

and were important in safeguarding public health; that there were no scientific problems which needed to be addressed; and that high performance liquid chromatography could be considered as an alternative to the current techniques for PSP monitoring.

In response to requests from the Director-General, the SAB recommended the establishment of the following three temporary working groups: one on the scientific and technical aspects of ricin production under Dr Thomas Inch (UK); one on analytical procedures and capabilities for verification purposes under Dr Marjatta Rautio (Finland); and one on the requirements and specifications for on-site monitoring equipment and other issues relating to inspection equipment under Professor Gerhard Matz (Germany). Each of these groups is to report to the SAB by the time of its next meeting in April 1999. Under its own initiative, the SAB also requested the Director-General to establish a temporary working group on technologies for the destruction of chemical weapons and recommended that Dr Giorgio Modena (Italy) be designated chairman. The SAB also agreed that it would keep the issue of developments in science and technology relevant to the Convention, including work on a

database of toxic chemicals, as a standing item on the agenda of its future meetings.

### **Future Work**

The fourth session of the CSP meets in a little over six months time. Much of this short intersessional period is likely to be occupied with intensive efforts to reach solutions to as many of the outstanding unresolved issues as possible. In addition to the work remaining from the days of the Preparatory Commission, the next few months will also be taken up with the negotiation of a draft budget for 2000. Efforts are currently underway to streamline the whole budgetary process and to improve the dialogue between the organs of the OPCW. A tentative schedule for the intersessional period has already been drawn up to facilitate planning by both states parties and the Technical Secretariat.

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

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*Progress in Geneva*

*Quarterly Review no 5*

## **Strengthening the Biological and Toxin Weapons Convention**

A four-week meeting, the twelfth 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 14 September to 9 October 1998. As in the previous three-week sessions, negotiations focused on the rolling text of the Protocol.

Fifty-seven states parties and 3 signatory states participated at the twelfth session; a net total of 7 more state parties than in June/July 1998 as 9 states (Kuwait, Malta, Nigeria, Philippines, Singapore, Slovenia, Thailand, Ukraine and Venezuela) participated in September/October 1998 whilst 2 states (Democratic People's Republic of Korea and Iraq) which had participated in June/July did not in September/October. One signatory state (Morocco) participated in September/October but did not in June/July.

Twenty-eight new Working Papers (WP.297 to WP.324) were presented in September/October, some 6 more than in the three-week meeting in June/July. As usual these were presented both by states parties (United States 4, South Africa 3, Indonesia 2, Iran 2, Ukraine 2 along with single papers by 7 states and 4 papers by groups of two or more states) and by the Friends of the Chair (4).

Continued progress was made in the September/October session with further clear signs of engagement by all participants with serious negotiations seeking to resolve language currently within square brackets. A revised version of the Protocol was produced and attached to the procedural report of the session (BWC/AD HOC GROUP/43). This was thus the sixth 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 the longest version so far produced, comprising 278 pages (with previous versions having totalled 113, 167, 241, 241 and 251 pages), there was again a clear sense that the AHG has turned the corner from adding reams of new text to reducing down and focusing on key issues. The first indication of this had been provided in July 1998 by the working paper (WP. 293) prepared by the Friend of the Chair on the Investigations Annex which had noted that the Ad Hoc Group had concluded three readings of the General Provisions part of that Annex and that were only a few issues which could be identified as fundamental. That working paper had 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. Annex IV to the October report contains 7 papers prepared by the Friends of the Chair of proposals for further consideration in which text modified in a transparent way (using strikethrough text to show deletions and bold text to show proposed additions) is provided. Such text after a couple of readings could lead to the preparation of a clean text prepared by the Chairman and thus to the final agreed text of the Protocol.

Of the 40 meetings held, 10.5 were devoted to compliance measures, 6 to Article X measures, 8 to definitions, 1 meeting to legal issues, 9.5 to the investigations annex, 0.5 to organization/implementational arrangements, 2 to confidentiality and 0.5 to national implementation and assistance. Two new Friends of the Chair were appointed: on

the seat of the Organization (Ambassador Akira Hayashi of Japan) and on the Preamble (Malik Azhar Ellahi of Pakistan); the Chairman, Ambassador Tibor Toth, acted as Friend of the Chair for organization/implementation issues.

The AHG meeting 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 updated papers on the cost and structure of a BWC Organization and on the investigation of alleged use of biological weapons. The Department of Peace Studies at the University of Bradford presented and distributed copies of a further six Briefing Papers in its series: No 12 *Article III: Some Building Blocks*, No 13 *Article III: Further Building Blocks*, No 14 *National Implementation Measures: An Update*, No 15 *Non-Compliance Concern Investigations: Initiation Procedures*, No 16 *The BTWC Protocol Implementation: Practical Considerations* and No 17 *The Strengthened BTWC Protocol: Implications for the Biotechnological & Pharmaceutical Industry*. (Copies of these together with their Executive Summaries are all available on the Bradford website <http://www.brad.ac.uk/acad/sbtwc>). In addition, a series of four lunches were held at Quaker House to discuss key issues relating to the Protocol: Organization and National Implementation, The Protocol and Industry, Article X International Cooperation and Article III Non-Transfer.

### **Political Developments**

Since the June/July AHG meeting there have been further political developments:

- 2 September 1998: a Russian–US Presidential Joint Statement on the Protocol said that:

We urge the further intensification and successful conclusion of those negotiations to strengthen the Convention by adoption of a legally binding Protocol at the earliest possible date.

- 3 September 1998: the Final Document of the NAM Summit of Heads of Government or State held in Durban, South Africa said that:

They noted the progress achieved so far negotiating a Protocol to strengthen the BWC and reaffirmed the decision of the Fourth Review Conference urging the conclusion of negotiations by the Ad Hoc Group as soon as possible before the commencement of the Fifth Review Conference and for it to submit its report ... to be considered at a Special Conference.

- 23 September 1998: a Ministerial meeting held in New York was attended by 30 Ministers and supported by a further 27 countries agreed a declaration that stated:

The Ministers are determined to see this essential negotiation brought to a successful conclusion as soon as possible. ... The Ministers call on all States Parties to accelerate the negotiations and to redouble their efforts within the Ad Hoc group to formulate an efficient, cost-effective and practical regime and seek early resolution of the outstanding issues through renewed flexibility in order to complete the Protocol on the basis of consensus at the earliest possible date.

- 6 October 1998: The Director of the US Arms Control and Disarmament Agency in a statement to the Ad Hoc Group said:

Your deliberations have established up to now a positive momentum toward concluding your work successfully ... Nineteen ninety-nine should be the year of the BWC Protocol. You simply must — and you can — find the time, energy, and the flexibility to finish.

There can therefore be no doubt at all about the political momentum and expectation. It is now up to the Ad Hoc Group to address the remaining issues with flexibility.

### **The Emerging Regime**

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

**Compliance Measures** The September/October meeting carried out major rework and reordering of *Article III. D. Declarations* as well as creating largely new language for *Article III. E. Consultation, Clarification and Cooperation*. Although the text for *Article III. F. 1 Random Visits* and for *Clarification Visits* was extended from 7 to 41 paragraphs and from 9 to 50 paragraphs respectively, these were not discussed during the twelfth session. The text on *Article III. Investigations* was also extended from 67 to 75 paragraphs, again without discussion at the twelfth session. *Annex B. Visits* was reordered and some 31 new paragraphs were added, without discussion, on clarification visits. Appendix A on the information to be provided in declarations of past offensive/defensive programmes was reordered and Appendix C on information to be provided in declarations of facilities was elaborated considerably.

**Declarations** Six working papers (by China, India, Indonesia, South Africa, USA and five European countries) addressed declarations and declaration formats demonstrating a useful focussing on the detail of a key element of the future regime. The Chinese, Indonesian, South African and US papers all proposed text for the declarations section of Article III whilst the Indian and the European paper addressed information to be provided in declarations of facilities. The latest draft of the Protocol in *Article III Compliance Measures D. Declarations* has an expanded initial three paragraphs and is restructured into *Initial Declarations, Annual Declarations* and *Notifications*. Initial Declarations comprise “a. Past offensive and/or defensive programmes” and “b. National legislation and regulations”. Annual declarations are for “c. Current defensive programmes”, “d. Vaccine production facilities”, “e. Maximum containment BL-4 facilities”, “f. High containment BL-3 facilities”, “g. Work with listed agents and/or toxins”, “h. Other production facilities”, and “i. Other facilities”. As before, “j. Transfers” and “k. Article X declarations” are little developed. “l. Outbreaks of disease” now appears under Notifications.

**Consultation, Clarification and Cooperation** A working paper by the Friend of the Chair proposed rationalized

text for *Article III. E Consultation, Clarification and Cooperation*. Much of this was incorporated into the new text. This now includes language within square brackets that the states parties, the Organization or:

relevant international organizations such as the WHO, FAO, or OIE may undertake to assist on a voluntary basis ... in clarifying or resolving matters related to a concern about non-compliance which has been raised as a matter for consultation, clarification and cooperation.

**Visits** Two working papers, one by Austria and one by the Nordic group of countries, reported on trial random visits at industrial facilities. Both concluded that such visits could take place without jeopardizing commercial confidential information. Five working papers (Indonesia, Japan, Sweden and two by France/UK) addressed visits. Article III. F on visits has been considerably developed with the text for both random and clarification visits being considerably extended, albeit without discussion at the twelfth session. *Annex B. Visits* has been restructured.

John Holum, Director of the US Arms Control and Disarmament Agency, speaking to the AHG on 6 October said "there must be means to ensure that all sites whose activities merit declaration are in fact declared, and that declarations are accurate". He went on to say: "Investigations and visits must be conducted in ways to protect legitimate proprietary and national security sensitivities, but they must also be conducted vigorously, to provide confidence in compliance".

**Investigations** A US working paper proposed language on how a field investigation might be transformed into a facility investigation which was incorporated without discussion at the twelfth session.

**Annex D on Investigations** As noted in the previous *Progress in Geneva*, the Friend of the Chair on the Investigations Annex had provided a working paper which noted that the Ad Hoc Group had concluded three readings of the General Provisions part of this Annex and that were only a few issues which could be identified as fundamental. The working paper proposes language changes to address those issues which could be resolved at this stage of the negotiations and thus moves forward this section of the Protocol towards a clean text with square brackets around the more fundamental issues. This paper was reissued as WP.293/Rev. 1 with language included on [Field]Investigations [of alleged use of BW].

Working papers by South Africa and by the Friend of the Chair proposed language for *Section III [Facility Investigations][Investigations of any other breach of obligations under the provisions of the Convention]* which resulted a further development of the rolling text in Annex D.

**Definitions** Five working papers by the Czech Republic, Iran (two papers), South Africa, and the USA addressed various aspects. The US working paper proposed a short list of agents and toxins for use in *Article III. Section D*.

The language in *Article II Definitions* was reordered with the merging into Article II of all the language on definitions that had previously appeared in Section I of Annex

A. The new Section I of Annex A is now the previous *II Lists and Criteria (Agents and Toxins)*. This has been reordered so that there is now a clearer approach with a list of human, animal and plant pathogens followed by criteria for human, for animal and for plant pathogens. In addition some square brackets have been removed whilst others have been inserted, especially in respect of animal and plant pathogens which are now entirely within square brackets for Rinderpest virus. The list of human pathogens comprises some 16 viruses, 9 bacteria, 3 rickettsiae, 2 protozoa (within square brackets) and the list of toxins has reduced from 21 to 19 with the removal of Aflatoxins and of Verucologen (*Myrothecium verrucaria*). The list of animal pathogens has been reduced from 18 to 14 by the removal of bluetongue virus, porcine enterovirus type 9, peste des ruminants virus and rabies virus and that of plant pathogens from 18 to 16 by removal of *Erwinia carotovora* and *Phytophthora infestans*. There has been no change to the subsequent sections of Annex A.

**BWC Article X Measures** A few changes were made to the language in the first two sections (A) and (B) of Article VII of the Protocol with some rewording and streamlining. The Friend of the Chair in a paper in Annex IV sets out some ideas intended to help the debate on how to address certain substantive issues in the draft Article VII.

**Confidentiality** Article IV and *Annex E Confidentiality Provisions* saw a development of the language and the removal of square brackets. In addition, the Friend of the Chair has produced proposals in Annex IV for further consideration for both Article IV and for Annex E.

**National Implementation & Assistance** As only half a meeting was devoted to this, there was no change to *Article VI Assistance and Protection against Biological and Toxin Weapons* and there was some slight development in paragraph 1 of *Article X National Implementation Measures* which was simplified. The outstanding point of substance in Article X that remains within square brackets is that relating to the requirement for the enactment of penal legislation.

**Organization/Implementational Aspects** As this also had only half a meeting, there was limited progress. However, the language in *Article IX The Organization and Implementational Arrangements* was further developed by the removal of a previous paragraph which, in square brackets, had required the Organization to conclude an agreement with the WHO which would be entrusted with the verification responsibilities. Further language has been introduced for a new option for the composition of the Executive/Consultative Council. In addition, the Friend of the Chair has produced proposals in Annex IV for further consideration for Article IX.

### **Prospects**

There was much debate at the September/October session about the dates for and durations of AHG meetings in 1999. As usual, the decision on this went to the very end of the

session with agreement being reached on the last day, 9 October, that there would be five sessions in 1999 totalling 16 weeks: 4–22 January (3 weeks), 29 March–9 April (2 weeks), 28 June–23 July (4 weeks), 13 September–8 October (4 weeks) and 22 November–10 December (3 weeks).

Agreement on the programme of work for the January 1999 session was also reached. This made the following allocation of the 30 half-day meetings to the various topics:

Compliance measures	9.5
Definitions	7.5
Investigations annex	10
Article X	6
Confidentiality	1.5
Legal issues	1
Organization	1
National implementation	1
Ad Hoc Group	2.5
Total	30

Since the last *Progress in Geneva* there have been further meetings at which the importance of the strengthening of the BWC has been emphasised. A Wilton Park conference entitled “CBW Disarmament: Achieving and Ensuring Compliance” was held on 26–27 September. Further dis-

cussion that was relevant to the strengthening of the BWC occurred at two NATO Advanced Research Workshops, each lasting three days, held in Prague in the week commencing 18 October. The first focused on scientific and technical means of distinguishing between natural and other outbreaks of disease and the second on the role of biotechnology in countering BW agents. A Pugwash BW Workshop was held in Geneva on 28–29 November which addressed “The BTWC Protocol negotiation: Unresolved issues” and saw a lively and unusually stimulating meeting with far ranging and frank discussion of the key issues yet to be resolved by the AHG.

The continuing attention being given to the strengthening of the BWC in international meetings is welcomed as it extends the debate about how best to achieve an effective Protocol and underpins the increased political attention being given to achieving this.

There is a real opportunity to complete the Protocol in 1999 and the AHG can be expected to make steady progress.

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

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## News Chronology

## August through November 1998

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*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.*

**1 August** The US National Research Council is now releasing its review of new Army human-toxicity estimates for mustard and nerve gases {AP from Anniston 4 Sep}. The estimates had been generated in 1994 by the Army’s Chemical Defense Equipment Process Action Team (CDEPAT) at the request of the Surgeon-General for purposes of establishing a set of exposure limits for use in protecting US soldiers. Previously available estimates were developed for offensive, not protective, purposes, and the new ones (like the old) stem from an often defective data-base; so the Army commissioned an independent review from the NRC, one that would address the estimates for tabun, sarin, soman, cyclosarin (GF), VX and mustard gas (HD). This review has now concluded that some of the CDEPAT estimates are scientifically valid; that others are adequate as interim estimates pending further research; that some estimates should be lowered; and that other estimates should be raised. For those six CW agents, the CDEPAT estimates of inhalation LCt50 were 135, 35, 35, 35, 15 and 900 mg-min/m<sup>3</sup> respectively. All were substantially lower than the existing offensive-use estimates, but the NRC report now recommends that they should be lowered still further, except for the mustard-gas estimate which it considers valid. {NRC *Review of Acute Human-Toxicity Estimates for Selected Chemical-Warfare Agents*}

**2 August** In Taipei, the Taiwan Defence Ministry declares that it would not develop and does not possess chemical weapons. This declaration is part of a statement denying that Tai-

wan had helped South Africa to develop chemical weapons during the 1980s. Such an interpretation could have been placed on a document recently released by the South African Truth and Reconciliation Commission [see 31 Jul]. {DPA from Taipei 2 Aug}

**2 August** The *Washington Post* publishes details of a US administration plan for rebuilding Iraq’s political opposition and for preparing a case for a possible war-crimes indictment of Iraqi leaders. The \$5 million expenditure envisaged has already been approved by the Congress [see 1 May]. The newspaper says that the plan includes the funding of a centre for Iraqi exile activities in London, as well as the translation and indexing of a great number of captured Iraqi documents.

**3 August** In Baghdad, UNSCOM Executive Chairman Richard Butler, accompanied by commissioners from China, the Netherlands and Norway as well as senior UNSCOM staff, meets with Deputy Prime Minister Tariq Aziz and other senior Iraqi officials for the talks that had been scheduled in June to discuss the results of the programme of work which, when it had been agreed then, encouraged talk about light at the end of the tunnel [see 11–15 Jun]. Ambassador Butler had beforehand visited Beijing for talks with Chinese Vice-Premier Qian Qichen {AFP from Beijing 3 Aug}. Iraqi news media are not welcoming, and accuse UNSCOM of prolonging its work to suit US interests {Reuter from Baghdad 2 Aug}; and an American UNSCOM inspector has just been accused of spying {AFP from