threshold quantities are needed. On the subject of confidentiality the workshop was told that the provisions of the BWC protocol are similar to those of the CWC.

Prospects for the Ad-Hoc Group

Views on the prospects for the AHG differed greatly among the workshop participants. Some considered that the progress achieved so far, combined with the increasing political momentum during 1998 meant that a window of opportunity exists for completion of the negotiations in 1999. It was pointed out that the move towards clean text in the annex to the current rolling text was a sign that the negotiations were entering their endgame. However, others were more pessimistic, highlighting the major issues which still need to be resolved and the apparent divergence between, and even within, some major delegations. It was noted that at a similar stage in the negotiations for the CWC there were far fewer conceptual differences between delegations and much more involvement by industry representatives.

The workshop recommended that the next meeting of the Study Group should take place in Noordwijk, the Netherlands during 15-16 May 1999. It should deal both with the implementation of the CWC, paying particular attention to industry experience, and with what implications that might have for the BWC protocol negotiation.

Participants

- Amb. Serguei Batsanov, Russian Federation
- Mr. Richard H. Burgess, USA
- Dr. Marie Chevrier, USA
- Brig. Gen. Raffaele D'Amelio, Italy
- Prof. Malcolm Dando, UK
- Ms. Silvana da Silva, Brazil
- Prof. Yadin Dudai, Israel
- Mr. Daniel Feakes, UK
- Prof. Christine Gosden, UK
- Mr. Jerome Hauer, USA
- Dr. Alastair Hay, UK
- Ms. Iris Hunger, Germany
- Dr. Goran Jamal, UK
- Dr. Martin Kaplan, USA/Switzerland

- Prof. Eduard Kellenberger, Switzerland
- Mr. Ian Kenyon, UK
- Mr. Taijiro Kimura, Japan
- Dr. Patricia Lewis, UK
- Col. (res.) Shmuel Limone, Israel
- Amb. Guennadi A. Loutai, Russia
- Mr. Douglas MacEachin, USA
- Prof. Maurizio Martellini, Italy
- Prof. Jack Melling, UK
- Prof. Matthew S. Meselson, USA
- Mr. J.S. Mukul, India
- Dr. Sola Ogunbanwo, Nigeria
- Prof. Graham S. Pearson, UK
- Dr. Alexander A. Pikayev, Russia
- Dr. Decio Ripandelli, Italy
- Mr. Julian P. Perry Robinson, UK
- Dr. Ralf Trapp, Germany
- Mr. Wang, P R China
- Mr. Bozorgmehr Ziaran, Iran

Working Papers

'Building a BTWC Organization: Some Observations from the OPCW', by Daniel Feakes (UK).

'International Criminalization of Chemical and Biological Weapons' by Matthew Meselson (USA) and Julian Perry Robinson (UK).

'Is the BWC Protocol Rolling Text Dealing Adequately with the Problem of Dual Use?', by Julian Perry Robinson (UK).

'The BTWC Protocol: Progress and Unresolved Issues' and 'UNSCOM: Another Year', Copies of transparencies presented by Graham S Person (UK).