

This will be the first meeting of the new Commissioners as elected by the third session of the Conference.

Future work

Unresolved issues Although a number of issues were either resolved or removed from the list of unresolved issues by the third session of the Conference, there are still a substantial number which are still under facilitation in the Committee of the Whole (CoW). The CoW met on 28 January to review progress since the third session of the Conference and to prepare for the intersessional period ahead. As a result of the fourteenth session of the Council two issues have been fully resolved and aspects of two more have been addressed. However, 26 issues are still under facilitation by the CoW. Of these the drafting of guidelines on the usability of old chemical weapons is one of the most urgent, but also one of the most complex. The Director-General reported to the fourteenth session of the Council that the files on 25 inspections of O/ACW cannot be closed until the usability issue has been resolved. Resolution of this issue would also facilitate the resolution of other unresolved issues relating to the overall O/ACW verification regime such as the attribution of the costs of verification and the destruction and verification requirements for abandoned chemical weapons. As the fourth session of the Conference ap-

proaches thoughts will begin to turn to how the remaining unresolved issues should be addressed in the future. The use of the CoW during the intersessional periods was originally intended as a temporary measure as it was expected that the unresolved issues could all be resolved before the second session of the Conference. It has been suggested that those issues which still require attention should be referred to the appropriate organs and subsidiary bodies of the OPCW, such as the Council and the Scientific Advisory Board.

Preparations for the fourth session of the Conference

With only four months until the Conference convenes for its fourth session, preparations for the event are well underway. Informal consultations on the draft 2000 budget have already been initiated and the fifteenth session of the Council will consider the provisional agenda of the fourth session. Consultations are currently underway on a draft of the *Report of the Organisation on the Implementation of the Convention*. This can be seen as the "annual report" of the OPCW and is designed for circulation beyond the OPCW and its member states.

This review was written by Daniel Feakes, the HSP researcher in The Hague

Strengthening the Biological and Toxin Weapons Convention

A three-week meeting, the thirteenth session, of the Ad Hoc Group to consider a legally binding instrument to strengthen the Biological and Toxin Weapons Convention (BWC) was held in Geneva from Monday 4 January to Friday 22 January 1999. As in the previous three-week sessions, negotiations focused on the rolling text of the Protocol.

There was the largest ever participation of states parties in the meeting reflecting the increasing sense that the negotiations are nearing completion. Sixty-five states parties and 5 signatory states participated at the thirteenth session; a net total of 8 more states parties than in the twelfth session held in September/October 1998 as 9 states (Bosnia-Herzegovina, Ecuador, Iraq, Jordan, Libya, Mauritius, Oman, Saudi Arabia, and the former Yugoslav Republic of Macedonia) participated in January 1999 whilst 1 state (Singapore) which had participated in September/October 1998 did not in January. Two additional signatory states (Gabon and Nepal) participated in January.

Twenty-eight new Working Papers (WP.325 to WP.352) were presented in January, the same number as in the four-week session in September/October 1998. As usual these were presented both by states parties (South Africa 8, United Kingdom 5, Russian Federation 3, NAM 2 along with single papers by 6 states and 3 papers by groups of two or more states) and by the Friends of the Chair (1).

There was a widespread sense of progress among participants at the January 1999 meeting with serious negotiations making progress in the area of visits and consolidating previous work on confidentiality and legal issues. A revised version of the Protocol was produced and attached to the procedural report of the January meeting (BWC/AD HOC GROUP/44). This was thus the seventh version of the rolling text — previous versions having been produced in June 1997 (35), July 1997 (36), October 1997 (38), February 1998 (39) and June/July 1998 (41). Although this was again the longest version so far produced comprising 312 pages (previous versions having 113, 167, 241, 241, 251 and 278 pages), there was a clear sense of progress with square brackets being removed in those parts of the rolling text discussed in January. Two Articles (VII and IX) had the previous square brackets removed from their titles leaving only one Article (II [Definitions]) with its title still within square brackets. As at the previous session, there was evidence in the 125-page Annex IV of the January procedural report of further text being prepared by the Friends of the Chair which in a transparent way show deletions and additions to the existing rolling text and thus give an indication of the way in which the Friends of the Chair envisage the text being developed towards a cleaner text with fewer square brackets. Such text is helpful as it enables delegations to

consider both the current rolling text and possible developments thereof.

Rolling Text Health Warning! It is important to emphasise that each new version of the rolling text is made up of relatively small sections with new language surrounded by much larger sections of older text which are *not* revised because there is insufficient time in the session for each FOC to review in his meetings all of the text for which he is responsible the older text will be revised whenever the next reading is made of that older text. Although copies of the *Outcome of Discussions by Friends of the Chair* are circulated as L-series documents, this is dependent on their being sufficient time to produce the L-series document before the end of the session. Consequently, the L-series documentation does not always include all the outcomes of the discussions by the Friends of the Chair although all such outcomes are incorporated into the rolling text attached to the Procedural Report. It is therefore easy to be confused about the latest terminology if the language in the rolling text is taken at face value without giving due consideration to which is the most recent text.

Although 30 meetings were planned, only 26 were held as there was an unexpected holiday on 18 January and the two meetings on the mornings of 20 and 21 January were used for informal consultations of definitions because there were clashes with Conference on Disarmament meetings on those mornings. Of the 26 meetings held, 6.5 were devoted to compliance measures, 6 to definitions, 5 to the investigations Annex, 3 to Article X measures, 1 to confidentiality, 1 to legal issues, 1 to national implementation and assistance, and 1 to organization/implementational arrangements, 0.5 to the preamble, 0.5 to the seat of the organization and 1 to an AHG meeting. No new Friends of the Chair were appointed although Carlos Simas of Brazil took over the Friend of the Chair on Article X Measures from Carlos Duarte who was no longer in Geneva.

The session as usual saw various NGO activities either providing papers or holding meetings at which briefings were presented for the AHG delegations. The Federation of American Scientists provided a paper on "Visits: A Unified Concept" and one entitled "Aerosol Trigger" with suggested criteria for such declarations. The Department of Peace Studies at the University of Bradford presented and distributed copies of a further two Briefing Papers in its series: No 18 "Visits: An Essential and Effective Pillar" and No 19 "The Future BTWC Organization: Observations from the OPCW". (Copies are on the website <http://www.brad.ac.uk/acad/sbtwc>). In addition, two Quaker lunches were hosted within the Palais des Nations to discuss key issues relating to visits and why these are regarded as essential and effective elements of the future Protocol.

Political Developments

The January AHG session saw the circulation of a European Union declaration which recalled that the Fourth Review Conference had welcomed the decision of the AHG to intensify its work with a view to completion of the Protocol as soon as possible before the Fifth Review Conference and went on to say that to achieve this, the EU believes that "it

will be imperative to have completed all the stages necessary to ensure that a Protocol be opened for signature prior to the Fifth Review Conference, which is to be held no later than 2001". The Declaration goes on to say that it will actively promote the work of the AHG "with a view to achieving substantive progress by the end of 1999, so that the Protocol can be adopted by a Special Conference of States Parties in 2000". As usual, the associated countries and other countries aligned themselves with this declaration.

In the last week of the January meeting, there were two formal statements to the AHG. The first, on 19 January, by Jakob Kellenberger, the Swiss Secretary of State for Foreign Affairs, which offered Geneva as a candidate city to host the headquarters of the future BWC organization. In his statement, he said that Geneva offered an ideal platform because of its experiences in hosting international organizations and the presence in the city of numerous Permanent Missions as well as specialized agencies in the fields of disarmament and arms control. Further, he said "a natural functional link exists between the future verification organization and those organizations based in Geneva which deal with the international community's humanitarian, health and environmental concerns". Finally, he noted that Geneva had been the venue for the negotiations of the BWC and for the Review Conferences, VEREX and the AHG.

A day later, the Ambassador Raimundo Gonzalez of the Chilean Ministry of Foreign Affairs also addressed the AHG. He recalled the statement signed on 5 September 1998 in Panama by the 12th Summit of Heads of State and Government of the Rio Group which urged the international community to take immediate steps intended to free the world of nuclear weapons and other weapons of mass destruction. He went on to refer to the Ministerial meeting held in New York on 23 September 1998 and the sense of urgency in its statement. He said that recognising that this was the thirteenth meeting of the AHG:

we consider that time is ripe for giving a new impulse to these negotiations. We reiterate once more our appeal to show a greater flexibility.

He emphasised that:

prevention of the proliferation of biological weapons through effective verification measures and promotion of international cooperation through scientific and technological exchange are two basic requirements for a successful completion of this negotiating process and their due consideration should give way to the political viability of reaching the necessary consensus for adoption of the protocol and subsequent adherence thereto and for its universality.

The Emerging Regime

The distribution of the meetings in the January session shows that most of the time available was spent on compliance measures, the investigations Annex, definitions and on Article X measures.

{For clarity, comments from the author of this article will be contained within curly brackets.}

Compliance Measures The January meeting focused on visits and made good progress in respect of visits both in regard to the language in *Article III. D. Declarations II.*

Follow-up after Submission of Declarations A. Randomly-Selected Visits as well as preparing text on *Declaration Clarification Procedures* (WP.347) which will be discussed at the next AHG meeting. This latter text, although circulated as a UK working paper, represented the result of consultation between the UK, France, Germany, Japan, South Africa and the United States. This language has been incorporated into the rolling text along with alternative language from a Chinese Working Paper (WP.338) replacing all the previous text on clarification visits.

An important decision was to separate Visits and Investigations as these are quite distinct activities with very different purposes. The September/October rolling text had "Visits and Investigations" as a final Section F of *Article III Compliance Measures*. The January rolling text has visits within *II Follow-up after Submission of Declarations* of Section D *Declarations* and has "Investigations" as a final Section G of Article III.

As visits are one of the principal issues being discussed, it is helpful to outline the developments in terminology and to identify which text is the latest version so as to reduce the potential for confusion. The September/October meeting saw development of terminology in Article III for:

Random Visits

Clarification Visits

Request Visits

Voluntary Visits

with language for random visits, clarification visits, voluntary visits and voluntary confidence-building visits. *Annex B Visits* contained text for random visits and clarification visits. In Annex IV, there was strikethrough text for Article III on Random Visits, Clarification Procedures, and Voluntary Request Visits.

The Working Papers distributed at the January meeting included several which related to visits. The South African paper (WP.336) proposed language for voluntary visits, random visits, clarification visits (to declared facilities) and consultation visits (to undeclared facilities to determine whether they should be declared). An Iranian paper (WP.345) reported on a national trial visit and concluded:

The random visit is considered to be a necessary measure within an effective compliance Protocol. The visiting team, with the cooperation of the visited State Party shall be able to validate the accuracy of declarations without interruption of the normal work of the facility.

The January meeting saw negotiations by the Friend of the Chair on visits and the introduction of the term "randomly-selected visits" into the rolling text in place of the previous "random visits". Later in the January meeting, a working paper by Brazil, Chile, New Zealand and Norway (WP.346) proposed language for randomly-selected visits which incorporated language to allow for the implementation, as appropriate, of cooperation and assistance activities during the carrying out of the randomly-selected visits. This has been incorporated into the new rolling text for randomly-selected visits in Article III. The concept that randomly-selected visits could both promote the accuracy of declarations and serve to provide technical assistance and cooperation is one that is well received by the developing countries.

The rolling text that emerged from the January meeting contains language in Article III for:

Randomly-selected Visits {New}

Clarification Procedures and Voluntary Visit/Declaration Clarification Procedures {WP.338/WP.347 respectively}

Voluntary Visits {as in the previous rolling text}

Voluntary Confidence-Building Text {as in the previous rolling text together with new South African text on voluntary visits from WP.336}

Annex B Visits is no more than a compilation of proposed text for randomly-selected visits, clarification visits and consultation visits; however, none of this material on the more detailed aspects of visits has so far been discussed. In Part II there is strikethrough text for Article III on *II Follow-up after Submission of Declarations* which includes Transparency Visits which is a proposed replacement for the current term "randomly-selected visits".

Consequently, at the March/April AHG session negotiations will focus on the language in the rolling text of *Article III for Declaration Clarification Procedures and Voluntary Visits*. Annex B will be amended at a later date to reflect the outcome of the negotiations on the Article III language.

The new rolling text on Randomly-selected Visits incorporates language from Brazil, Chile, New Zealand, Norway (WP.346) setting out that "the primary purpose" of the randomly selected-visits:

shall be to confirm ... that declarations are consistent with the obligations under this Protocol and to promote accuracy of declarations.

It then goes on to say that randomly-selected visits:

shall also implement, as appropriate, technical assistance and cooperation activities or programmes, if requested by the State Party and the facility, as well as enhance transparency of declared facilities and activities ...

It is made clear that:

any provision or implementation of technical cooperation and assistance activities or programmes ... during the visit shall be consistent with achievement of its primary purpose.

New language is included for the selection of facilities. As was pointed out in the South African WP.336, the previous selection formula with each region receiving the same maximum number of 10 visits a year could result in situation where a region such as Africa declaring 20 facilities would have each facility visited every couple of years whilst Western Europe might declare 500 facilities and it would take 50 years for each facility to be visited once. A selection formula for a more balanced distribution was therefore needed. The new formula in the rolling text sets out that:

there shall be no more than [20][50][60][100] randomly-selected visits per calendar year to declared facilities selected randomly by the Technical Secretariat from among all declared facilities.

In selecting facilities to be visited, the Technical Secretariat shall ensure that:

Over a five-year period, such visits shall be divided between each category of declarable facilities in approximate propor-

tion to the total number of declared facilities in each category,

Over a [1][5] year period, no State Party shall receive more than [2][10] such visits,

[Over a five-year period, such visits shall be fairly distributed among regional groups of State Parties [on the basis of the number of declared facilities],]

[Over a five-year period, no facility shall be subject to more than two such visits,]

[The prediction of when any particular facility will be subjected to such a visit will be precluded,]

[The scientific and technical characteristics of the facility to be visited and the nature of the activities to be carried out there may be taken into account.]

The duration of randomly-selected visits is now essentially out of square brackets and states that they “may last up to two days [except in the case of such visits to biodefence capabilities which may last up to three days]”. The size of the visiting team, also now out of square brackets, “shall not exceed four members”. Much of the material relating to randomly-selected visits is now out of square brackets although the entire section is still within square brackets.

Insofar as declaration clarification procedures are concerned, these will be discussed in detail during the March/April AHG session with attention focusing on the language in the rolling text coming from UK WP.347 based on consultation with several nations and from the Chinese WP.338. The WP.347 text makes provision for the Technical Secretariat either at the request of a state party or as a result of its own examination, if it considers there is “any possible ambiguity, uncertainty, anomaly or omission concerning the declaration(s) submitted by a State Party” to submit a written request for clarification to the state party concerned. This shall be provided in writing no later than 20 days after receipt of the request. If within 14 days after receipt of the written response either the state party making the original request or the Technical Secretariat considers that the written response does not resolve the matter, the Technical Secretariat may submit a written request to the state party concerned for a consultative meeting between the Technical Secretariat and representatives of the state party in order to resolve the matter. Such a meeting shall be held no later than 10 days after receipt of the request for such a meeting and its duration shall not exceed 48 hours. Should the consultative meeting not resolve the matter then the Technical Secretariat may propose that a clarification visit be conducted at the facility concerned for the sole purpose of resolving the matter. The requested state party shall advise within 48 hours of receipt of the request whether (a) the clarification visit should proceed as proposed, (b) the proposal for the clarification visit should be submitted to the Executive Council for review at its next regular session, or (c) the clarification visit be declined if the requested state party considers that it has made every reasonable effort to resolve the matter through the consultation procedures. In the last case, the Executive Council shall be so informed by the Director-General within 12 hours of receipt of the response from the requested state party. In addition, the language also makes provision for the requested state party, at its own discretion and at any stage during the clarification

procedures, to invite the Technical Secretariat to make a voluntary visit with a view to resolving the matter which has been raised.

The Chinese alternative proposes that any concern related to a declared facility shall be first sought to be resolved through the process of consultation, clarification and cooperation. The state party to which the concern is related may volunteer for the Technical Secretariat to conduct a visit to the facility in question with a view to resolving the concern.

Declarations There was little detailed discussion of declarations although agreement was reached that declaration formats should be reordered and streamlined. The structure of Article III D Declarations had been clarified with a new heading *I Submission of Declarations* prior to the language specifying what should be declared. Annex IV in Part II contains in FOC/14 a new strikethrough text version for section *I Submission of Declarations* and in FOC/13 declaration formats for current biological defence facilities and for other facilities.

Annex D on Investigations Good progress was also made on the Investigations Annex. The *I General Provisions* section was developed with good progress made in removing square brackets. The previous text in the Annex on privileges and immunities was moved to the appropriate section of *Article IX The Organization*. The first section of the General Provisions entitled *(A) Designation of Investigation Personnel* is now divided into two sections addressing full time investigation personnel and *ad hoc* experts respectively. The language relating to the *ad hoc* experts makes it clear that should the necessary expertise not be available within the Technical Secretariat and *ad hoc* experts are required for a “[field] investigation [of alleged use of BW]” then such experts shall be selected from a designated list by the Director-General. In square brackets, it is stated that an *ad hoc* expert shall not be appointed as an investigation team leader. Provision is also made for the Technical Secretariat to “ensure that all members of the designated investigation personnel are properly trained to conduct such investigations.”

The next section, previously on accreditation of laboratories is now entitled *(B) Designation and Certification of Laboratories*. This sets out that the criteria, including proficiency standards, and procedures required for designation and certification of laboratories shall be approved by the first Conference of States Parties.

As noted in earlier *Progress in Geneva* reports, the Friend of the Chair on the Investigations Annex had provided a working paper (WP.293/Rev. 1) which proposed language changes to address those issues which could be resolved at this stage of the negotiations and thus moved forward this section of the Protocol towards a clean text with square brackets around the more fundamental issues. This paper was taken forward in the January AHG session as FOC/8 which includes strikethrough text for the following Sections: *I General Provisions*, *II [Field] Investigations [of alleged use of BW]* and *III [Facility] Investigations [of Any Other Alleged Breach of Obligations under the Provisions of the Convention]*.

Language was incorporated within square brackets into *Article III G. Investigations (A) Initiation and Types of Investigations* which came from WP.339 by China, Cuba, India, Indonesia and Pakistan and states that “All natural outbreaks of disease do not pose a compliance concern to the Convention and therefore shall not be a cause for an investigation of a non-compliance concern. The diseases that are endemic in the region and present the expected epidemiological features shall not be considered as an unusual outbreak of disease.” A new Section *V Investigations of Natural and Unusual Outbreaks of Disease* within square brackets has been added to Annex D which states that “for the purposes of this Protocol, an unusual outbreak of disease may have one or more of the following reasons: ...” and provides a list of 12 such reasons.

Definitions Progress was made on *Annex A II. List of Equipment* which was reduced from 10 to 7 pages with most of the previous alternative language being deleted and a number of square brackets being removed. Insofar as *Article II Definitions* is concerned, these were reordered following a proposal by the Russian Federation into three categories: *Category I: For the Purposes of this Protocol*, *Category II: [Definitions to be inserted in] [for the purposes of] Article III [, Section D on Declarations]* and *Category III* (which states that these definitions can be moved to the appropriate sections of the Protocol after discussion). Some progress was made in consolidating language from alternative definitions into a consolidated definition which can form the basis for subsequent negotiation.

BWC Article X Measures The new Friend of the Chair (Carlos Simas of Brazil) succeeded in obtaining a more detailed and open debate and achieved a significant change to the title of Article VII which became *Scientific and Technological Exchange for Peaceful Purposes and Technical Cooperation* which is free from all square brackets and has deleted the words “Implementation Assistance” which had created much NAM concern when these were introduced in the March 1998 AHG meeting (see *Progress in Geneva No 3*, CBWCB 40, June 1998). Some slight changes were made to Sections *(A) General Provisions* and *(B) Measures to Promote Scientific and Technological Exchanges*. An additional alternative for the opening paragraph of the General Provisions was incorporated as *1ter* into the rolling text as a possible replacement for paragraphs 1 and *1bis*. Much of the debate related to how to find wording which makes it clear that the benefits accrue to those states which accede to the Protocol.

Two working papers were submitted by the NAM and Other Countries (WP.349 and WP.350). The first proposed that a Cooperation Committee should be established to coordinate and promote effective and full implementation of Article X of the Convention and Article VII of the Protocol and outlined its powers and functions. The second proposed language for information to be provided in declarations of the implementation of Article X. The language from these two papers has been incorporated into Article VII and a new Appendix E respectively.

The Friend of the Chair in a paper (FOC/11) in Annex IV in Part II sets out some ideas intended to help the debate

on how to address certain substantive issues in the draft Article VII.

Organization/Implementational Aspects A significant development was the Russian Federation working paper WP.341 which addressed the organization for the implementation of the Protocol. This meant that brackets around the terms [Organization] and [Executive Council] could now be removed enabling the text of Article IX to be improved throughout. The title of the Article also was agreed as “The Organization” instead of the previous “[The Organization] [and Implementational Arrangements]”.

Section *(E) Privileges and Immunities* was extended and developed in the light of proposals made in an Austrian working paper (WP.351) and the transfer of language previously in *Annex D Investigations* into Article IX.

In addition, Annex IV in Part II contains strikethrough text produced by the Chairman for further consideration of Article IX.

Confidentiality Some progress was made with the deletion of square brackets and the deletion of some text from *Article IV Confidentiality Provisions* and *Annex E Confidentiality Provisions*. These are now becoming reasonably clear of square brackets. In addition, the Friend of the Chair has produced transparent proposals in FOC/10 in Annex IV for further consideration for both Article IV and Annex E.

National Implementation & Assistance There was some progress with *Article VI Assistance and Protection against Biological and Toxin Weapons* in regard to the conditions under which a state party has the right to receive assistance which now reads:

- (a) Biological or toxin weapons have been used against them; {unchanged}
- (b) It is threatened by imminent actions that are prohibited [for States Parties] by Article I of the Convention; {amended by insertion of “imminent”}
- (c) [It has credible reason to believe] it is confronted by imminent actions or [elevated] threat with respect to actions that are prohibited [for States Parties] by Article I of the Convention; {new}

Square brackets were removed from paragraphs 9 and 10 as well as from parts of the text in the Article. There was no progress in relation to *Article X National Implementation Measures* where the outstanding point of substance remaining within square brackets is that relating to the requirement for the enactment of penal legislation.

Legal Issues Progress continued to be made with consideration of Articles V, XI, XII and XIV with the removal of square brackets and the streamlining of text. A new paragraph *5bis* was added, in square brackets, to *Article XIV Amendments* as an alternative to the existing text in paragraph 5 on technical and administrative changes which closely mirrors that in the CWC. The new paragraph *5bis* addresses amendments only to the list of agents and toxins contained in Annex A and states that (a) the criteria for inclusion or exclusion of an agent or toxin be agreed by the first Conference of States Parties, (b) proposed additions or

deletions be submitted with supporting documentation and evaluation to the Director-General who shall communicate the proposal to all states parties, and (c) the first following Conference of States Parties shall consider the proposed addition or deletion. These will be adopted by a positive vote of a majority of all states parties present and voting, with no state party casting a negative vote.

Seat of Organization The recently appointed Friend of the Chair (Ambassador Hayashi of Japan) had half a meeting on the Seat of the Organization. As already noted above, Switzerland made a formal proposal that Geneva should be the seat of the BWC Organization. In addition, the Netherlands indicated its interest in hosting the future organization in The Hague. The Friend of the Chair prepared a paper (FOC/12) in Annex IV which notes that:

Switzerland proposed Geneva as a candidate city to host the headquarters of the future Organization, and the Netherlands declared its interest in hosting the future Organization in The Hague and expressed the hope that it would be able to present a comprehensive and concrete offer in the near future.

Preamble The recently appointed Friend of the Chair (Malik Ellahi of Pakistan) had half a meeting on the Preamble. The text in the rolling text was unchanged pending a merged version of the existing language.

Prospects

The January meeting also saw the agreement of the programme of work for the two-week fourteenth session to be held on 29 March to 9 April. This session is made even

shorter by three holidays within the period thus reducing the number of meetings to 14. These were allocated as follows:

Compliance measures	5.3
Investigations annex	4
Article X	3
National Implementation	0.5
Preamble	0.3
Seat	0.3
Ad Hoc Group	0.5
Total	14

Overall, the January meeting saw encouraging progress in all areas of the draft Protocol. Although there are still key points in most areas that will not be resolved until the final few meetings, there are several areas in which the text is relatively free from square brackets — legal issues, confidentiality, assistance and national implementation, the Annex on Investigations — and real progress is being made on compliance measures, Article X measures, definitions and the organization. Overall, the prospects for 1999 are promising with all delegations actively engaged.

Since the last *Progress in Geneva* there has been a further meeting at which the importance of the strengthening of the BWC has been emphasised. A NATO Advanced Research Workshop lasting three days was held in Moscow from 9 to 11 December 1998. This addressed the scientific and technical basis for strengthening the BWC through a legally binding Protocol and involved some 44 experts from 16 countries. It was particularly valuable as it enabled informal yet informed technical debate about key issues that need to be resolved to achieve an effective and cost-efficient Protocol to strengthen the BWC.

This review was written by Graham S Pearson, HSP Advisory Board

News Chronology

November 1998 through February 1999

What follows is taken from the Harvard Sussex Program CBW Events Database which provides a fuller chronology and identification of sources, all of which are held in hard copy in the Sussex Harvard Information Bank. The intervals covered in successive Bulletins have a one-month overlap to accommodate late-received information. For access to the Database, apply to its compiler, Julian Perry Robinson.

November North Korea has the third largest chemical-weapons capability in the world, according to a military commentator writing in the Seoul monthly *Pukhan* {in FBIS-EAS 21 Nov 98}, which specializes in North Korean affairs. Much further purported detail about North Korean CBW preparations, including the use of political prisoners for experimentation with CBW agents, is presented in the article, which, however, neither identifies the provenance of its information nor otherwise indicates its reliability.

1 November In Washington, President Clinton and Israeli Prime Minister Benjamin Netanyahu sign a memorandum of agreement that commits the United States to enhancing Israel's "defensive and deterrent capabilities" and to engaging in prompt consultations about what support or assistance, "di-

plomatic or otherwise", it could provide in the face of "direct threats to Israel's security arising from the regional deployment of ballistic missiles of intermediate range [500 km] or greater". The agreement had been reached during the previous month at the Wye River summit, where Israel and the Palestinian Authority signed an interim security agreement. {*New York Times* 2 Nov}

1 November The US Air Force study that is tracking the health of veterans of Operation Ranch Hand — the Air Force unit responsible for aerial spraying of Agent Orange and other chemical herbicides during the Vietnam war — is characterized as "so flawed that it might be useless" by the San Diego *Union-Tribune* {1 Nov} after a six-month investigation based on interviews with Richard Albanese, a civilian doctor at Brooks Air