Progress in Geneva

Strengthening the Biological and Toxin Weapons Convention

It is now over three years since the Special Conference of the states parties to the Biological and Toxin Weapons Convention (BWC) met in Geneva in September 1994 to consider the report of the Ad Hoc Group of the Governmental Experts (known as VEREX) to identify and examine possible verification measures from a scientific and technical viewpoint. At this Special Conference, the states parties agreed to establish a further Ad Hoc Group (AHG) to consider appropriate measures, including possible verification measures, and to draft proposals to strengthen the Convention, to be included, as appropriate, in a legally binding instrument, to be submitted for the consideration of the states parties. According to its mandate, the Ad Hoc Group shall, *inter alia*, consider:

- Definitions of terms and objective criteria, such as lists
 of bacteriological (biological) agents and toxins, their
 threshold quantities, as well as equipment and types of
 activities, where relevant for specific measures designed to strengthen the Convention;
- The incorporation of existing and further enhanced confidence building and transparency measures, as appropriate, into the regime;
- A system of measures to promote compliance with the Convention, including, as appropriate, measures identified, examined and evaluated in the VEREX Report. Such measures should apply to all relevant facilities and activities, be reliable, cost effective, non-discriminatory and as non-intrusive as possible, consistent with the effective implementation of the system and should not lead to abuse;
- Specific measures designed to ensure effective and full implementation of Article X, which also avoid any restrictions incompatible with the obligations undertaken under the Convention, noting that the provisions of the Convention should not be used to impose restrictions and/or limitations on the transfer for purposes consistent with the objectives and the provisions of the Convention of scientific knowledge, technology, equipment and materials.

The mandate also required that:

Measures should be formulated and implemented in a manner designed to protect sensitive commercial proprietary information and legitimate national security needs.

and:

Measures shall be formulated and implemented in a manner designed to avoid any negative impact on scientific research, international cooperation and industrial development.

In addition, the Special Conference made it clear that the regime "would include, *inter alia*, potential verification measures, as well as agreed procedures and mechanisms for their efficient implementation and measures for the investigation of alleged use". The Ad Hoc Group is required to

"complete its work as soon as possible and submit its report, which shall be adopted by consensus, to the states parties, to be considered at the Fourth Review Conference or later at a Special Conference".

The AHG under the chairmanship of Ambassador Tóth of Hungary held its first procedural meeting on 3–5 January 1995 and then substantive meetings of two weeks duration on 10–21 July 1995, 27 November–8 December 1995, 15–26 July 1996, and 16–27 September 1996. In its report to the Fourth Review Conference held on 25 November–6 December 1996, the AHG reported that "in order to fulfil its mandate, the Ad Hoc Group has decided to intensify its work with a view to completing it as soon as possible". The AHG therefore decided to hold three meetings each of three weeks duration during the twelve months from September 1996. These three meetings were held on 3–21 March, 14 July–1 August and 15 September–3 October. Thus there have been eight sessions of the AHG to date.

The functioning of the AHG during 1995, 1996 and its meetings in early 1997 has been facilitated by the appointment of Friends of the Chair (FOC) who chaired sessions concerned with the four elements of the mandate:

- Definitions of Terms and Objective Criteria Dr Ali Mohammadi of the Islamic Republic of Iran
- Confidence-Building and Transparency Measures Ambassador Tibor Tóth of Hungary
- Measures to Promote Compliance initially Mr Stephen Pattison and later Ambassador Sir Michael Weston of the UK
- Measures Related to Article X Ambassador Jorge Berguno of Chile.

At the successive AHG meetings, the FOC produced papers that reflected the discussions that had taken place yet were without prejudice to the positions of delegations on the issues under consideration in the AHG and did not imply agreement on the scope or content of the paper. These FOC papers were considered by the AHG in plenary session and amended as requested by delegations so that they reflected the views expressed before they were accepted for attachment to the procedural reports of the meetings. It was clear from these reports that some FOC papers have gone through several iterations and have thus been refined and improved.

At its March meeting, the AHG had exchanges of views on how to move to a negotiating format in order to fulfil its mandate and also considered the possible structural elements of a legally binding instrument to the BWC. Consequently, a rolling text was prepared and issued in June containing the material in the previously produced FOC papers which was inserted into the structural outline that had been considered and annexed to the procedural report of the March meeting.

The July AHG meeting thus saw the transition of the AHG to the consideration of the rolling text. Additional FOCs were also enlisted to assist the AHG:

- Legal Issues Ambassador John Campbell (Australia)
- Investigations Annex Mr Peter Goosen (South Africa)

In addition, Mr Carlos Duarte of Brazil was asked to succeed Ambassador Jorge Berguno of Chile as the FOC on Article X measures. A revised version of the rolling text was appended to the procedural report of the July 1997 AHG meeting.

The next AHG meeting in September 1997 saw further consideration of the rolling text together with the request to two further FOCs to assist the AHG:

- Confidentiality Ambassador Dr Gunther Siebert (Germany)
- National Implementation and Assistance Mr Ajit Kumar (India)

In addition, Mr Richard Tauwhare of the UK replaced Ambassador Sir Michael Weston as the FOC on Compliance Measures. A further developed rolling text was appended to the procedural report of the September 1997 AHG meeting.

The Emerging Regime The regime to strengthen the BWC that is emerging from the negotiations in Geneva is an integrated package of measures which is likely to include mandatory declarations together with on-site measures together with measures to strengthen the implementation of other Articles of the BWC — notably Article III, the undertaking not to transfer anything to aid prohibited activities, Article IV, the requirement for states parties to take any necessary measures to implement the Convention nationally, and Article X, the undertaking to assist in the fullest possible exchange of equipment, materials and information for peaceful purposes. Two other issues that are being addressed are the subjects of what needs to be defined and of what organization will be required to implement the strengthened BWC. Furthermore, the mandate for the regime calls for it to be devised so as to protect sensitive commercial proprietary information and legitimate national security needs.

This review focuses on the principal issues relating to declarations, on-site measures, national implementation, BWC Article III and Article X measures, definitions, confidentiality and the organization. Other issues such as legal issues and confidence-building measures are touched upon.

It should be noted that the Ad Hoc Group has developed a particular terminology which is quite deliberately different from that adopted by other treaties such as the CWC so as to avoid confusion. Whilst the AHG has to solve issues that are closely similar to those that were solved by the negotiators of the CWC, the subject of the BWC is different from that of the CWC and consequently measures for the strengthened BWC need to be tailored to its particular requirements. The rolling text for the legally binding instrument currently comprises some 23 Articles, 8 Annexes and 5 Appendices; in the following paragraphs, all references are to the current rolling text {BWC/AD HOC GROUP/38, of 6 October}. Articles mentioned are those in the rolling text unless specifically identified as being BWC Articles.

The current rolling text is liberally sprinkled with square brackets indicating a divergence of views between delegations as to the language that should be used. Such divergence can, on occasion, be very significant whilst other cases are relatively slight. The key point to appreciate is that nothing is agreed until everything is agreed. In order to keep this review as readable as possible, square brackets are kept to a minimum in the following paragraphs.

Declarations Article III, entitled Compliance Measures, includes Section D. Declarations which contains six pages of language. This requires each state party to declare all specified activities or facilities which exist on its territory or in any other place under its jurisdiction or control. Such declarations would be made not later than [60][90] days after the Protocol has entered into force for that state party, and subsequently annually, not later than 90 days after the end of the previous calendar year. Activities and facilities suggested for declaration include:

Activities:

- the presence/absence of biological defence programmes; and
- additional information on past offensive/defensive activities not provided in the initial declaration

Facilities:

- taking part in biological defence programmes
- producing vaccines to protect humans and animals
- producing plant inoculants
- which have BL 4 maximum containment laboratories;
 and
- which have BL 3 containment areas.

Transfers:

• all transfers of listed agents and equipment.

Appearance of outbreaks of disease:

- any relevant information on certain outbreaks of disease. Implementation of BWC Article X:
- measures taken to implement Article X of the BWC.

There is additional bracketed language about other facilities which might be declared such as facilities working with listed agents which carry out R & D, produce such agents with an aggregate production capacity of 100 litres or more, maintain culture collections, carry out genetic modification, or carry out aerobiology. Other possible categories for declaration are other microbiological production facilities not working on listed agents with an aggregate fermenter production capacity of [100][1000] litres or more and other facilities not working with listed agents which possess aerosol test chambers or conduct certain kinds of genetic modification.

Annex A. Declarations has some 26 pages; these currently comprise sections with language on definitions, lists and criteria for human, animal and plant agents and toxins, list of equipment, and thresholds together with headings without text for sections on programmes and facilities and for declaration formats. The five Appendices (A to E) address information to be provided in declarations of biological defence programmes, biological defence facilities, past biological programmes, and of other facilities.

The AHG is debating which triggers should be used to require declarations and what information should be provided in declarations. Some states (Canada, the Netherlands, UK, Italy and the five Nordic countries) have provided the results of national surveys as Working Papers to help determine which activities and facilities should be

declared. A comparison of these surveys is made in the University of Bradford Briefing Paper No 3, September 1997 (available on the web at http://www.brad.ac.uk/acad/sbtwc). It is generally appreciated that the aim is to declare those facilities and activities of greatest relevance to the BWC and not to declare all facilities of possible relevance.

On-Site Measures Article III Compliance Measures also contains a Section F Visits and Investigations which contains 26 pages. There are two principal categories of Visits and Investigation; first, Non-Challenge Visits (NCVs) in circumstances other than to investigate a non-compliance concern and, second, Non-Compliance Concern Investigations. A further category comes under the heading of measures to strengthen the implementation of BWC Article III. Whilst there is considerable consensus regarding the inclusion of investigations in the regime, there is still considerable debate about the role of visits. Those in favour of a regime including visits argue strongly that such visits will contribute to the overall effectiveness of the regime which would otherwise depend on declarations and highly political non-compliance concern investigations.

Visits are described as falling into several categories:

- random visits to declared facilities to confirm the accuracy of declarations;
- ambiguity related visits to resolve declaration ambiguities;
- clarification visits to resolve any uncertainty in declarations;
- request visits made for the BWC organization to help compile declarations; and
- voluntary visits.
 - Investigations fall into two categories:
- field investigation where there is a release of, or exposure of humans, animals or plants to biological agents or toxins that cause concern about non-compliance; and
- facility investigation where there is concern that a particular facility is engaged in prohibited activities.

Annex B Non-Challenge Visits currently has no text whereas Annex D Investigations has been extensively developed and contains some 62 pages. Annex D has extensive duplication as in addition to a section of 12 pages on General Provisions, it has sections on both the two categories of investigations outlined above as well as on the alternative titles for these two categories: investigation of alleged use of biological weapons, and investigation of any other alleged breach of the BWC respectively.

The debate on NCVs is between those who are persuaded that overall, NCVs will increase transparency; enhance confidence in compliance; facilitate detection of a prohibited activity by denying it the cover of an otherwise peaceful facility; assist in building a picture over time of national norms in microbiological activities; help the BWC and states parties keep abreast of legitimate biological activity in each state party; provide an opportunity to assist states parties in gathering information for declarations, and upgrading laboratory and manufacturing standards; encourage cooperation among states parties; and serve the interests of health and safety. On the other hand, others have raised some disadvantages such as increasing the risk of revealing commercial proprietary information that could have an ad-

verse economic effect on commercial enterprises; increasing the risk of revealing sensitive national security information that could make potential adversaries aware of vulnerabilities that could be exploited; and having a low probability of finding conclusive evidence of treaty violations at the declared facilities. Arguments for and against NCVs are summarised in another University of Bradford Briefing Paper No 2, September 1997, which concludes that NCVs are a necessary element of an integrated regime of measures to strengthen the BWC. It is, however, important to recognise that NCVs are envisaged as being very infrequent; they are not being considered as a parallel to the routine inspections in the CWC.

The text in Article III on Investigations includes sections on the following:

- initiation
- consultation, clarification and cooperation
- information to be submitted with a request for an investigation
- screening to guard against abusive requests
- pre-investigation procedures
- access and measures to guard against abuse during the conduct of investigations
- post-investigation procedures

Insofar as screening to guard against abusive requests is concerned, the question as to whether the screening process should be a red light procedure (i.e., the investigation will take place unless a majority decide against carrying out the investigation) as in the CWC or a green light procedure (i.e., the investigation will take place only if a majority decide in favour of carrying out the investigation) is undetermined. The rolling text currently contains both in square brackets.

National Implementation Article X National Implementation Measures first appeared as a single page in the rolling text produced by the September 1997 AHG meeting. This addresses both the need for legislation to implement the Convention and the legally binding instrument as well as the need for states parties to appoint a national authority. The language relating to legislation calls on each state party to prohibit natural and legal persons anywhere on its territory or in any other place under its jurisdiction as recognized by international law from undertaking any activity prohibited to a state party under this Convention, including enacting penal legislation with respect to such activity. This language closely mirrors that in the corresponding Article of the CWC (Art. VII, para. 1) and provides a useful strengthening of the BWC Article IV undertaking.

Insofar as the national authority is concerned, the Article X language again mirrors that in the CWC (Art VII, para 4).

Measures to Strengthen the Implementation of Article III Each state party to the BWC undertakes in Article III:

not to transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage or induce any State, group of States or international organizations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment and means of delivery specified in article I of the Convention.

In the rolling text, Article III Compliance Measures includes under *D. Declarations* provision for each state party to declare annually all transfers of listed agents or toxins, equipment [or means of delivery] and under *F. Visits and Investigations* contains a section (II) on Measures to Strengthen the Implementation of Article III. This sets out the following guidelines with the objective of preventing dual-use items from being used for purposes prohibited by the BWC:

- (i) Any request for procurement of a specific agent/toxin shall be accompanied by information on the purpose, quantity required, site or facility for proposed use, quantity to be produced, place where intended to be stored and end-use certificate.
- (ii) Any request for transfer or procurement of equipment envisaged to be declared under CBMs, for use by a state participating in the compliance regime in a BL-4 facility, including details of its proposed application and the site/facility for intended use, shall be notified to the BWC Organization.
- (iii) Any transfer of technology related to delivery systems, aerosol dispersion of toxins and pathogens, stabilization of agents/toxins to environmental stress shall be notified to the BWC Organization.
- (iv) Transfer of agents, equipment and material shall not be allowed to non-states parties of the compliance regime under the Convention without prior approval of the BWC Organization.

Alternative language on transfer guidelines is also provided in the same section and it is clear that further consideration will be given to this element of the rolling text.

The section (III) on Investigations in Article III of the rolling text includes provision for a further category for Investigations where there is a concern that a transfer has taken place in violation of Article III of the Convention. There is also a corresponding provision, albeit without text in the current rolling text, in Section IV of *Annex D Investigations*.

Measures related to Article X In Article X of the BWC, states parties undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technical information for the use of biological agents and toxins for peaceful purposes. In addition, this Article requires that the BWC be implemented in a manner designed to avoid hampering the economic or technological development of the states parties. In the rolling text Article VII Scientific and Technological Exchange for Peaceful Purposes and Technical Cooperation comprises some 10 pages with sections on Scope, Measures to promote scientific and technological exchanges, Measures to avoid hampering the economic and technological development of states parties, Institutional mechanisms and international cooperation, and Safeguards and limitations. The language proposes a number of particular activities which, usefully, is preceded by an introductory sentence which emphasises the need to take full account of existing agreements and competences of the relevant international organizations and the need to avoid duplicating existing activities, mechanisms and programmes. Proposed activities include promoting the dissemination of results in field of biological research and high technology in

areas directly relevant to the Convention, assisting in the establishment and functioning of an international system for the global monitoring of emerging diseases in humans, animals and plants, and various activities relating to biological defence including ways to strengthen the states parties biological defence capabilities. Language is included for states parties to provide assistance to any State party to the protocol which has been exposed to the use or threat of use of biological agents or toxins.

The section on Institutional Mechanisms and International Cooperation calls for the BWC Organization to develop a framework for activities to provide assistance to states parties to the Protocol and in particular to the developing countries which are states parties to the Protocol. There is language calling for the BWC Organization to establish a cooperative relationship and maintain working ties with relevant organizations including OPCW, WHO, FAO, OIE, UNIDO, ICGEB, UNEP and other agencies engaged in implementation of Agenda 21 and the Convention on Biological Diversity.

Definitions The mandate for the AHG calls for consideration, inter alia, of definitions of terms and objective criteria, such as lists of bacteriological (biological) agents and toxins, their threshold quantities, as well as equipment and types of activities, where relevant for specific measures designed to strengthen the Convention. The debate in the AHG has seen states parties fall into two groups; the larger having the view that care should be taken to define only those terms necessary for devising an effective legally binding instrument and that any proposal to define terms in Article I of the BWC would have the effect of amending the Convention and be contrary to the mandate of the AHG. The smaller group considered that definition of Article I terms was essential for the purposes of a verification mechanism. It is, however, clear from the CWC that great care needs to be taken by the AHG to ensure that the language adopted in the legally binding instrument does not confuse states parties as to the basic and comprehensive prohibition in Article I of the BWC.

Article II Definitions (6 pages) contains a number of terms which are not included in square brackets and are thus more agreed — such as biological defence facility, biosafety level 3, diagnostic facility, facility, production capability, site, vaccine, work with listed agents and toxins and a number that are in square brackets and are clearly seen as contentious — such as bacteriological (biological) and toxin weapons, biological agents, hostile purposes, toxins. The material in Article II is repeated in Annex A Declarations in Section I Definitions as the AHG delegations have expressed different views about the appropriate location of any agreed definitions. It is evident that for the Protocol to be effective, states parties will need to have precise information as to what their obligations are under the Protocol. It will be important, for example, that the requirements as to what activities and facilities should be declared are specific and unambiguous.

Other language closely related to definitions and arising from the same element of the AHG mandate is that concerning lists and criteria, lists of equipment and threshold quantities. Although Article III Compliance Measures has section headings A Lists and Criteria and B Equipment neither section has language. However, Annex A Declarations contains a Section II Lists and Criteria (Agents and Toxins) (8 pages) which contains lists of human, animal and plant pathogens and for each a set of criteria. As a footnote indicates, the lists and criteria section had been the subject of technical discussions as a FOC paper during earlier AHG session and views were expressed that the AHG had had sufficient discussion of the issue. Another view was that further consideration would be required. In a sense, there has probably been sufficient discussion of the lists and criteria as a topic in its own right. What is needed is for further consideration as to the extent to which such lists and criteria are needed for the legally binding instrument. Thus, the language for human pathogens includes the idea that such a list may be required "in particular, for initiating or triggering declarations". A List of Equipment (5 pages) is included in section III of Annex A as being a list discussed by the AHG in the context of a declaration format for a declared facility; seven categories are included — aerobiology, production, work with listed agents and toxins, genetic modification, plant inoculant equipment, cell disruption equipment and milling equipment.

Article III also has a Section C. Thresholds (1 page) which records in a footnote that views were expressed that the application of threshold limits to the possession of biological agents and toxins is not a useful means to strengthen the Convention and could undermine the General Purpose Criterion embodied in Article I of the BWC. Another view was that establishment of threshold quantities were essential for an effective verification regime. The divergence of views is evident in the conflicting draft language in this section. In addition, some 5 pages are included on thresholds in section IV of Annex A which proposes formula based on multiples of the effective dose of biological agents and toxins for calculating quantities that might be stored at facilities engaged in developing and testing means of protection against BW. Effective doses for biological agents are tabulated and toxins assigned to groups of lethal doses.

Confidentiality Language for confidentiality provisions first appeared in the rolling text produced at the July AHG meeting and was further developed at the September AHG meeting. Article IV Confidentiality Provisions comprises two pages. The language is closely similar to that in the CWC with requirements that the Organization conduct its activities in the least intrusive manner consistent with the timely and efficient accomplishment of their objectives, that each state party shall treat as confidential any information and data that it receives in confidence from the organization, that each state party shall have the right to take measures to protect confidential information provided that it fulfils its obligations to demonstrate compliance and that the Director-General shall have the prime responsibility for the protection of confidential information which comes into the possession of the Organization. Other language relates to the Confidentiality Annex and to liabilities arising from unauthorised disclosure of confidential information including the proposed establishment of a Commission to settle disputes relating to confidentiality. Annex E Confidentiality (3 pages) has sections addressing the need-to-know principle, the confidentiality regime, the establishment of a classification system, criteria for confidentiality, obligations for handling classified information, obligations for intended release of confidential information and handling of sensitive information on the premises of states parties. The language in the draft Confidentiality Annex is broadly similar to that in the corresponding Annex of the CWC although the obligations in respect of intended release appear more restrictive as there is no analogy to the CWC provision (Confidentiality Annex, para 2 (c)(i)) allowing the release of general information on the implementation of the Convention which may be compiled and publicly released in accordance with the decisions of the Conference of States Parties or the Executive Council.

Organization Language entered the rolling text in July 1997 as Article IX on organization and implementational arrangements which was reorganized in the current version of the rolling text with much of the detail on the technical secretariat together with additional material being incorporated in a new Annex H entitled The [Technical] Secretariat. There is at present considerable duplication between text on the technical secretariat in Article IX and that in Annex H. The current version of Article IX contains the sections on: A. General Provisions (1 page); B. The Conference of States Parties (3 pages); C. [The Executive Council] (3 pages); D. The [Technical] Secretariat [(including International Epidemiological Network)] (5 pages); and E. Privileges and Immunities (1 page) together with Annex H The [Technical Secretariat] (9 pages).

Annex H contains sections on structure (The Director-General, Scientific Support Centre, and Laboratories) and on functions. The language indicates that the proposed Scientific Support Centre, which would be the scientific and technical expertise of the Technical Secretariat, would be made up of both permanent and short-term staff with the indication being that, while the Technical Secretariat will conduct the various types of Non-Challenge Visits, it will only "provide technical support" and not conduct non-compliance concern and other investigations. There would be advantage as well as consistency with the role of the Technical Secretariat (Art. IX.37) if it were made clear that the Secretariat will also conduct investigations carried out under the Protocol. Current language could be read as indicating that part-time staff nominated by states parties will carry out investigations; the contrast to the CWC in which Article VIII specifies that the paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity. Although the comparable sentence appears in the rolling text of the BWC, it is in square brackets and the current text does not address how concerns about commercial confidentiality can be met if part-time staff are to be engaged in investigations and visits.

Other Issues There are numerous other issues that have yet to be addressed in detail. For example, whilst legal issues have seen the incorporation of language in the Articles of the rolling text concerned with Amendments, Duration and Withdrawal, Signature, Ratification, Accession and

Entry into Force, there are some significant gaps which will need to be negotiated. Thus, Article XX on Entry into Force requires the agreement of how many instruments of ratification should be deposited before entry into force. Another area is that related to Confidence-Building Measures (Article VIII) which is one of the only two Articles currently without any text (the other is Article I General Provisions). The absence of text on confidence-building

measures is understandable as until the principal elements of the Protocol have been elaborated, it would be premature to consider which confidence-building measures might usefully be incorporated into the Protocol.

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

News Chronology

May through August 1997

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** In South Korea the government establishes a task force of 80 people to "probe into North Korea's war provocations and formulate a defence strategy", so Yonhap news agency reports. The task force is to begin its work by the end of the year, and is to assess the threat posed by, among other things, the CW capability of North Korea. It is to be headed by Lt-Gen Choe Ton-kol of the Joint Chiefs of Staff, and is to include 48 field-rank army, navy and air force officers and 32 national and provincial government officials. Commentary from Pyongyang characterizes the announcement as provocation: "If they persistently seek a war against the North, they will be held fully responsible for all its consequences and will have to pay dearly for them" {KCNA 3 Aug}.
- **2 August** The European Commission's Moscow office has announced an ECU 2 million project, within the framework of the TACIS programme [see 21 May], for conversion of former chemical-weapons plants in Russia, pending decision by the Russian State Duma to ratify the Chemical Weapons Convention. The Russian side of the project is to be handled by the Metallkhim association, which will be assisted by a foreign corporation that is to be selected next month on the basis of a tender announced in the Spring for companies in member-countries of the European Union. {Segodnya 2 Aug}
- **3 August** In Russia, at the Stroitel sanatorium in Vladimir Oblast, a summer camp opens for groups of 20-30 children coming from the chemical weapons stockpile locations in Udmurtiya and in Bryansk, Kirov, Penza, Saratov and Kurgan oblasts. The camp is organized by Green Cross Russia [see 8-10 Jul]. {*Nezavisimaya Gazeta* and *Krasnaya Zvezda* 31 Jul}
- **5 August** In China, an outbreak of plague in the Beijing suburb of Yanshan is attributed by residents to a recently unearthed Japanese bomb {UPI 5 Aug}.
- **5 August** In Connecticut, Startech Environmental Corporation of Wilton announces that it is teaming with Burns and Roe Enterprises Inc to bid for chemdemil business in response to the US Army's recent request for proposals for demonstration of an Assembled Chemical Weapons Disposal System using a technology alternative to incineration [see 28 Jul]. The team will be proposing the Startech Plasma Waste Converter (PWC) system. {PR Newswire 5 Aug}

- **5–9 August** In the UK, OPCW initial inspections take place at four former chemical weapons production facilities the sites of the old chemical-munition filling stations at Lords Bridge, Barnham Heath, Norton Disney and West Cottingworth. {*Trust & Verify* Aug}
- **6 August** In India, Prime Minister Gujral is questioned in the Lok Sabha about the safeguards that India should take, now that it has abandoned its chemical weapons [see 26 Jun], in the face of the failure of Pakistan to ratify the Chemical Weapons Convention. He says that India still has capability in chemical weapons: "We can manufacture them and this by itself is a deterrent. Moreover, the destruction of the chemical weapons under the Convention would be gradual and we can have a second look at it." He also says that Indian manufacture of the weapons had begun before he became prime minister. He adds: "But I stand by the policies the successive governments have followed". {*The Hindu* 7 Aug}
- **6–8 August** In Chicago, there is a second Illinois Institute of Technology Research Institute *International Workshop on Chemical and Biological Agents* [see 10-12 Dec 96]. The workshop is again chaired by Prof Krishna Rajan. It brings together 10 specialists from the Czech Republic, India, Iran, Kuwait, Singapore and the United States. {*ASA Newsletter* 23 Aug}
- **7 August** In Syria, army brigades have been using CW agents during exercises in the desert near the Golan Heights in the course of which, several days previously, three soldiers had died, according to the military correspondent of the Israeli newspaper *Hatzofe*.
- **8 August** In India, an OPCW initial inspection is taking place at the Defence Research and Development Organization establishment at Ozra, near the western town of Nashik, where chemical weapons [see 6 Aug] are reported to have been made. In July, a smaller OPCW team had inspected the DRDO establishment at Gwalior. {South China Morning Post 8 Aug}
- **8 August** In the US House of Representatives, an Intelligence Committee report refers to an internal investigation by the Central Intelligence Agency which had concluded that the posting of intelligence documents on the GulfLink internet website [see 31 Oct 96] did "serious damage to intelligence sources and methods". {*New York Times* 8 Aug}