

# THE CBW CONVENTIONS BULLETIN

News, Background and Comment on Chemical and Biological Weapons Issues

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## A DRAFT CONVENTION TO PROHIBIT BIOLOGICAL AND CHEMICAL WEAPONS UNDER INTERNATIONAL CRIMINAL LAW

Any development, production, acquisition or use of biological or chemical weapons is the result of decisions and actions of individual persons, whether they are government officials, commercial suppliers, weapons experts or terrorists. The international conventions that prohibit these weapons, the BWC and the CWC, being directed primarily to the actions of states, address the matter of individual responsibility to only a limited degree.

Article IV of the BWC requires each state party to prohibit the development, production, stockpiling, acquisition and retention of biological weapons anywhere within its territory. Article VII of the CWC requires each state party to enact penal legislation applicable to acts committed in the territory of that state and also to acts committed by its nationals anywhere.

However the BWC and the CWC do not attempt to make the development, production, possession or use of biological and chemical weapons an international crime for which states establish jurisdiction over prohibited acts regardless of the place where they are committed or the nationality of the offender, nor do these treaties contain provisions dealing with the extradition of suspects.

Neither are these deficiencies remedied by the provisions applicable to biological and chemical weapons in the Convention for the Suppression of Terrorist Bombings, opened for signing in January 1998, or in the Statute of the International Criminal Court signed in Rome in July 1998. The Bombing Convention does not apply to the activities of military forces in the exercise of their official duties or to internal state acts — such as the use of CBW weapons by a leader against a population within his own state. Nor does the scope of either of these agreements extend beyond the actual use of CBW weapons to include, as do the BWC and the CWC, their development, production and possession.

What is needed is a new treaty, one that defines specific acts involving biological or chemical weapons as international crimes, like piracy or aircraft hijacking, obliging states either to prosecute or extradite offenders who are present in their territory. Treaties defining international crimes are based on the concept that certain crimes are particularly dangerous or abhorrent to all and that all states therefore have the right and the responsibility to combat them. Certainly in this category, threatening to the community of nations and to present and future generations, are

crimes involving the weaponization of disease or poison and the hostile exploitation of biotechnology.

The Harvard Sussex Program, with advice from an international group of legal authorities, has prepared a draft convention that would make certain acts involving biological and chemical weapons crimes under international law. The proposed convention would make it an offence for any person, regardless of official position, to order, direct or knowingly to participate or render substantial assistance in the development, production, acquisition, stockpiling, retention, transfer or use of biological or chemical weapons or to threaten the use of such weapons or to create or retain facilities intended for the production of such weapons. Any person who commits any of the prohibited acts anywhere would face the risk of apprehension, prosecution and punishment or of extradition should that person be found in a state that supports the proposed convention.

The proposed convention would oblige each state party: (i) to establish jurisdiction with respect to the specified crimes extending to all persons in its territory, regardless of the place where the offence is committed or the citizenship of the offender, and (ii) to prosecute or extradite any such offender found in its territory or any other place under its jurisdiction. Decisions regarding sentencing, including consideration of the severity of the offence and of any mitigating circumstances, are left to individual states parties.

The same obligations, to establish criminal jurisdiction and to extradite or adjudicate, *aut dedere aut judicare*, are included in international conventions now in force for the suppression and punishment of international crimes including aircraft hijacking and sabotage (1970; 1971), crimes against internationally protected persons (1973), hostage

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taking (1979), theft of nuclear materials (1980), torture (1984) and crimes against maritime navigation (1988).

The proposed convention defines biological and chemical weapons as they are defined in the BWC and the CWC, on the basis of the general purpose criterion — and its definitions of prohibited acts are modeled closely on the definitions in these treaties. Commission of a prohibited act is defined as a crime only if committed “knowingly” and it is an admissible defence that the accused person “reasonably believed” that the conduct in question was not prohibited. The proposed convention also includes provisions requiring states parties to cooperate in investigations and to provide legal assistance to one another in the adjudication of offences.

One way forward would be for a group of states to submit the proposed convention or a similar draft in the form of a resolution for consideration by the UN General Assembly,

seeking its referral to the UNGA Sixth (legal) Committee for negotiation of an agreed text. If the negotiated text receives the commendation of the General Assembly, the convention may then be opened for signature and ratification, leading to its entry into force. Adoption and widespread adherence to such a convention would create a new dimension of constraint against biological and chemical weapons by applying international criminal law to hold individual offenders responsible and punishable wherever they may be and regardless of whether they act under or outside of state authority. Such individuals would be regarded as *hostes humani generis*, enemies of all humanity. The norm against chemical and biological weapons would be strengthened, deterrence of potential offenders would be enhanced, and international cooperation in suppressing the prohibited activities would be facilitated.

*The present draft of the proposed convention, below, was prepared by a working group consisting of James Crawford (Cambridge University), John Dugard (Leiden University), Philip Heymann (Harvard University) and the directors of the Harvard Sussex Program (Matthew Meselson and Julian Robinson). It is based on an earlier HSP draft and on discussions at HSP workshops held in January 1997 at Harvard University and, in association with the Common Security Forum, at the University of Cambridge Lauterpacht Research Centre for International Law in May 1998.*

## **DRAFT CONVENTION ON THE PREVENTION AND PUNISHMENT OF THE CRIME OF DEVELOPING, PRODUCING, ACQUIRING, STOCKPILING, RETAINING, TRANSFERRING OR USING BIOLOGICAL OR CHEMICAL WEAPONS**

The States Parties to this Convention,

*Recalling* that States are prohibited by the Geneva Protocol of 1925, the Biological Weapons Convention of 1972 and the Chemical Weapons Convention of 1993, and other international agreements, from developing, producing, stockpiling, acquiring, retaining, transferring or using biological and chemical weapons, and that these prohibitions reflect a worldwide norm against these weapons;

*Recognizing* that any development, production, acquisition or use of biological or chemical weapons is the result of the decisions and actions of individual persons, including government officials, and that these activities are within the capability not only of States but also of other entities and of individuals;

*Affirming* that all persons and entities should be prohibited from engaging in these activities, and should be subject to effective penal sanctions, thereby enhancing the effectiveness of the Geneva Protocol, the Biological Weapons Convention and the Chemical Weapons Convention;

*Reaffirming* that any use of disease or poison for hostile purposes is repugnant to the conscience of humankind;

*Considering* that biological and chemical weapons pose a threat to the well-being of all humanity and to future generations;

*Resolving* that knowledge and achievements in biology, chemistry and medicine should be used exclusively for the health and well-being of humanity;

*Desiring* to encourage the peaceful and beneficial advance and application of these sciences by protecting them from adverse consequences that would result from their hostile exploitation;

*Determined*, for the sake of human beings everywhere and of future generations, to eliminate the threat of biological and chemical weapons;

*Have agreed* as follows:

### **ARTICLE I**

Any person commits an offence who knowingly:

- (a) develops, produces, otherwise acquires, stockpiles or retains any biological or chemical weapon, or transfers, directly or indirectly, to anyone, any biological or chemical weapon;
- (b) uses any biological or chemical weapon;
- (c) engages in preparations to use any biological or chemical weapon;
- (d) constructs, acquires or retains any facility intended for the production of biological or chemical weapons;
- (e) assists, encourages or induces, in any way, anyone to engage in any of the above activities;
- (f) orders or directs anyone to engage in any of the above activities;

- (g) attempts to commit any of the above offences;
- (h) threatens to use biological or chemical weapons.

### **ARTICLE II**

1. Nothing in this Convention shall be construed as prohibiting activities that are permitted under:
  - (a) the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, of 10 April 1972, or
  - (b) the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, done at Paris on 13 January 1993,
 or that are directed toward the fulfillment of a States obligations under either Convention and are conducted in accordance with its provisions.
2. In a prosecution for an offence set forth in Article I, it shall be a defence that the accused person reasonably believed that the conduct in question was not prohibited under this Convention.
3. It is not a defence that a person charged with an offence set forth in Article I acted in an official capacity, under the orders or instructions of a superior, or otherwise in accordance with internal law.

### **ARTICLE III**

For the purposes of the present Convention:

1. Biological weapons means:
  - (a) microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;
  - (b) weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.
2. Chemical weapons means the following, together or separately:
  - (a) toxic chemicals and their precursors, except where intended for:
    - (i) industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;
    - (ii) protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons;
    - (iii) military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare;
    - (iv) law enforcement including domestic riot control purposes
 as long as the types and quantities are consistent with such purposes.
  - (b) munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;

- (c) any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b).

3. Toxic chemical means any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.
4. Precursor means any chemical reactant which takes part at any stage in the production by whatever method of a toxic chemical. This includes any key component of a binary or multicomponent chemical system, that is to say, the precursor which plays the most important role in determining the toxic properties of the final product and reacts rapidly with other chemicals in the binary or multicomponent system.
5. Person means any natural person or, to the extent consistent with internal law as to criminal responsibility, any legal entity.

### **ARTICLE IV**

Each State Party shall adopt such measures as may be necessary:

- (a) to establish as criminal offences under its internal law the offences set forth in Article I;
- (b) to make those offences punishable by appropriate penalties which take into account their grave nature.

### **ARTICLE V**

1. Each State Party to this Convention shall take such measures as may be necessary to establish its jurisdiction over the offences set forth in Article I in the following cases:
  - (a) when the offence was committed in the territory of that State or in any other place under its jurisdiction as recognized by international law;
  - (b) when the alleged offender is a national of that State;
  - (c) when, if that State considers it appropriate, the alleged offender is a stateless person whose habitual residence is in its territory;
  - (d) when the offence was committed with intent to harm that State or its nationals or to compel that State to do or abstain from doing any act;
  - (e) when the offence involved the intentional use of biological or chemical weapons and a victim of the offence was a national of that State;
  - (f) when the offence involved the intentional use of biological or chemical weapons against any persons, irrespective of their nationality.
2. Each State Party shall likewise take such measures as may be necessary to establish its jurisdiction over the offences set forth in Article I in cases where the alleged offender is present in its territory and it does not extradite such person pursuant to Articles VII and VIII.
3. This Convention does not exclude any criminal jurisdiction exercised in accordance with internal law, including any internal law giving effect to Article I.

4. Jurisdiction with respect to the offences set forth in Article I may also be exercised by any international criminal court that may have jurisdiction in the matter in accordance with its Statute

#### **ARTICLE VI**

1. Upon receiving information that a person who has committed or who is alleged to have committed an offence as set forth in Article I may be present in its territory, a State Party shall take such measures as may be necessary under its internal law to investigate the facts contained in the information.
2. If it is satisfied that the circumstances so warrant, a State Party in the territory of which an alleged offender is present shall take that person into custody or shall take such other measures as are necessary to ensure the presence of that person for the purpose of prosecution or extradition.
3. Any person regarding whom the measures referred to in paragraph 2 are being taken shall be entitled to:
  - (a) communicate without delay with the nearest appropriate representative of the State of which that person is a national or which is otherwise entitled to protect that person's rights or, if that person is a stateless person, the State in the territory of which that person habitually resides;
  - (b) be visited by a representative of that State;
  - (c) be informed of that person's rights under subparagraphs (a) and (b);
4. The rights referred to in paragraph 3 shall be exercised in conformity with the laws and regulations of the State in the territory of which the offender or alleged offender is present, provided that the said laws and regulations must enable full effect to be given to the purposes for which the rights accorded under paragraph 3 are intended.
5. When a State Party, pursuant to the present Article, has taken a person into custody, it shall promptly notify, directly or through the Secretary-General of the United Nations, the States Parties which have established jurisdiction in accordance with Article V, paragraph 1, and, if it considers it advisable, any other interested States Parties, of the fact that such person is in custody and of the circumstances which warrant that person's detention. The State which makes the investigation contemplated in paragraph 1 of the present Article shall promptly inform those States Parties of its findings and shall indicate whether it intends to exercise jurisdiction.

#### **ARTICLE VII**

1. The offences set forth in Article I shall be deemed to be included as extraditable offences in any extradition treaty existing between States Parties. States Parties undertake to include those offences as extraditable offences in every extradition treaty subsequently concluded between them.
2. If a State Party which makes extradition conditional on the existence of a treaty receives a request for extradition from another State Party with which it has no extradition treaty, it may, if it decides to extradite, consider this Convention as the legal basis for

extradition in respect of the offences set forth in Article I. Extradition shall be subject to the other conditions provided by the law of the requested State.

3. States Parties which do not make extradition conditional on the existence of a treaty shall recognize the offences set forth in Article I as extraditable offences as between themselves subject to the conditions provided by the law of the requested State.
4. The offences set forth under Article I shall be treated, for the purpose of extradition between States Parties, as if they had been committed not only in the place in which they occurred but also in the territories of the States required to establish their jurisdiction in accordance with paragraph 1 of Article V.
5. The provisions of all extradition treaties and arrangements between States Parties with regard to offences set forth in Article I shall be deemed to be modified as between States Parties to the extent that they are incompatible with this Convention.

#### **ARTICLE VIII**

The State Party in the territory of which the alleged offender is found shall, if it does not extradite such person, be obliged, without exception whatsoever and whether or not the offence was committed in its territory, to submit the case without delay to competent authorities for the purpose of prosecution, through proceedings in accordance with the laws of that State. Those authorities shall take their decision in the same manner as in the case of any other offence of a grave nature under the law of that State.

#### **ARTICLE IX**

1. States Parties shall afford one another the greatest measure of assistance in connection with investigations or criminal or extradition proceedings brought in respect of the offences set forth in Article I, including assistance in obtaining evidence at their disposal which is necessary for the proceedings.
2. States Parties shall carry out their obligations under paragraph 1 in conformity with any treaties or other arrangements on mutual legal assistance that may exist between them. In the absence of such treaties or arrangements, States Parties shall afford one another assistance in accordance with their internal law.
3. States Parties may request assistance from competent international bodies in connection with investigations or criminal or extradition proceedings brought in respect of the offences set forth in Article I, as may be authorized by such bodies.

#### **ARTICLE X**

None of the offences set forth in Article I shall be regarded, for the purposes of extradition or mutual legal assistance, as a political offence or as an offence connected with a political offence or as an offence inspired by political motives.

Accordingly, a request for extradition or for mutual legal assistance based on such an offence may not be refused on the sole ground that it concerns a political offence or an offence connected with a political offence or an offence inspired by political motives.

#### **ARTICLE XI**

Nothing in this Convention shall be interpreted as imposing an obligation to extradite or to afford mutual legal assistance, if the requested State Party has substantial grounds for believing that the request for extradition for offences set forth in Article I or for mutual legal assistance with respect to such offences has been made for the purpose of prosecuting or punishing a person on account of that person's race, religion, nationality, ethnic origin or political opinion or that compliance with the request would cause prejudice to that person's position for any of these reasons.

#### **ARTICLE XII**

States Parties shall cooperate in the prevention of the offences set forth in Article I, particularly by:

- (a) taking all practicable measures to prevent preparations in their respective territories for the commission of those offences within or outside their territories;
- (b) exchanging information and coordinating the taking of administrative and other measures as appropriate to prevent commission of those offences.

#### **ARTICLE XIII**

1. Each State Party shall inform the Secretary-General of the United Nations of the legislative and administrative measures taken to implement this Convention. In particular, each State Party shall notify the Secretary-General of the United Nations of the jurisdiction it has established under its internal law in accordance with paragraph 3 of Article V. Should any change take place, the State Party concerned shall immediately notify the Secretary-General.
2. Each State Party shall, in accordance with its national law, promptly provide to the Secretary-General of the United Nations any relevant information in its possession concerning:
  - (a) the circumstances of any offence over which it has established its jurisdiction pursuant to paragraph 1 or paragraph 3 of Article V;
  - (b) the measures taken in relation to the alleged offender, and, in particular, the results of any extradition proceedings or other legal proceedings.
3. The State Party where an alleged offender is prosecuted shall communicate the final outcome of the proceedings to the Secretary-General of the United Nations, who shall transmit the information to the other States Parties.
4. Each State Party shall designate a contact point within its government to which other States Parties may communicate in matters relevant to this Convention. Each State Party shall make such designation known to the Secretary-General.

#### **ARTICLE XIV**

Any dispute between States Parties concerning the interpretation or application of this Convention which is not settled by negotiation shall, at the request of one of them, be submitted to arbitration. If within six months from the date of the request for arbitration the parties are unable to agree on the organization of the arbitration, any one of those

parties may refer the dispute to the International Court of Justice.

#### **ARTICLE XV**

1. Ten years after the entry into force of this Convention, or earlier if it is requested by a majority of Parties to the Convention by submitting a proposal to this effect to the Secretary-General of the United Nations, a Conference of States Parties shall be held at [Geneva, Switzerland], to review the operation of the Convention with a view to assuring that the purposes of the preamble and the provisions of the Convention are being realized.
2. At intervals of seven years thereafter, unless otherwise decided upon, further sessions of the Conference may be convened with the same objective.

#### **ARTICLE XVI**

1. This Convention shall be open for signature by all States from [DATE] until [DATE] at United Nations Headquarters in New York.
2. This Convention is subject to ratification, acceptance or approval. The instruments of ratification, acceptance or approval shall be deposited with the Secretary-General of the United Nations.
3. This Convention shall be open to accession by any State. The instruments of accession shall be deposited with the Secretary-General of the United Nations.

#### **ARTICLE XVII**

1. This Convention shall enter into force on the thirtieth day following the date of the deposit of the [NUMBER] instrument of ratification, acceptance, approval or accession with the Secretary-General of the United Nations.
2. For each State ratifying, accepting, approving or acceding to the Convention after the deposit of the [NUMBER] instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the thirtieth day after deposit by such State of its instrument of ratification, acceptance, approval or accession.

#### **ARTICLE XVIII**

The Articles of this Convention shall not be subject to reservation.

#### **ARTICLE XIX**

The original of this Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations, who shall send certified copies thereof to all States.

IN WITNESS WHEREOF, the undersigned, being duly authorized thereto by their respective Governments, have signed this Convention, opened for signature at United Nations Headquarters in New York on [DATE].

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## Developments in the Organization for the Prohibition of Chemical Weapons

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The period covered by this quarterly review, from mid-September to early December, has been a particularly active one for the Organization for the Prohibition of Chemical Weapons (OPCW). The third session of the Conference of the States Parties (CSP) took place in November with regular sessions of the Executive Council meeting shortly before and after it. Many commentators considered this session of the CSP to be its first "normal" session as it was intended to deal less with organizational issues and more with issues related to the implementation of the Convention. Whether this actually proved to be the case is a point of debate. Issues related to the internal functioning of the OPCW have occupied a prominent place during the period under review, a fact which is reflected in the following description.

Four states have ratified the Convention during the period under review. In chronological order they are: Viet Nam, Panama, Ukraine and Indonesia. At the time of writing, therefore, there were 121 ratifying and acceding states and 48 signatory states. In October the Director-General visited UN Headquarters in New York and held discussions with representatives of over 40 states, mainly signatories and non-signatories. Regional seminars aimed at increasing the universality of the Convention took place in Beijing in September and Saint Lucia in November.

A number of important decisions have been taken during the period under review. The Executive Council was finally able to reach consensus on a decision, albeit an interim one, regarding the transfer of the Schedule 1 chemical, saxitoxin, an issue which had been on its agenda for over a year. The momentum gained during the successful negotiation of a model facility agreement for Schedule 2 plant sites was continued and a model was also agreed for Schedule 1 facilities. Also during the period under review, the Director-General announced that a team of OPCW inspectors had visited the Satian No. 7 facility in Japan, at which the Aum Shinrikyo cult produced the sarin gas which killed 12 people and injured thousands more in Tokyo in 1995, in order to verify its destruction. On the subject of destruction, the Director-General announced to the third session of the CSP that the OPCW had already confirmed the destruction of 11 Chemical Weapons Production Facilities (CWPFs) and that the conversion of two others had been approved. He said that inspectors had now visited 34 Chemical Weapons Storage Facilities (CWSFs) which between them hold eight million chemical munitions and more than 25,000 bulk containers filled with chemical agent.

However, as is to be expected, the period under review has also thrown up its fair share of difficulties. As reported in previous quarterly reviews, the national implementation of the Convention is still proceeding very slowly and unevenly. However, the US Congress has now passed the implementing legislation which means that sometime in 1999 the US chemical industry will finally begin to receive inspections. Events during the period under review have also

demonstrated that a number of improvements and refinements to the working relationship between the organs of the OPCW are required in order to increase the efficiency of decision-making. There are a number of issues which need to be addressed including decision-making within the Council, communication between the Technical Secretariat and the policy-making organs and the amount of discretion which is allowed to the Director-General and his senior officials to manage the Technical Secretariat. Another area of concern is the ability of inspection teams to use sampling and analysis while on missions.

### **Organizational Issues**

The third session of the CSP brought to the surface a whole range of observations on the functioning of the OPCW, and in particular on the working relationship between its organs, namely the CSP, the Executive Council and the Technical Secretariat. It is appropriate therefore to examine this issue first, as it permeates the work of the OPCW as a whole. The remarks made during and after the third session of the CSP addressed three key aspects of the issue: the decision-making process within the Executive Council; the communication processes and information flow between the organs of the OPCW; and the relationship between member states and the Technical Secretariat.

*Decision-making in the Executive Council* For a number of months now states parties, the Technical Secretariat and external commentators have been analysing the decision-making process within the Executive Council. Addressing the third session of the CSP the chairman of the Council, Mr Krzysztof Patulej (Poland), questioned whether the Council's time was being used effectively if it became a forum for ongoing consultation rather than decision-making. He said that the Council should not be afraid of taking decisions by vote on organizational issues, but that consensus should still be a prerequisite when national interests are at stake.

In their statements to the CSP, the Council chairman and the Director-General both used the negotiation of the draft 1999 budget as an example of the inefficient use of Council and Technical Secretariat resources. Commenting on the drawn-out negotiating process the chairman stated that "the budget has become an annual odyssey — or is it a pilgrimage? — which, until now, has been characterised by seemingly never-ending consultations. ... We must ask ourselves: what can we do, on the basis of the experience which we have so painfully acquired until now, to refine, streamline, and expedite the budgetary decision-making process?" Even after many hours of negotiation in the twelfth session of the Council, informal consultations and one unscheduled Council meeting, the draft submitted to the CSP still included a number of square-bracketed sections.

In his address to the thirteenth session of the Council, the chairman supported the proposal of having fewer, but better prepared, regular sessions in 1999 and of having much better planning in the periods between sessions. The idea of having fewer sessions was originally proposed by the Director-General (see last quarterly review). It now appears that much more use will be made of informal meetings of the Council to address specific topics and to discuss contentious issues before making recommendations to the Council. It is fairly standard practice in other international organizations that issues are only submitted to the executive body when detailed negotiations have been completed in subsidiary bodies and it is clear that consensus can be achieved. The CWC clearly does not foresee the Council as a negotiating body, but as a decision-making one.

#### *Communication between the organs of the OPCW*

Another subject of much discussion during and after the third session of the CSP was the communication processes between the OPCW's organs, particularly between the policy-making organs and the Technical Secretariat. During the general debate of the third session of the CSP, a number of states parties, in particular Switzerland and Norway, spoke on this issue. The representatives of both countries proposed bringing together the key officials of each of the organs of the OPCW in addition to representatives of the regional groups in an informal forum. By complementing the formal mechanism of Council and CSP sessions with informal processes those making these proposals hope to facilitate communication and ensure that the regular Council sessions can concentrate on their main task of promoting the effective implementation of the Convention. It was stressed that any informal processes should be as transparent as possible and should not undermine the activities and responsibilities of the CSP, Council or Technical Secretariat. In his closing statement to the third session of the CSP its chairman announced that he would initiate informal consultations between states parties and the Director-General, as part of his contribution to improving the dialogue between the organs of the OPCW.

#### *Relationship between member states and the Technical Secretariat*

As reported in previous quarterly reviews, the extent of the involvement of states parties, and the members of the Council in particular, in organizational and administrative issues has become a topic of much discussion within the OPCW. Besides promoting the effective implementation of, and compliance with, the Convention, the Council is also tasked to "supervise" the activities of the Technical Secretariat. Article VIII.31 does not further define the term supervise, neither does it specify which activities of the Technical Secretariat the Council is to supervise. Since the entry into force of the Convention the members of the Council appear to have adopted a rather broad interpretation of the activities which they are to supervise. This has led some commentators to suggest that states parties are attempting to "micro-manage" the Technical Secretariat.

The most current claims of "micro-management" have centred on the recent negotiation of the draft 1999 budget and the consultations on staff regulations. Although its role is as the executive organ of the OPCW the Council appeared to have become involved in the routine administra-

tion of the Technical Secretariat. Council members examined the various drafts of the budget in intricate detail during hours of informal consultations and also in the regular sessions of the Council. Again, the Council appeared to have adopted a very broad interpretation of its role under Article VIII of the Convention. In addition, the third session of the CSP witnessed the principal organ of the OPCW spending a great deal of its time considering the draft staff regulations which, although they have financial implications, were primarily an organizational matter unrelated to the implementation of the Convention.

In his statement to the third session of the CSP the Director-General said that it was "particularly important for Member States to step back and concentrate much more on providing the Secretariat with the strategic policy guidance which it needs, and less on continuing to involve themselves in mundane day-to-day issues which are more properly the province of the management of the Secretariat". The Director-General emphasised that as chief executive officer of the OPCW he needed to have flexibility in managing the Technical Secretariat's resources without the imposition of "straight-jackets of a micro-managerial nature". However, the CSP proceeded to spend a great deal of its time discussing organizational issues and referred many issues related to the implementation of the Convention back to the Council for further discussion. Expressing his dissatisfaction with this outcome the Director-General said in his closing statement to the CSP that "it is regrettable that much of your energy and money has been wasted on issues of a minor and purely administrative nature. The province of a Conference of the States Parties is quite properly defined in the Convention, i.e. as decision-making on important policy and implementation issues."

#### **Executive Council**

The Executive Council met for two regular sessions and one unscheduled meeting during the period under review. The regular sessions, the Council's twelfth and thirteenth, were held on 6–9 October and 8–11 December respectively. The Council held an unscheduled meeting on 20 October.

The twelfth session of the Council, and the one-day meeting, were mainly devoted to negotiations on the draft 1999 budget and various other preparations for the third session of the CSP. The thirteenth session, which met for only two days, returned to more routine matters related to the status of implementation of the Convention and also had to address a number of issues arising from the third session of the CSP. During the period under review a number of issues were referred from the twelfth session of the Council to the third session of the CSP, and some of them were referred back from the CSP to the thirteenth session of the Council. In addition, a few new issues were referred to the thirteenth session of the Council by the CSP. At its thirteenth session the Council took action on some of these recurring and new issues and agreed to appoint friends of the chair or to convene informal meetings to address the others.

At its thirteenth session, the Council decided to meet for four regular sessions during 1999. These sessions will be held on: 2–5 February; 26–29 April; 21–24 September; and 30 November–3 December. The February session of the Council will be its fourteenth regular session.

*Status of implementation of the Convention* The Director-General updated both the twelfth and thirteenth sessions of the Council on the submission of initial and annual declarations and notifications. A minority of states parties remain in technical non-compliance with the Convention, because they have not submitted initial declarations or have only submitted partial initial declarations. Since the last quarterly review three more states parties (Panama, Iran and Senegal) have submitted their initial declarations, bringing the total number submitted since entry into force to 85 as of 8 December.

As decided by the Council at its tenth session, the twelfth session considered the situation with regard to declarations and with a view to making a recommendation to the third session of the CSP. During its deliberations, the Council recalled its obligation under Article VIII.31 to promote the effective implementation of, and compliance with, the Convention. The Council decided therefore, to bring the situation to the attention of the CSP under Article VIII.35 and 36, which deal with the reporting of concerns about compliance, including cases of non-compliance. At its thirteenth session the Council expressed its intention to continue monitoring the fulfilment of declaration obligations by states parties. It will later consider making a recommendation to the fourth session of the CSP for redressing the situation.

As agreed at the eleventh session of the Council the Director-General did not submit a *Status of Implementation Report* (SIR) to the twelfth session as it met only four weeks later. A two-part SIR was submitted to the thirteenth session with the first part addressing verification-related issues and the second addressing the implementation of Articles X and XI. For the first time the first part of the SIR was issued as a Highly Protected document, including its annexes. This reflected increasing calls from members of the Council for the provision of more information on the results of verification activities. However, the methodology and format used to report on the results of verification activities have yet to be finalised between the Technical Secretariat and states parties. Discussions will begin early next year. When classification levels have been assigned by states parties to submitted documents, any documents produced by the Technical Secretariat using those documents must carry the same classification. Although this means that more detailed information is being made available to states parties, it also means that distribution of the SIR to states parties which are not members of the Council is no longer a simple matter of posting or faxing the report. Documents classified as Highly Protected must be picked up from the OPCW headquarters by a representative of the state party, which is a limiting factor, particularly for those delegations which are not based in The Hague and do not have the resources to make numerous trips to the OPCW.

*Destruction plans* The thirteenth session of the Council approved, ad referendum and subject to confirmation by the fourteenth session, a detailed plan for the destruction of chemical weapons at the Dugway Proving Ground in the USA during 1999. The Director-General reported to the thirteenth session of the Council that the USA had submitted an additional annual plan for the destruction of chemical weapons.

As reported in the previous quarterly review, a state party submitted to the eleventh session of the Council a draft decision on the end-point of destruction for the hydrolysis of sulphur mustard. The eleventh session of the Council deferred decision on this matter. A decision was approved by the twelfth session on the understanding that it applies only to this particular case and does not set a precedent. The destruction process in question produces a hydrolysate which contains less than 3 per cent thiodiglycol, a Schedule 2 chemical. The Council decided to establish a series of verification and transparency measures for the destruction activities and also decided that future destruction processes which produce scheduled chemicals where the end-point of destruction is not clear should be subject to approval on a case by case basis.

During 1999 a series of informal consultations will be held to discuss the destruction of both chemical weapons and of CWPFs.

*Combined plans for destruction and verification* As reported in the previous quarterly review, the combined partial plans for destruction and verification of a CWPF at the Newport Chemical Depot in the USA were deferred by the eleventh session of the Council. These plans were later approved by the twelfth session of the Council.

The thirteenth session of the Council considered an addendum to an earlier decision on the combined plans for destruction and verification of the Satian No. 7 CWPF in Japan which expanded the list of specialised equipment to be destroyed. However, the Director-General also reported to this session of the Council that an inspection team was currently at the site in Kamikuishiki verifying that it had been destroyed. In this light, the Council agreed that it did not need to take action on the addendum, but urged states parties to strictly comply with the timelines and procedures envisaged in the Convention for such cases.

To date, the Technical Secretariat has issued destruction certificates for 11 CWPFs, confirming that all specialised and standard equipment and buildings at these facilities have been destroyed.

*Facility agreements* At its twelfth session the Council returned to the consideration of a facility agreement for a Category 3 Chemical Weapons Destruction Facility (CWDF) in the USA. This agreement had been submitted to the tenth session of the Council, but its adoption was deferred by both the tenth and eleventh sessions. However, the eleventh session of the Council had noted that the destruction campaign was actually completed before the Council could consider the facility agreement. In this light, the twelfth session of the Council agreed that no further action needed to be taken on this matter, but emphasised that the timelines and procedures of the Convention should be strictly observed in future.

No further facility agreements were submitted to the twelfth or thirteenth sessions of the Council. A number of facility agreements for chemical weapons production and storage facilities in Russia have been prepared and will be submitted to the fourteenth session of the Council.

*Transfers of saxitoxin* The issue of the transfer of saxitoxin for medical and diagnostic purposes had been on the



Council's agenda for over a year, but it had not been possible to reach consensus on a solution. Each session of the Council has however recognised the urgent need to resolve the problem. A number of delegates attended the technical seminar on saxitoxin in September, following which the twelfth session of the Council was able to reach consensus on an interim decision. This decision means that saxitoxin can be transferred from one state party to another in amounts limited to five milligrams for medical and diagnostic purposes without the provision of the 30 day advance notification normally required. However, the transferring state party must notify the Technical Secretariat at the time of any such transfer, and must include detailed information on the transfers in its annual declaration. This decision has effect for 270 days from the date on which it was taken, unless an amendment or change to the Convention is initiated under Article XV.

Canada announced to the twelfth session of the Council that it intended to initiate a proposal for a change to the Verification Annex in accordance with Article XV. The proposal was submitted to the thirteenth session. Whereas amendments to the main articles of the Convention must be approved by an amendment conference and ratified or accepted by all states parties, technical or administrative changes to the Verification Annex need only be evaluated by the Director-General and then approved by the Council. The Canadian change proposal would add a new paragraph 5bis to Section B of Part VI of the Verification Annex, which would read: "for quantities of 5 milligrammes or less, the Schedule 1 chemical Saxitoxin shall not be subject to the notification period in paragraph 5 if the transfer is for medical/diagnostic purposes. In such cases, the notification shall be made by the time of transfer".

According to the Director-General's evaluation, this proposal should facilitate international cooperation, strengthen the implementation of the Convention and would have no major implications for the Technical Secretariat in terms of recording and tracking the transferred quantities of saxitoxin. At its thirteenth session, the Council decided to hold an informal meeting on 15 January in order to prepare its recommendation on the Canadian proposal to all states parties in accordance with Article XV.5(c).

This proposal only deals with the notification aspect of the transfer of saxitoxin. Canada and the UK plan to submit a joint proposal which will deal with the re-transfer aspects.

*Schedule 1 model facility agreement* Following the successful negotiation of a model facility agreement for Schedule 2 plant sites, which was approved by the eleventh and confirmed by the twelfth sessions of the Council, it was decided that a model agreement for Schedule 1 facilities was the next priority. Following intensive consultations chaired by the facilitator, Mr Ali Soltanieh (Iran), a final text was submitted to, and approved by the twelfth session of the Council. Some concerns were expressed about the implications for Schedule 1 facility agreements which had already been approved. However, the decision does not oblige states parties to modify existing agreements, although they can negotiate amendments with the Technical Secretariat to bring existing agreements into line with the model. States parties are still free to draw upon approved agreements or to depart from them where they deem appro-

priate. However, new agreements must conform with the provisions of the Convention and retain the general form and content of the model facility agreement.

*Chemical industry issues* The Director-General submitted to the thirteenth session of the Council two reports on chemical industry issues. He emphasised the fact that it is essential for the Technical Secretariat to have an accurate understanding of the basis upon which Schedule 2 and 3 chemicals are declared and of the criteria used by states parties for declaring aggregate national data (AND) for these chemicals.

The Director-General submitted to the thirteenth session of the Council an updated version of his report to the tenth session on the reporting of AND by states parties. This revised report further illustrated that a wide variety of criteria are being used by states parties when collecting and declaring AND. This situation lessens the ability of the Technical Secretariat to make effective use of AND for tracking Schedule 2 and 3 activities on an international scale.

The second report by the Director-General dealt with the criteria used by states parties for making Schedule 2 and 3 declarations. The second session of the CSP requested states parties to provide information on the criteria which they apply in making declarations of plant sites producing, processing and consuming Schedule 2 chemicals and/or producing Schedule 3 chemicals. The tenth session of the Council reiterated the CSP's request and the Director-General submitted a report to the eleventh session of the Council on responses received. The Director-General issued an updated report to the thirteenth session of the Council. Most states parties responded that they had applied the provisions of Parts VII and VIII of the Verification Annex to their declarations, and most also stated that they had applied low concentration limits to their Schedule 2 and 3 plant site declarations. However, the responses collectively failed to provide an additional insight into the discrepancy between the application of low concentration limits and the numbers of plant sites declared by different states parties.

After considering the Director-General's reports, the thirteenth session of the Council requested him to ask all relevant states parties for more information regarding the criteria for making Schedule 2 and 3 declarations, and to report back to the fifteenth session of the Council.

*Recurring issues* The second session of the CSP requested the Council to address and resolve at its tenth session the issue of the attribution of the costs related to inspections of old and abandoned chemical weapons (O/ACW). However, no consensus could be reached at the tenth or eleventh sessions of the Council despite intensive work on the part of the friend of the chair, Mr Urs Schmid (Switzerland). Two draft decisions, one on the costs of verification of OCW and one on the costs of verification of ACW, were submitted to the twelfth session of the Council by the friend of the chair. Again, no consensus could be reached but the Council nonetheless decided to refer the draft decisions to the third session of the CSP for its consideration. The CSP was also unable to reach consensus and referred the issue back to the Council for further consideration with a view to making recommendations to the fourth session of the CSP. Mr Schmid told the thirteenth session of

the Council that he was willing to continue as the friend of the chair on this issue.

The negotiation of a draft relationship agreement with the UN is another long-standing item on the Council's agenda. The final text as negotiated between the secretariats of the OPCW and the UN was submitted to the twelfth session of the Council for recommendation to the third session of the CSP. However, not all members of the Council could accept the final form of the draft agreement, and it was therefore submitted to the CSP in the form of a draft decision. Despite intensive consultations during the third session of the CSP, no final decision could be reached on this issue, and the CSP requested the Council to continue addressing it. At its thirteenth session the members of the Council made some adjustments to the text of the agreement and agreed to submit the adjusted version to the UN Secretariat for comments. The Council hopes to be able to make a recommendation to the fourth session of the CSP.

The first session of the CSP approved interim staff regulations which would apply until the end of the third session, when draft staff regulations would be proposed for adoption. The tenth session of the Council appointed Mr Tsutomu Arai (Japan) as the friend of the chair on this issue. During the period under review he conducted intensive consultations involving states parties, the management of the Technical Secretariat and individual staff members. The draft staff regulations were submitted to the third session of the CSP by the Director-General but, despite further intensive consultations and some progress being made, no final decision could be taken. The main obstacle to consensus appeared to be agreement on a tenure policy for the staff members of the Technical Secretariat. The CSP delegated to the Council the authority to finalise the staff regulations for provisional implementation, pending final confirmation by the fourth session of the CSP. Mr Arai informed the thirteenth session of the Council that he would be willing to continue as friend of the chair. Further informal consultations are scheduled to take place during January.

The Director-General reported to the eleventh session of the Council on difficulties which the Technical Secretariat had been experienced with the sole supplier designated by the host country. The sole supplier is responsible for providing all office furniture and equipment used by the OPCW. According to the contract between the OPCW and the sole supplier the earliest date for termination was 29 April 2005. However, due to problems in the relationship, the sole supplier had offered to terminate the contract early, on condition that the OPCW pay NLG 2,500,000 for the cost of the office furniture and equipment. This offer was considered by the third and fourth sessions of the Advisory Body on Administrative and Financial Matters (ABAF) and an independent accountancy firm was requested to conduct a cost-benefit study. In the light of the ABAF recommendations and the results of the cost-benefit study the twelfth session of the Council recommended that the third session of the CSP consider early termination of the contract. The issue was duly considered by the CSP which could not reach consensus and therefore mandated the thirteenth session of the Council to adopt a final decision. The Council decided to terminate the contract with effect from 1 January 1999 and to pay compensation up to NLG 2,500,000 to the sole sup-

plier. The Council authorised the Director-General to use savings from the 1998 budget to pay the compensation.

#### *Issues referred from the third session of the CSP*

The issue of internal transparency was raised by a number of delegations in the general debate and in other forums during the third session of the CSP. Some states parties doubted that members of the Council received enough information on the results of verification activities to be able to accurately monitor compliance with the Convention, which is one of the Council's main functions. While states parties receive information on declarations submitted by other states parties, they only receive general information on the outcome of inspections, and do not have access to, for example, final inspection reports. During the general debate at the third session of the CSP a number of states parties called for more access to information on inspection activities, but others recalled the confidentiality provisions of the Convention and the need to respect the position of states parties with legitimate security concerns. The CSP requested the Council to further discuss the issue of transparency and to prepare a format for reporting information to the Council on the verification activities, including inspection results, conducted by the Technical Secretariat. The thirteenth session of the Council decided to convene an informal meeting to consider the issue and to prepare a draft reporting format for consideration by the Council's fourteenth session. The informal meeting is tentatively scheduled for 14 January.

The Council decided to appoint a friend of the chair on the draft resolution submitted at the third session of the CSP by Iran, Cuba and Pakistan regarding the fostering of international cooperation for peaceful purposes. The friend of the chair was tasked to report back to the Council in time for it to report to the fourth session of the CSP. Informal consultations on this issue are likely to take place during February.

The Director-General reported to the twelfth session of the Council that he had established an internal task force to identify, on the basis of operational experience, items of inspection equipment which needed to be added to the current list of approved equipment. The task force also studied whether the specifications of existing items of approved equipment needed to be revised. On the basis of the task force's findings, the Director-General submitted to the third session of the CSP a list of new equipment and revised specifications for approved inspection equipment. The CSP considered this list and requested the Council to consider the proposals at its fourteenth session and to make recommendations to the fourth session of the CSP. The CSP also requested the Technical Secretariat to provide states parties with additional information on the proposed additions and revisions in time for review by a meeting of experts. This meeting was duly held on 11 December and the Council will continue to address this matter at its fourteenth session in February.

As stipulated by the financial regulations, the Technical Secretariat submitted a draft medium-term plan to the third session of the CSP along with the draft 1999 budget. The draft plan covers the years from 1999 to 2003. The Technical Secretariat's ability to prepare a comprehensive medium-term plan was restricted because of the newness of the OPCW and the lack of historical data. The draft plan high-

lights the significant events which are scheduled to occur over the next four years, including sessions of the CSP. It then attempts to estimate resource requirements for the various programmes of the OPCW budget during this period. The plan foresees a large upsurge in destruction activities in 2002, based on the increase in the number of CWDFs predicted in submitted destruction plans. Without sequential inspections and the use of on-site monitoring equipment this would result in a 96 per cent increase in total inspector days. While the number of staff members assigned to administrative and support roles is expected to remain fairly static, the numbers employed in the Inspectorate and Verification Division will rise in proportion to the increase in inspector days. The CSP requested the Council to further consider the draft medium-term plan and report back to its fourth session. The thirteenth session of the Council decided to hold an informal meeting, tentatively scheduled for 31 March, in order to prepare a recommendation for the fourth session of the CSP.

**Financial issues** The Director-General reported to both sessions of the Council on the status of contributions to the 1998 budget and the Working Capital Fund. As of 30 November, only 78.8% of the total assessments of NLG 122,810,879 had been received from member states. Of the then 120 member states, only 53 had paid in full, 29 had partially paid and 38 had not paid anything at all. Contributions to the Working Capital Fund stood at 98.3%, but 34 states parties had not paid their contributions. Collections for the 1997 budget amounted to 99.1% of the total with 76 member states having paid in full, 4 having only partially paid and 25 having paid nothing at all. Collection rates for the Preparatory Commission in 1993 stood at 99.3%, while the rate for the period 1994–97 stood at 99.1%.

At its thirteenth session the Council expressed the hope that, after April 1999, the provisions of Article VIII.8 would not apply to any state party. Article VIII.8 states that a member state which is in arrears shall have no vote if the amount of its arrears equals or exceeds the amount of the contribution due from it for the preceding two full years.

Members of the Council continue to set a mixed precedent for other states parties to follow. While calling for all states parties to pay their contributions to the OPCW in full and as soon as possible, many Council members have themselves not done so. As of 30 November, while 24 of the Council's 41 members had paid their contributions to the 1998 budget in full, 14 had paid only partially and 3 still had not paid anything at all. Interestingly, the same three are the only Council members not to have paid their contributions to the 1997 budget in full either.

The ABAF met for its fourth session during 21–23 September. The main items on its agenda were the draft staff regulations, the provident fund and the reclassification of posts within the Technical Secretariat. The ABAF also received information regarding the ongoing informal consultations on the draft 1999 budget. The next session of the ABAF, its fifth, has been tentatively scheduled for 2–4 March. Items on its agenda will include the draft staff regulations, the 1999 budget and the draft medium-term plan.

**Other decisions** As reported in the previous quarterly review, guidelines for the use of the resources in the Volun-

tary Fund for Assistance were submitted to the eleventh session of the Council. Consideration of the guidelines was deferred by that session of the Council, but they were adopted by the twelfth session.

The thirteenth session of the Council decided to adjust the Director-General's salary, as of 1 March 1998, in order to bring it into line with other executive heads within the UN system.

The Director-General submitted to the twelfth session of the Council for its approval a list of newly validated spectra for inclusion in the OPCW Central Analytical Database. The Council deferred approval to its thirteenth session at which the spectra were duly approved for inclusion in the database.

As reported in the previous quarterly review, the eleventh session of the Council deferred consideration of the draft agreement between the OPCW and the Permanent Court of Arbitration on the provision of registry services by the court. The twelfth session of the Council approved the registry agreement.

### **Third Session of the Conference of the States Parties**

The third session of the CSP took place in The Hague during 16–20 November. It was attended by a total of 512 participants from 96 states parties, one contracting state, 15 signatory states, two non-signatory states, two international organizations and eight non-governmental organizations.

**Opening of the session** The session was opened by the outgoing chairman of the second session of the CSP, Ambassador Simbarashe S. Mumbengegwi (Zimbabwe). After his election, the chairman of the third session of the CSP, Ambassador Young-shik Song (South Korea) addressed the plenary. He was of the opinion that this was the first fully-fledged routine session of the CSP, as previous sessions had dealt with organizational issues, whereas this session had before it a number of issues related to the effective implementation of the Convention. The chairman emphasised two issues in particular, universality and compliance with the declaration requirements of the Convention.

The Director-General's opening statement to the CSP helped to set the tone for the rest of the session. In his statement he summarised the activities of the OPCW during the intersessional period and looked at the challenges to come, particularly the requirement to destroy all declared chemical weapons by 2007. The Director-General emphasised the importance of closing the remaining gaps in the verification regime, especially with regard to the absence of declarations and the submission of incomplete declarations. Reflecting the importance he attaches to such matters, he spent a great deal of time on organizational issues, in particular the relationship between states parties and the Technical Secretariat. He also addressed the universality of the Convention, noting that a "fresh effort" was needed to accelerate progress towards achieving universality, particularly in areas such as Africa, the Middle East and the Asia-Pacific region. The Director-General said that it was now time for the OPCW to make vigorous efforts to reach the general public and to increase its cooperation with NGOs. He also referred to progress in the area of international cooperation

and assistance and stated that member states participating in export-control regimes such as the Australia Group might wish to consider how they can contribute to ensuring the free movement of chemicals and encouraging the development of chemistry for peaceful purposes.

*General debate* Over 30 states took part in the general debate. Of special interest was the statement by Iran which provided information on its recently submitted initial declaration. The Iranian representative said that Iran had developed a chemical weapons capability during the Iran–Iraq war, but that the programme was discontinued as soon as the ceasefire was signed. Another interesting statement was that of Panama which included information on its declaration of abandoned chemical weapons on Panamanian territory.

Other speakers concentrated on a number of issues related to the Convention and its implementation. Progress towards universality was acknowledged as an important issue by many delegations. While recognising the achievements of the past year, 19 new member states since the last session of the CSP, they urged more states to join the CWC. Many speakers referred to Article XI and called for its speedy and full implementation, recognising it as one of the main pillars of the Convention. Turning to problems faced by the OPCW, delegates highlighted the continuing absence of declarations and the submission of incomplete declarations, as well as the number of issues which remain unresolved. A number of states parties called for further increases in internal transparency, particularly as regards the results of verification activities, while others emphasised the special situation of states which have national security concerns.

*Appointment of officials* Ambassador Young-shik Song (South Korea) was elected as the chairman of the third session of the CSP. The following states parties were elected as vice-chairmen: Algeria and Kenya; Iran and Mongolia; Czech Republic and Slovakia; Peru and Uruguay; and France and the USA. Ambassador Carl Gerhardus Niehaus (South Africa) was elected chairman of the Committee of the Whole, replacing Ambassador Bjørn Barth (Norway), whose term came to an end at this session.

*Election of new Executive Council members* The Conference elected 21 new members of the Executive Council. The new members are as follows:

- Africa — Cameroon, Côte d'Ivoire, Ethiopia, Tunisia, Zimbabwe
- Asia — Bangladesh, China, India, Japan, South Korea, Saudi Arabia
- Eastern Europe — Romania, Ukraine
- Latin America and the Caribbean — Argentina, Brazil, Mexico
- Western Europe and Others — France, Germany, Italy, UK, USA

These appointments are for two years, and will begin on 12 May 1999.

*Election of new Confidentiality Commissioners* The terms of appointment of the present members of the Confidentiality Commission, as elected by the first session of the

CSP, will come to an end in May 1999. Accordingly, new members were appointed by the third session of the CSP:

- Africa — Dr Laurraine Lotter (South Africa), Mr David William Chikaka (Zimbabwe), Professor Mohammed Mokhtar Dridi (Algeria), Dr Driss Hajir (Morocco)
- Asia — Professor Masahiko Asada (Japan), Dr Jamshid Momtaz (Iran), Dr R.V. Swamy (India), Mr Gong Chunsen (China)
- Eastern Europe — Dr Jaroslav Fiedler (Czech Republic), Mr Yuri Nickolaevich Marakhovsky (Russian Federation), Mr Zoltán Pecze (Hungary), Major Valery Dmitrievich Ziablov (Belarus)
- Latin America and the Caribbean — Mrs Ana Maria Cerini (Argentina), Mr Jesús Cuevillas Domínguez (Cuba), Professor José Luz González Chávez (Mexico), Mr Camilo Sanhueza Bezanilla (Chile)
- Western Europe and Others — Dr Karl F. Jorda (USA), Professor Dr Eric P.J. Myjer (Netherlands), Professor Dr Dieter C. Umbach (Germany), Dr Ignacio Vignote (Spain)

The CSP noted the report of the second meeting of the Confidentiality Commission and also approved the Commission's operating procedures.

*Status of implementation of the Convention* As requested by the tenth session of the Council, the Director-General submitted to the third session of the CSP a report on the status of initial declarations and notifications. This report listed the following 34 states parties which, as of 2 November, had yet to submit their initial declarations required under Articles III, IV, V and VI and the Verification Annex: Bahrain, Benin, Bolivia, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Burkina Faso, Burundi, Cameroon, Costa Rica, Cyprus, Equatorial Guinea, Gambia, Ghana, Guinea, Guyana, Iran, Kuwait, Lao People's Democratic Republic, Malawi, Mali, Mauritania, Moldova, Namibia, Papua New Guinea, Paraguay, Qatar, Saint Lucia, Senegal, Swaziland, Tanzania, Togo, Trinidad and Tobago, and Turkmenistan.

The third session of the CSP noted the Director-General's report and expressed serious concern at the significant number of states parties which had submitted no initial declarations or incomplete initial declarations. It also noted with concern the non-submission of annual destruction plans by some possessor states and delays in the start of destruction processes. The CSP requested the Director-General to bring these matters to the attention of the states parties concerned and to draw their attention to the assistance offered by the Technical Secretariat. It also took note of its responsibility under Article VIII.21(k) for taking measures to ensure compliance with the Convention and, in accordance with Article XII, to remedy and redress any situation contravening the Convention.

*1999 programme and budget* As in the past, the approval of the programme and budget for the coming year was one of the main items on the CSP's agenda. Despite the intensive negotiations conducted by the friend of the chair, Mr Hendrik Regeur (Netherlands), in the run-up to the third session of the CSP, final consensus could not be achieved before the third session of the CSP on a number of issues related to the draft budget. Two issues proved particularly

contentious: the creation of new fixed-term posts within the Technical Secretariat and the distribution of inspections to Schedule 2 plant sites. The lack of consensus on important issues meant that the CSP itself had to spend a great deal of its time discussing organizational and administrative issues relating to the budget. However, after negotiations lasting into the small hours of the morning, a budget for 1999 was finally approved by the CSP.

The budget for 1999 amounts to NLG 137,748,000, of which NLG 108,040,000 will be covered by contributions from member states. The remaining NLG 29,708,000 is miscellaneous income which includes interest payments, reimbursements from possessor states for inspections under Articles IV and V including payments in kind, and funds from the host country. As required by the Convention, the 1999 budget is divided into two chapters. The first relates to administrative and other costs and amounts to NLG 60,587,400, while the second chapter relates to verification costs and totals NLG 77,160,600. Following much negotiation among states parties, the budget provided for 496 fixed-term posts within the Technical Secretariat, an increase of 5 on 1998. Four of these new fixed-term posts are in the general service category and one is in the professional category. According to the budget, the Technical Secretariat expects to be able to carry out 300 inspections and visits in 1999. Of these, 188 will be to chemical weapons-related facilities, 17 will be to Schedule 1 facilities, 88 will be to Schedule 2 plant sites and 7 will be to Schedule 3 plant sites. Reflecting the desire of a number of states parties to restore some balance to the burden of chemical industry inspections, of the 88 Schedule 2 inspections due in 1999, 50 are reserved for plant sites in states parties which had not declared such sites as of 20 November 1998 and will not be carried out in other states parties.

The 1999 budget represents a decrease compared with the 1998 budget which totalled NLG 140,797,000. While administrative and other costs have increased from 1998 to 1999 (up from NLG 57,468,300 to NLG 60,587,400), the cost of the OPCW's verification activities has decreased over the same period (down from NLG 83,328,700 in 1998 to NLG 77,160,600 in 1999). These savings have primarily been made in the course of inspections under Articles IV and V because possessor states have provided services to inspection teams and because teams have been smaller and spent fewer days on-site than anticipated. Additional savings were made through the use of sequential inspections, discounted airfares and lower equipment transportation costs. With the reduction in the total budget the contributions due from member states have also fallen. Whereas in the 1998 budget contributions from member states amounted to NLG 122,444,500, in the 1999 budget this figure has fallen to NLG 108,040,000.

**CSP decisions** The third session of the CSP began its substantive work by taking a number of procedural decisions on attendance at the session by international organizations, non-signatory states and non-governmental organizations. The CSP also adopted a recommendation on ensuring the universality of the Convention which urged all states not party to the Convention to ratify or accede as quickly as possible. It recommended that states parties and the Director-General make strenuous efforts to achieve the

universality of the Convention. The Director-General will report on the implementation of this recommendation at the next session of the CSP. The CSP requested the Technical Secretariat to report to the fourteenth session of the Council on how it implements the provisions of paragraphs 12 of Parts VII and VIII of the Verification Annex. These provisions relate to the inspection regimes for Schedule 2 and 3 chemicals.

The agenda of the CSP included a number of decisions taken by the Council which required confirmation or approval by the CSP. The decision on privileges and immunities agreements with Denmark and Ghana adopted by the Council at its eleventh session was approved by this session of the CSP. In accordance with decisions taken by the Council at its eighth session, the CSP decided that end-use certificates for transfers of Schedule 2 and 3 chemicals to states not party to the Convention should be issued by the competent government authority, and that in the case of transfers to importers in states not party, the importer is obliged to specify the name and address of the actual end-user before the transfer is authorised. Under the procedure agreed at the second session of the CSP for unresolved issues, two draft decisions finalised by the Committee of the Whole (CoW) were approved by the Council at its eleventh and twelfth sessions for immediate implementation, subject to confirmation by the CSP. These decisions, on model facility agreements for Schedule 1 facilities and Schedule 2 plant sites, were accordingly confirmed by the third session of the CSP. The CSP also confirmed the important decision taken by the eleventh session of the Council on the costs of verification of inspections under Articles IV and V.

The CSP also took a number of decisions on unresolved issues which had been worked upon by solely be facilitators under the CoW. A procedural decision was taken on the meaning of "production by synthesis" in Part IX of the Verification Annex. Under this decision the CSP tasked the Scientific Advisory Board to address, purely from a scientific and technical aspect, the qualitative and quantitative implications of the issue in relation to their impact on declarations and inspections. Two further decisions were taken on chemical weapons issues. The first related to the issue of chemical weapons buried by a state party on its territory after 1976 or dumped at sea after 1984. The CSP decided that the Technical Secretariat shall inspect such chemical weapons on the basis of declarations submitted, taking into consideration that such weapons have to be accessible for identification. The second decision, on an understanding of what is considered a chemical weapon in relation to Article II.1(b) and (c), was more procedural in nature. It requested the Technical Secretariat to analyse the declarations submitted by states parties and to compile a list of illustrative, non-exhaustive examples of munitions, devices and equipment declared as chemical weapons pursuant to Article II.1(b) and (c). It was also agreed that a further seven unresolved issues need no longer be pursued and could therefore be removed from the list of unresolved issues.

#### *Procedure for addressing unresolved issues*

Although decisions were reached upon a number of unresolved issues either during the intersessional period or at the third session of the CSP, and issues were also deleted from the list, it was recognised that a need still exists for a proce-

ture to address the remaining unresolved issues. For this reason, the CSP adopted a procedure for addressing unresolved issues between its third and fourth sessions.

The current facilitators are to continue their work and attempt to prepare draft decisions in time for consideration and approval by the fourth session of the CSP. Issues which are resolved are to be introduced to the Council by the chairman of the CoW for immediate implementation, subject to final confirmation by the CSP. Additionally, in cases where the implementation of the Convention requires urgent action, the Director-General, or any state party, can bring an issue to the attention of the Council for immediate action. States parties can also bring any issue to the attention of the chairman of the CoW who has the authority to decide on a framework within which it can be addressed. At its fourth session the CSP will have to decide how to deal with the remaining unresolved issues.

Reporting to the third session of the CSP, Ambassador Barth, the outgoing chairman of the CoW, expressed his belief that the facilitation mechanism should not continue after the fourth session of the CSP and that any remaining issues should then be moved into the appropriate organs of the OPCW.

**Fostering of international cooperation** The delegations of Iran, Cuba and Pakistan submitted to the CSP a draft resolution on the fostering of international cooperation for peaceful purposes in the field of chemical activities. The resolution called for all states parties to complete the review of their existing national regulations for chemical trade and to report to the fourth session of the CSP, emphasising particularly any arrangements between states parties which would restrict or impede trade and the development of scientific and technological knowledge. The resolution requested the Director-General, in consultation with states parties, to strengthen international cooperation through the development of effective programmes aimed at assisting developing countries. The resolution also invited all states parties to report to the CSP on the implications of restrictions on trade and development which originate in parallel regimes outside of the Convention. The CSP deferred consideration of this matter to the Council for it to report back to the CSP at its fourth session.

**Status of national implementation** The Director-General submitted to the CSP a report on compliance by states parties with Article VII, dealing in particular with legislation, cooperation and legal assistance. The report stressed that the Convention is not self-executing and that states parties are required to introduce measures implementing the Convention domestically. Despite the intensive work undertaken to prepare and assist states parties to comply with the provisions of Article VII, out of 119 states parties at the time the report was written only 40 had submitted information on the legislative and administrative measures taken to implement the Convention. Although some of the texts were still being translated and others might have been incomplete, it appeared that only 26 were comprehensive enough to implement the Convention effectively. Only 18 submissions had extended penal legislation to nationals extraterritorially, as required by Article VII.1(c).

In response, the CSP urged states parties to complete the legislative and administrative measures to implement the Convention and to inform the Technical Secretariat of such measures. The CSP also proposed enhancing the possibilities of legal assistance among states parties through the convening of a seminar on national implementation and legal cooperation.

**Reports** The twelfth session of the Executive Council referred the *Draft Report of the Organisation on the Implementation of the Convention (29 April—31 December 1997)* to the third session of the CSP for its consideration and approval. This report, which updates the partial 1997 report approved by the second session of the CSP, was approved by the third session. The chairman of the Council, introduced the *Report of the Executive Council on the Performance of its Activities (1 November 1997—4 September 1998)*, which was noted by the CSP. The CSP also noted the report of the first session of the Scientific Advisory Board and a report by the Director-General on the implementation of the regime governing the handling of confidential information by the Technical Secretariat.

### **Actions by Member States**

**Ratifications** During the period under review four states deposited instruments of ratification with the UN Secretary-General in New York. They were: Viet Nam, which ratified on 30 September (entry into force on 30 October); Panama, which ratified on 7 October (entry into force on 6 November); Ukraine, which ratified on 16 October (entry into force on 15 November); and Indonesia, which ratified on 12 November (entry into force on 12 December). These ratifications bring the total number of states parties to 121 and the number of signatory states to 48.

### **Technical Secretariat**

**Declaration processing** Reporting to the third session of the CSP the Director-General summarised the current status of declarations of chemical weapons and related facilities. States parties had declared 59 CWPFs to the OPCW. Of these, 11 had already been certified as destroyed and the conversion of a further two for peaceful purposes had been approved. A further 12 CWPFs are expected to receive destruction certificates by the end of 1998 or early 1999. States parties had also declared 34 CWSFs, which between them contain around eight million chemical munitions and more than 25,000 bulk containers filled with chemical agent. There are also 45 sites declared as containing O/ACW. There are 24 declared inspectable Schedule 1 facilities. States parties had also declared 128 inspectable Schedule 2 plant sites and 325 inspectable Schedule 3 plant sites.

The Director-General updated the twelfth session of the Council on the preparations for the security audit of the Electronic Document Management System (EDMS). The reconstituted audit team held its initial meeting on 10 September. It reported that the security critical network was capable of storing confidential information with the required level of security and that it was ready for routine use, subject to periodic audits in the future.

*Inspections* As of 9 November 349 inspections had been carried out in 27 states parties. The breakdown of these inspections was as follows: eight to ACW sites; 86 to CWPFs; 57 to CWSFs; 19 to OCW facilities, 33 to Schedule 1 facilities; 64 to Schedule 2 plant sites; and 9 to Schedule 3 plant sites. Inspectors had also spent 13,324 inspector days at CWDFs in the USA where they had witnessed the destruction of 182,730 chemical munitions, 116,140 components of chemical munitions, 6,849 items of Category 3 chemical weapons and approximately 1,880 tonnes of chemical agents and binary weapons components.

*Implementation of Article X* According to Article X.4 states parties are required to submit on an annual basis information on their national programmes related to protective purposes. However, the procedures for these submissions are an unresolved issue which is currently not even under facilitation. In the absence of formal guidelines it is up to states parties themselves to decide what information to submit. As of 15 November only eight states parties (Albania, Belarus, Czech Republic, France, Romania, Sweden, Switzerland and the UK) had submitted information to the Technical Secretariat.

Article X.5 requires the Technical Secretariat to establish a data bank on protection against chemical weapons. The data bank currently consists of over 300 items which are being processed for abstracts and keywords. While most of the material in the data bank is currently in English, efforts are being made to obtain material in the other official languages of the OPCW. Of particular interest is information on protection against chemical weapons in tropical climates. The second part of Article X.5 states that the Technical Secretariat should, when requested, provide expert advice and assist the requesting state party in improving the implementation of its national protective programmes. In order to implement this provision, the Technical Secretariat intends to establish a network of experts in chemical weapons protection from states parties and its own staff. Experts from this protection network would provide on-site assistance to help requesting states parties improve their protective capabilities. The 1999 budget includes provision for ten such requests from states parties assuming two visits per request. At the time of writing, a number of states parties have indicated that they are actively considering whether to make a request under Article X.5.

Under Article X.7 states parties can choose three ways of pledging assistance to the OPCW. As of 15 November the Technical Secretariat had received contributions to the Voluntary Fund for Assistance from 16 states parties (Belgium, Canada, Chile, Denmark, Finland, Ireland, Italy, Luxembourg, Netherlands, New Zealand, Norway, Oman, Slovenia, South Korea, Sweden and Switzerland). A further four states parties (Kenya, Mauritius, Peru and Turkey) have sent contributions which had not been received by 15 November. The total amount in the fund stood at NLG 1,009,262. Three states parties (the Philippines, Poland and Spain) had expressed an interest in entering into bilateral agreements with the OPCW concerning the procurement of assistance and consultations with two of them were underway. The number of states parties to have made unilateral offers of assistance stood at 21 (Australia, Austria, Bulgaria, Cuba, Czech Republic, France, Germany, India, Iran,

Mongolia, Pakistan, Poland, Romania, Singapore, Slovakia, South Africa, Spain, Sweden, Switzerland, the UK and the USA) as of 15 November. The offers made by a further three states parties (Belarus, Monaco and Morocco) are to be clarified by the Technical Secretariat.

During 28–30 September the OPCW and the Bulgarian government organised a workshop on the coordination of assistance in central and eastern Europe. More than 30 participants from 17 states parties and one non-governmental organization, SIPRI, attended the workshop in Sofia and discussed ways to coordinate the offers made by states parties in the region and to integrate them into a viable assistance package. As part of its offer under Article X.7 the Swiss government hosted a training course on protection against chemical weapons and the use of Swiss protective equipment. The course was held at the Swiss NBC training centre in Spiez from 23–27 November and was attended by 40 chief instructors in civil chemical weapons protection, detection and decontamination from 31 member states.

*Implementation of Article XI* An integral part of the OPCW's programmes under Article XI is the provision of administrative and technical support to national authorities. There are two main aspects of this particular programme. The first relates to the training of national authority personnel and is conducted principally through courses in the Netherlands. These courses provide basic training in the obligations and requirements of implementing the Convention. A course was held in Beijing from 9–13 September, while another course is currently underway in the Netherlands with participants from 23 states parties. A course was held in Ljubljana on 12–13 November for personnel of the Slovenian national authority and two parallel regional courses will take place in Tehran from 1 to 9 March 1999. The second strand of the programme is the provision of on-site assistance to states parties preparing declarations for submission to the OPCW. As reported in previous quarterly reviews, a declaration assistance network was established in December 1997, made up of experts from nine states parties and the Technical Secretariat. The first meeting of the network was held in February 1998 and another meeting is planned in the near future. As of 15 November, five formal requests for assistance had been received and four on-site missions had been completed. The Technical Secretariat also convened two declaration assistance workshops during the period under review. The first was held in Rio de Janeiro and was attended by 23 representatives from 15 states parties of the Latin American and Caribbean group. The second workshop took place in The Hague and was attended by 13 representatives of 12 states parties of the African group. The purpose of this series of workshops is to exchange practical experiences between national authorities in a particular region and to focus on regional specifics in the implementation process.

A further important task under Article XI relates to the supporting of national capabilities relevant to the CWC. The Technical Secretariat is implementing a support programme for national laboratories, especially for those seeking to become OPCW designated laboratories. The Technical Secretariat organised a pre-symposium meeting to the First Singapore International Symposium on Protection Against Toxic Chemicals (SISPAT-I) on 1 December. This

meeting brought together experts from laboratories which have successfully participated in the series of proficiency tests and from laboratories considering joining the process.

Particularly important to the implementation of Article XI is the exchange of chemicals, equipment and scientific and technical information relating to the development and application of chemistry for peaceful purposes. To facilitate access to information for scientists and engineers from developing countries and those with economies in transition, the OPCW supports participation by such people in international meetings and conferences. During the period under review, four meetings were supported: the International Symposium on the Chemistry of Natural Products in Beijing in October; the Chemical and Biological Medical Treatment Symposium Industry I in Croatia in October; the Third African Workshop on Theoretical Chemistry in Harare in November; and the SISPAT-I pre-symposium meeting in Singapore. The OPCW has also established an internship programme to encourage links between research institution in the developing and industrialised worlds. To date, three requests have been approved, and the internships will begin in 1999. Through its website, the Technical Secretariat facilitates exchanges of chemical technology and laboratory equipment by bringing together donors of equipment and potential recipients in the developing world. As of 25 November, three transfers of equipment had been processed with one consignment already at its destination. The Technical Secretariat has also held discussions with a number of international organizations which deal with chemicals, such as the Inter-Organisational Programme for the Sound Management of Chemicals (IOMC) and the secretariats of the Basel and Rotterdam conventions.

**Technical seminar on saxitoxin** A seminar on the uses of saxitoxin was arranged in The Hague during 23–24 September. The Technical Secretariat invited ten internationally recognised scientists from six states parties to discuss the legitimate uses of saxitoxin. The seminar was also attended by governmental experts and scientists from 22 states parties, members of delegations based in The Hague and the members of the Scientific Advisory Board. The intention of the seminar was to present technical information on the legitimate needs for access to saxitoxin and on the impact of the Convention's transfer regulations for such access. The seminar did not discuss specific proposals to resolve the issue of saxitoxin transfers and also did not address the legal aspects of the issue. A number of scientists who participated in the seminar signed a statement outlining their opinion that: "the 30 day notification period puts at risk human lives; there is an urgent need for tritiated saxitoxin for medical research and testing purposes; that urgent research and health related needs could be accommodated by transfers of saxitoxin in amounts of less than 5 mg". The report of the technical seminar was brought to the attention of the Council at its twelfth session, when an interim decision on the subject of saxitoxin transfers was taken.

**Fourth and Fifth Official Proficiency Tests** Proficiency testing for laboratories wishing to be designated by the OPCW for the analysis of authentic samples is ongoing. The fourth official proficiency test took place from 19 May to 17 June and involved 21 laboratories from 20 states par-

ties. The test samples were prepared by NC-Laboratory in Switzerland and the results were evaluated by the VERIFIN laboratory in Finland. A meeting to discuss the preliminary evaluation of the test with participants was held on 22 September and the final results of the test should be available soon.

The fifth official proficiency test began at the beginning of December. Not including the laboratories responsible for preparing the samples and evaluating the test results, there are currently 21 laboratories from 18 states parties participating in the test.

**Designation of laboratories** During his address to the third session of the CSP, the Director-General announced the designation of the first set of laboratories for the analysis of authentic samples. The designated laboratories have fulfilled all three criteria set out in the relevant decision of the first session of the CSP. The seven designated laboratories are as follows:

- Laboratory of Analytical Chemistry, Research Institute of Chemical Defence (China)
- Finnish Institute for Verification of the Chemical Weapons Convention, VERIFIN (Finland)
- GSRDC-4 Laboratory, Agency for Defence Development (South Korea)
- TNO-Prins Maurits Laboratory (Netherlands)
- Swedish Defence Research Establishment, FOA, Division of NBC Defence (Sweden)
- Defence Procurement Agency, NC-Laboratory Spiez (Switzerland)
- US Army Materiel Command, Treaty Laboratory of APG Edgewood Area (USA)

The Director-General also announced that further laboratories which fulfil the criteria will be designated in the future. In order to retain their status, designated laboratories are required to demonstrate that they have maintained their capabilities by participating in one proficiency test per year, either as a regular participant, or as the laboratory supporting the Technical Secretariat in preparing the test samples or in evaluating the test results.

**Analytical support for verification activities** During the period under review the Director-General circulated a note reviewing the status of analytical support for OPCW verification activities. According to this report the use of sampling and analysis as an effective and independent inspection tool has yet to be realised.

A number of reasons for this are listed in the report: the requirement to limit the capabilities of on-site analytical equipment to protect confidential business information through "blinding", the small number of spectra approved for inclusion in the Central Analytical Database; the unwillingness of some states parties to accept for inclusion in the database spectra for chemicals other than scheduled chemicals and their derivatives; uncertainty about whether samples could be transported by commercial aircraft; the very limited availability of sound alternatives to chemical on-site analysis; the problems associated with the use of analytical equipment belonging to the inspected state party, the emerging tendency in states parties to perform analysis themselves without validation; and the US reservation prohibiting the removal of samples from its territory.



Individually these factors would not have a great impact on the effectiveness of sampling and analysis, but taken together, as is the current situation, the independent and meaningful analysis of samples has become problematic. The report concludes that the OPCW's capability to perform independent, quality-controlled and technically sound on-site analysis is severely hampered. Its capability for off-site analysis at designated laboratories remains untested in relation to the transport of samples.

**Official visits** The Director-General visited UN Headquarters in New York during 14–22 October, coinciding with the fifty-third session of the General Assembly. During this visit the Director-General met with the representatives of around 40 states, many of which were signatory states or non-signatory states. He also met with Secretary-General Kofi Annan, Deputy Secretary-General Louise Frechette and the Under Secretary-General for Disarmament Affairs, Jayantha Dhanapala. On 19 October the Director-General addressed the First Committee of the General Assembly. In his statement the Director-General reported on the progress in the implementation of the Convention since his last visit to the UN in October 1997. He concentrated on efforts being made by the Technical Secretariat in the implementation of Articles X and XI and suggested that it was time for members of the Australia Group to review their export control policies and report to the OPCW, as required by the Convention. He also devoted much of his statement to the subject of universality, urging states, particularly those in the Middle East, to ratify or accede to the Convention as soon as possible. The Director-General used this opportunity to urge member states to have the courage to allow the OPCW to develop from its adolescent phase to full adulthood and to accept its unavoidable emerging political role.

The Director-General also made a number of official bilateral visits to countries in the Asian region. During 26 October–1 November he visited China for discussions with the authorities in Beijing. Whilst in China the Director-General addressed the faculty and students of Fudan University and visited a storage site for abandoned chemical weapons at Nanjing. From 24–30 November the Director-General paid an official visit to South Korea. He met with officials involved in the implementation of the Convention and paid a visit to the Agency for Defence Development, one of the laboratories designated by the OPCW. The Director-General then travelled on to Tokyo from 30 November to 5 December for discussions with Japanese officials. During his visit he also held discussions with the Japan Chemical Industry Association and visited a Schedule 2 plant site.

The Deputy Director-General also made a number of official visits during the period under review. During 13–18 September, he visited Brazil where he participated in the declaration assistance workshop and met with senior officials in Rio de Janeiro. Between 23 and 28 September the Deputy Director-General visited Uzbekistan, Kazakhstan and Russia. On 30 November the Deputy Director-General was in Malaysia and met with senior officials in the Ministry of Foreign Affairs. On 1–2 December he visited Singapore and addressed SISPAT-I on the subject of the impact of the Convention on chemical defence research and development. Finally he visited Indonesia on 3 December.

**Outreach activities** During the period under review the Technical Secretariat organised two regional seminars. The first took place in Beijing, China during 9–13 September. The seminar was attended by participants from 17 states parties (Armenia, China, Cuba, Ethiopia, Fiji, Georgia, Iran, Jordan, Lao People's Democratic Republic, Mauritius, Oman, Pakistan, South Korea, Russia, Singapore, Sri Lanka and Uzbekistan) and five signatory states (Indonesia, Malaysia, Micronesia, Myanmar and Thailand).

On 4–5 November the Technical Secretariat organised a regional seminar in Castries, St Lucia. The seminar was attended by more than 27 participants from eight states parties (Canada, Cuba, El Salvador, Guyana, Panama, Suriname, St Lucia and Trinidad and Tobago), eight signatory states (Bahamas, Dominica, Grenada, Guatemala, Haiti, Jamaica, St Kitts and Nevis and St Vincent and the Grenadines) and one non-signatory state (Antigua and Barbuda). The Secretariat of the Organisation of the Eastern Caribbean States (OECS) and the Embassy of the Eastern Caribbean States in Brussels were also represented.

**Staffing** As of 24 November, 477 of the allotted 491 fixed-term posts within the OPCW were occupied. Of these, 327 were in the professional and higher category and 150 were in the general service category. With staff on short-term and temporary assistance contracts included the total number of staff was around 520. The strength of the Inspectorate stood at 209, including 195 inspectors and 14 inspection assistants. The regional breakdown of nationalities represented in the professional and higher categories was as follows: Africa 8 per cent; Asia 24 per cent, Eastern Europe 22 per cent, Latin America and the Caribbean 12 per cent; and Western Europe and Others 34 per cent.

### **Subsidiary Bodies**

**Scientific Advisory Board** The Scientific Advisory Board (SAB) held its inaugural meeting during 21–25 September in The Hague. At this meeting the members of the SAB elected Dr Claude Eon (France) as its chairman and Dr Will Carpenter (USA) as its vice-chairman.

The SAB discussed its terms of reference as adopted by the second session of the CSP. The members of the SAB noted with concern that the terms of reference did not include any budgetary provision for the work of the temporary working groups or of any SAB meetings other than its annual meetings. The SAB concluded that this situation is likely to complicate the practical work of the SAB and the temporary working groups and could also prevent the participation of some of its members, or other experts, in its work. The SAB also doubted that one meeting a year would be sufficient to provide an effective and scientifically sound service to the OPCW. The SAB discussed the draft interim rules of procedure as submitted by the Director-General. A number of comments were made and were taken into account during the finalisation of the rules of procedure. The final draft of the rules of procedure was submitted to the thirteenth session of the Council.

The members of the SAB also attended part of the technical seminar on saxitoxin. The SAB concluded that the uses of saxitoxin for the monitoring of paralytic shellfish poisoning (PSP) and for research purposes were legitimate

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/implementation 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

Baghdad 31 Jul). *Al-Jumhuriya*, moreover, reports what it calls “biological warfare” against Iraq: “Iraqis noticed an unusual increase of mice and rats in Iraq, which led them to think that this is [the result of] an organized operation by a foreign side, represented by the American officers and spies” {AP from Baghdad 3 Aug}. After a morning and an evening session, and for reasons that are not immediately disclosed to the outside world, the talks do not resume on the second of the two days that had been allocated to them {AP from the UN 3 Aug}. Ambassador Butler and his team leave. The *New York Times* {6 Aug} later reports officials who had been with him in Baghdad as saying that he had never got into substantive discussion with the Iraqi team: “Mr Aziz and his colleagues appeared relaxed, even smug, as they stated and restated what apparently had become a high-level policy line: that there was nothing left to talk about, that Iraq had ended all its weapons programs and that sanctions should be lifted without further ado”. Ambassador Butler, in his formal report to the UN Security Council, subsequently details what had happened, recording that Deputy Prime Minister Aziz had seen point in continuing the talks only “if I were prepared to agree to his demand that I report to the Council that Iraq had no proscribed weapons and related materials” {S/1998/719}. This is confirmed by a simultaneous Iraqi communication to the Security Council {S/1998/718}.

**3 August** In South Africa, the Pretoria Regional Court postpones to 24 March next year the trial of Brigadier Basson [see 31 Jul] on fraud, drugs-related and possibly other charges. {AFP and SAPA from Pretoria 3 Aug 98}

**4 August** In New Zealand, the government announces the establishment of a committee to inquire into the effects of herbicides such as Agent Orange and of nuclear radiation on the health of children of exposed veterans. The committee is to be chaired by former governor-general Paul Reeves. It will survey all those New Zealand veterans who had served in Vietnam during 1964–72 and all those who had been involved in the UK nuclear-weapons testing at Christmas and Malden Islands during 1957–58. The committee is expected to report by the end of February 1999. {Wellington *Dominion* 5 Aug}

**4 August** In Iran, the *Tehran Times* {4 Aug} criticises the judiciary for failing to proceed more rapidly with the lawsuits that have been filed against German companies by Iranian victims of Iraqi chemical weapons [see 10 Apr 97]. After noting the complicity of other countries besides Germany in the Iraqi chemical-weapons programme during the Iraq–Iran war — Britain, France, the former Soviet Union and the United States are mentioned — the newspaper continues: “But more surprising is the truth that we have also demonstrated a callous passiveness toward our martyrs who were killed by lethal gases. The death toll by the poisonous gases is believed to have surpassed the figure of 10,000. The lethal weapons have also inflicted injuries to another 50,000 of Muslim combatants and even innocent civilians. About 118 of those wounded by chemical weapons have already attained martyrdom since 1991.”

**4 August** In Russia, “the military-biology complex continues development of biological weapons” and maintains stockpiles of them, according to a long but undocumented, unsourced and anonymous article published in *World Reporter*. The article states that, in the 1980s, the Schu-4 strain of tularemia bacteria had become established in rat populations local to a biological-weapons production facility at Omutninsk, this particular strain being one that had been weaponized, the article says, in the old US BW programme from which “Soviet intelligence” had stolen

samples in the 1950s. Further, the article relates striking new claims about the 1979 Sverdlovsk anthrax outbreak [see 20 May] (such as “the number of deaths, taking into account the civilians, militaries and prisoners, exceeds the official one by 1900-2900 percent” [see also 18 Feb and 30 Apr]) and, without explanation, characterizes the definitive analysis of the outbreak published three years previously [see 18 Nov 94] by *Science* [vol 266, pp 1202–8] as “pseudo-scientific”. A largely identical version of the article is subsequently published by Lev Fyodorov [see 1 May Russia] in the September issue of the Moscow monthly *New Times*.

**4 August** In Washington, the Special Assistant to the Deputy Secretary of Defense for Gulf War Illnesses, Dr Bernard Rostker, issues three new reports from OSAGWI investigations {DoD News Briefing 4 Aug}. Two are case narratives [see 19 Mar], one of which concludes it “unlikely” that chemical agents had been released during the bombing on 3 February 1991 of Iraq’s southwest ammunition storage point at An Nasiriyah, despite Iraq’s declaration to UNSCOM that 6,000 rounds of mustard-gas 155mm artillery ammunition had been stored in one of its bunkers then. The other case narrative concludes that some but not all of the Czechoslovak detections of CW agents in Saudi Arabia during January 1991 [see 9 Nov 93] were “credible” [but see 4 Jun 96, UK] whereas the others, like similar French detections, were “indeterminate”. The narrative states that copies had been provided to the Czech and French governments in September 1997 [see 8 Sep 97], and that it would be updated so as to reflect official comments received from them. Also released is the first of a new series of Environmental Exposure Reports, concluding that depleted uranium had not caused Gulf War illness [see 17 Mar].

**5 August** The Iraqi government announces that, following a unanimous vote by the National Assembly, President Saddam Hussein has decided to “completely suspend cooperation with the UN Special Commission and the International Atomic Energy Agency” {*Los Angeles Times* 5 Aug, S/1998/718}. UN Secretary-General Kofi Annan describes this as a violation both of UN Security Council resolutions and of the February Memorandum of Understanding between Iraq and the UN [see 20-23 Feb], but he also observes that Iraq’s position is apparently “not a closed one” {*New York Times* 7 Aug}. Indeed, the Iraqi statement includes the following: “Considering the fact that UNSCOM, in its current structure, is neither objective nor impartial, we demand that the Security Council restructure UNSCOM along the lines of the following principles: (a) A new executive office to be set up to supervise UNSCOM’s activities led by equal numbers of representatives from each of the permanent members of the UN Security Council, and with a revolving presidency and Iraq as an observer within this executive office. (b) Restructuring UNSCOM teams in UNSCOM headquarters in New York, Bahrain and Baghdad along the same lines. (c) UNSCOM centre to be moved from New York to Geneva or Vienna to shelter it from US influence.” And the statement goes to say that, in order to “prove its good intentions”, Iraq authorizes continuation of the ongoing monitoring and verification work of UNSCOM (which is run out of the Baghdad Monitoring and Verification Centre [see 7 Oct 94]). {AFP from Baghdad 5 Aug}

**6 August** In the United Kingdom, a national survey of police use of CS Spray [see 10 Feb] on people with mental health problems is published by a leading psychiatric institution, the Maudesley Hospital {*Mental Health Care* Aug}. The hospital describes the research as revealing that “the widespread, inappropriate use of the gas poses a serious health risk to both the

mentally ill and nursing staff". Its press release continues: "The authors of the report are calling for ... CS spray to be banned from being used on people with mental health problems and on hospital premises. They also criticise the fact that research on the long-term health effects of CS by the Police Scientific Development Branch (PSDB) has *never* been published. Existing evidence suggests even low dosages of CS can cause permanent lung damage. High levels of exposure can cause burns, blistering and heart failure." Press commentary observes that CS spray is being increasingly used by UK police forces to quell disturbances, including ones involving mentally ill people within the community, as well as "football fans, New Age travellers and protesting beef farmers". An author of the Maudesley report has stated that the "police are using [CS spray] to subdue people before bringing them to hospital" {London *Independent on Sunday* 2 Aug}. In one such case, the Cambridgeshire force is now being sued in the law-courts for assault and for exemplary damages for police violation of a patient's rights while detained under the Mental Health Act {*Independent on Sunday* 9 Aug}. The Mental Health Act Commission subsequently proposes that the Royal College of Psychiatrists should convene a meeting of the relevant interests to consider what should be done {*Hansard (Commons)* 19 Nov}. There are increasing calls to suspend altogether the use of CS spray pending an independent scientific inquiry into its safety {*Independent on Sunday* 23 Aug}, such as there had been, under the Himsworth Committee, when CS smoke weapons were introduced into UK use in 1969.

**6 August** The UN Security Council meets privately with UNSCOM Executive Chairman Richard Butler and UN Secretary-General Kofi Annan, and afterwards issues a presidential declaration stating that Iraq's suspension of cooperation with UNSCOM and the IAEA [see 5 Aug] is "totally unacceptable". The heads of both UNSCOM and IAEA subsequently notify the Council that they are unable any longer to conduct meaningful inspections in Iraq and therefore seek the Council's instructions {S/1998/766 and S/1998/767}. The Council deliberates but postpones action and, in the meanwhile, the Secretary-General's special envoy to Baghdad, Ambassador Prakash Shah, is seeking a compromise, while Iraq is soliciting international support {*New York Times* 10 Aug}. The latter includes an unprecedented showing on Baghdad television {9 Aug in FBIS-NES 9 Aug} of several hours of video of the August 3 Iraq-UNSCOM talks {*New York Times* 13 Aug}. [Note: possibly it was this grotesque violation of confidence which later caused UN Special Commissioner Ooms of the Netherlands, a participant in those talks, to give an extraordinarily candid account of them in interview to *NRC Handelsblad* {18 Aug}.]

**6 August** In Miami US District Court, a \$100 million defamation and negligence suit is filed against CNN and *Time* magazine by a Vietnam-war veteran, Kenneth Planch, distressed by the Tailwind story [see 2 Jul]. *Forbes* magazine reports that a hundred people have now threatened or filed suit against CNN, and that one of them has publicly rejected an offer of settlement. {*Los Angeles Times* 5 Aug, AFP from Miami 6 Aug}

**7 August** US civil-defence planning against the possibility of bioterrorism [see 2 Jun and 8 Jun] is criticized in the *New York Times*, which states that a "review of events leading to the Clinton vaccine decision [see 22 May] reveals that the proposal was pushed by a small group of scientists, businessmen and policy makers who largely shared the same views as they struggled to do something, anything, about a threat whose dimensions were potentially terrifying but frustratingly unclear."

The newspaper's chief findings, which it explains in detail, it summarizes thus:

"— A presidential meeting where seven scientists endorsed the stockpile plan included two men who stood to gain financially from the decision.

"— The plan was made without consulting leaders of the drug industry about whether companies could fulfil the president's pledge.

"— The apparent consensus on acquiring vaccines masked deep divisions among scientists and military officials."

The criticisms are subsequently disputed by Minnesota State Epidemiologist Michael Osterholm [see 2 Jun], who writes: "Most of the \$700 million Federal investment in domestic antiterrorism preparedness has focused on chemical events, with an emphasis on training and equipment for quick response by fire, police and emergency medical teams. However, these steps would do little to prepare for a biological attack, the effects of which would not be apparent for days or weeks afterward. Millions of doses of anthrax and smallpox vaccines and appropriate antibiotics must be readily available if we are to control such an outbreak." {*New York Times* 14 Aug}

**11 August** In London, at Bow Street magistrates court, a naval chief petty officer, Steven Hayden, pleads guilty to a charge under the Official Secrets Act of having leaked a classified document to the *Sun* newspaper warning of the possibility of clandestine BW attacks on the UK [see 23 Mar] {London *Guardian* 12 Aug}. The newspaper had paid him £10,000, which he used to pay off debts and funeral expenses and buy a parrot in a cage. He is later sentenced to 12 months in prison {*Guardian* and *Daily Telegraph* 24 Oct}.

**14 August** In China, the abandoned chemical weapons that are not of Japanese origin [see 24 Jun] may possibly include some originating from the 1920s in "a chemical arms race among various Chinese warlords eager to gain a technological advantage through modern weaponry", according to Dr Benjamin Garrett writing in *ASA Newsletter*. He states that British and German firms were amongst the potential suppliers of chemical weapons that had been approached during 1923–25 by Chinese agents. The *Newsletter*, however, has left unpublished his detailed source citations.

**14 August** The *Washington Post* reports that the US administration has sometimes intervened to dissuade UNSCOM from mounting particular no-notice inspections in Iraq, and had done so most recently on 4 August in regard to inspections planned for 6 August. The newspaper suggests that this was because the administration wished to avoid a new crisis over Iraq. Secretary of State Madeleine Albright confirms that such intervention had indeed taken place {*New York Times* 17 Aug}, but, as the *Washington Post* {27 Aug} later puts it, she explains its purpose as being "to control the pace of confrontation with Iraq to create the best conditions in which to prevail". The chairman of the Senate Foreign Relations Subcommittee on Near Eastern and South Asian Affairs, Senator Sam Brownback, announces his intention of conducting a hearing on the matter as soon as the Congress reconvenes {Reuter from Washington 19 Aug}.

The newspaper later itemizes six occasions of US intervention, back to 22 November 1997. It also reports that, in March, "the United States and Britain withdrew crucial elements of the intelligence support that allowed [UNSCOM] to observe Iraqi concealment efforts as they happened during surprise inspections", the withdrawal "including information, equipment and personnel". {*Washington Post* 27 Aug} Attributing unidentified US officials, *US News & World Report* {7 Sep} later locates the

shift of policy to “a Spring re-examination of the inspections crisis that ended when [UN Secretary-General] Annan brokered a deal requiring that diplomats chaperone inspectors to Iraqi presidential sites [see 20-23 Feb]”.

**14 August** US Defense Secretary William Cohen announces that Phase I of the Total Force Anthrax Vaccine Immunization Program [see 22 May] is to begin next week for service personnel assigned or rotating to Southwest Asia and Korea. Assistant Defense Secretary for Health Affairs Susan Bailey tells reporters that, since commencement of the accelerated programme of anthrax vaccination for Persian Gulf personnel [see 3 Mar], some 48,000 people had been started on the series of inoculations, only seven of them reporting adverse reactions; 15 have refused the injections, and been disciplined. {DoD news release and special briefing 14 Aug}

**14 August** Bolivia deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thereby become the 114th state party to the treaty.

**16 August** Japanese atrocities during the second world war are the subject of a video teleconference sponsored by the Simon Wiesenthal Center in Los Angeles which links participants there to Japanese veterans in Tokyo who had been denied access, as war criminals, to the United States [see 1 Jul]. A former member of Unit 731, Kanetoshi Tsuruta, speaks of the use during the war of typhus, cholera, anthrax and plague bacteria as weapons against Chinese and Russians, he himself having poured what he believed to be typhus organisms into a river upstream of a Soviet base. The US historian Sheldon Harris relates his estimate that as many as 250,000 people were killed in Japanese BW attacks in China. {*San Francisco Chronicle* 15 Aug, *Japan Times* 17 Aug, AP from Los Angeles 18 Aug}

**18 August** The UN Security Council agrees unanimously on the texts of letters it now sends to the Executive Chairman of UNSCOM and the Director-General of the IAEA in which its members “reiterate their full support for the IAEA and UNSCOM in the full implementation of their mandates”. The letters continue: “Iraq is obliged under the relevant Security Council resolutions to provide IAEA and UNSCOM with the cooperation necessary for them to undertake their activities, including inspections. You should continue to report to the Council on all occasions that you deem necessary.” It is thus left to UNSCOM and the IAEA to decide how best to proceed. {S/1998/768 and S/1998/769} Ambassador Butler next day requests Iraq to resume cooperation with UNSCOM inspection teams. Iraqi Deputy Prime Minister Tariq Aziz responds: “Iraq will not change its decision ... until the Security Council seriously and responsibly studies its justifiable demands, detailed on August 5, and begins to lift the embargo by applying paragraph 22 of resolution 687.” {AFP from Baghdad 20 Aug}

**18 August** In Wichita, Kansas, several hundred workers are evacuated from a state building, and surrounding blocks are cordoned off, following a written warning that the white powder spread over several floors is anthrax. A decontamination station is set up, and the Wichita FBI office takes charge. Next day the substance is reported to be harmless. {*Wichita Eagle* 19 Aug, UPI from Wichita 19 Aug, AP from Wichita 27 Aug}

**19 August** In Israel, the Prime Minister’s Office issues a statement about the Israel Institute for Biological Research at Ness Ziona saying: “No person has ever been killed in a work

accident at the Biological Institute since its inception 45 years ago. No incidents which have caused harm or could cause harm have ever occurred at the institute.” {BBC News 20 Aug} The London *Foreign Report* had just stated that 4 workers at the institute had been killed and 25 injured in recent years [see also 18 Feb 97] {*Jerusalem Post* and London *Guardian* 20 Aug}.

**20 August** In Sudan, the Al-Shifa Pharmaceutical Industries factory in Khartoum North is destroyed by 13 Tomahawk cruise missiles {*Aviation Week* 31 Aug} launched from US warships in the Red Sea. The attack is part of the US response to the bombings on 7 August of the US embassies in Kenya and Tanzania in which 263 people were killed and thousands injured. Occurring simultaneously and with the same explanation are US cruise-missile attacks launched from the Arabian Sea off Pakistan against six training bases in Afghanistan. US government officials state that these bases are a key part of the worldwide terrorist network, funded and led by Usama bin Ladin [see 8 Jul], which had been responsible for the Nairobi and Dar-es-Salaam embassy bombings.

At a background briefing at the US Defense Department later in the day, an unidentified official speaks as follows about the factory in Khartoum: “First, we know that Bin Ladin has made financial contributions to the Sudanese military industrial complex. That’s a distinct entity of which we believe the Shifa pharmaceutical facility is part. We know with high confidence that Shifa produces a precursor that is unique to the production of VX. We know that Bin Ladin has been seeking to acquire chemical weapons for use in terrorist acts. We know that Bin Ladin has had an intimate relationship with the Sudanese government which is a state sponsor of terrorism. We know that Bin Ladin has worked with Sudan to test poisonous gasses and to finance simpler methods of manufacturing and dispensing gas, methods which would be less time consuming and expensive than prior Sudanese efforts. Even though he left Sudan in 1996, we know that Bin Ladin’s businesses acquire restricted, high-priced items for the Sudanese military, including arms, communications, and dual use components for chemical and biological weapons.” Speaking on television next day about the Khartoum factory, US National Security Adviser Sandy Berger says that the US “has physical evidence that they were making a chemical which was essentially one step removed from VX gas, a precursor chemical necessary to make VX gas which does not have other significant commercial purposes”. He also says that the evidence “was indisputable as far as we’re concerned”. {*USIS Washington File* 20 and 22 Aug}

The Sudanese government requests an urgent meeting of the UN Security Council to consider the behaviour of the United States and to set up a fact-finding mission to visit the bombed factory, which, it says, had made antibiotics, anti-malaria drugs and veterinary pharmaceuticals {S/1998/786, S/1998/792}. That the factory had indeed produced such items is soon being reported by journalists from Khartoum, and it is later disclosed that US Defense Secretary William Cohen had not known that the factory made medicine {*New York Times* 3 Sep}. Also being reported is testimony to its peaceful purpose by British and other professionals associated with the factory, including its 1992–96 Technical Manager Tom Carnaffin {AFP from Amman 22 Aug, London *Observer* 23 Aug, Reuter from Khartoum 23 Aug, AP from Khartoum 24 Aug, *Washington Post* 25 and 26 Aug, *Wall Street Journal* 28 Aug, *Free Arab Voice* 2 Sep, S/1998/880}. A statement from Cairo by the exiled Sudanese National Democratic Alliance says: “The reality is that this plant was making components for chemical arms while pharmaceuticals were



manufactured to cover up the main activity” [see also 26 Jul] {AFP from Cairo 25 Aug}.

In justification of its cruise-missile attacks, including that against Sudan, the US Representative at the United Nations writes to the President of the Security Council to state that “the United States has acted pursuant to the right of self-defence confirmed by Article 51 of the Charter of the United Nations”. The letter continues: “The targets struck, and the timing and method of attack used, were carefully designed to minimize risks of collateral damage to civilians and to comply with international law, including the rules of necessity and proportionality”. {S/1998/780}

**20 August** The UN Security Council conducts its regular two-monthly review of Iraqi compliance with its resolutions [see 24 Jun]. Its president, Ambassador Danilo Turk of Slovenia, subsequently tells reporters that there had been unanimity in the Council that the sanctions should remain in force. {UN Daily Highlights 20 Aug}

**21 August** In Albania, criminal prosecutor Arben Rakipi orders the arrest of six former government officials on charges of committing crimes against humanity, alleging that, while in power the previous year, they had deliberately fomented civil unrest and secretly authorized the use of poison gas against Albanian citizens. Former president Sali Berisha has organized a large demonstration in the capital against the arrests. Specifically, former defence minister Safet Zhulali and former interior minister Halit Shamata are alleged to have approved the use of gas against peaceful demonstrators in Vlore. In fact there had been no such use because helicopter pilots refused to fly the chemicals to Vlore from the military arsenal near Tirana. The active chemical was reportedly to have been chloropicrin, obtained from China in the days of close Albanian-Chinese relations. {Washington Post 27 Aug}

**24 August** At the United Nations in New York, where the Security Council has before it a Sudanese request for the dispatch of a fact-finding mission to the bombed factory in Khartoum North [see 20 Aug], deputy US representative Peter Burleigh reportedly says that such a mission is unnecessary because Washington already has evidence: “Putting together a technical team to confirm something that we already know, based on our own information, doesn’t seem to have any point to us”. {AP from Washington 25 Aug}

Reporters are now being briefed on the nature of that evidence by the US intelligence community: a soil sample “obtained by clandestine means” in the last few months from the grounds of the factory, in which had been detected traces of O-ethyl methylphosphonothioic acid (EMPTA) {New York Times and AP, Reuter and USIA from Washington 25 Aug}. The significance of EMPTA is explained at a news conference by US Under Secretary of State for Political Affairs Thomas Pickering as follows: the chemical is “a known precursor for the nerve agent VX, and an indicator of potential to produce VX gas. The substance is not used in commercial applications. It doesn’t occur naturally in the environment, and it is not a by-product of another chemical process.” {USIS Washington File 26 Aug} [Note: EMPTA is also a VX degradation product. It had been detected in a sample of blood more than a year after the sample had been taken, in December 1994, from a murder victim in Japan; the victim had been sprayed with VX by an Aum Shinrikyo cultist {Boston Globe 26 Aug}. Although this suggests that EMPTA is a stable substance, in other environments it may hydrolyse rapidly: senior Netherlands CW-defence scientist Jan Medema is quoted in the Amsterdam press

as saying that “In soil this compound reacts with water and/or oxygen within a few days and is then broken down into phosphoric acid” {De Volkskrant 28 Aug}.]

Later background briefings go into more detail about the sample. The *Wall Street Journal* {1 Sep} reports an unidentified US intelligence official as follows: “Because of ‘human intelligence’ reports from Khartoum about Sudanese government attempts to develop chemical weapons and because of other indications of Iraqi interest in helping Sudan achieve that goal, the US several months ago sent a person who was neither American nor Sudanese to secretly obtain some soil outside the El Shifa Pharmaceuticals Industries Co facility in Khartoum, he said. ‘We took multiple samples in Sudan from multiple sites’, the official disclosed. But only one sample — that taken at the El Shifa plant — contained evidence of Empta ... The US has monitored Empta usage for two years, since Iraq disclosed that the chemical was crucial to its nerve-gas program. To ensure that the sampling was accurate, the person who collected it was polygraphed and checked out in other ways, he said. The sample itself was sent to an independent laboratory, where it was tested three times and found to have concentrations that indicated a large quantity of the chemical.” AFP {from Washington 1 Sep} reports an intelligence official as saying that the testing was done in “a commercial US laboratory that we deal with, that we have a longstanding relationship with, one which has been accurate and very skilled in the past in these kind of issues”. According to the official it was standard practice by the US intelligence community to work with only one “fully vetted” laboratory. Further, the official says: “Those tests showed the presence of EMPTA ... in concentrations 2.5 times the level which gets it above the trace into significant amounts. ... Whether it was produced there or stored there and spilled is uncertain but there was EMPTA present there.”

The intelligence briefers, in speaking of Iraq-Sudan chemical-weapons connections [see 10 Feb], cite evidence, including telephone intercepts, that directors of the Shifa plant have had communications with Emad al-Ani, an official at Samarra Drug Industries in Iraq, which is the organization believed by US intelligence to be responsible for Iraq’s chemical-weapons programme {New York Times and Washington Post 25 Aug, Chicago Sun-Times 26 Aug}. The Iraqi UN Mission subsequently issues a statement {27 Aug} categorically denying “that Dr Imad Al-Ani was cooperating with the Sudanese authorities”. Doubts start to be expressed about the quality of the information that had been available to the United States {London Financial Times and Washington Post 26 Aug, New York Times 27 Aug, Chemical & Engineering News 31 Aug}, although reportedly not by most of the 42 US senators that are given a classified briefing {New York Times 2 Sep, AP from Washington 2 Sep}.

The Security Council conducts a preliminary discussion of the Sudanese request, members reportedly saying that they need more time to review the situation {USIS Washington File 24 Aug, Mideast Mirror 27 Aug}.

**25 August** In Johannesburg, during an address to the Diplomatic Forum of Rand Afrikaans University, former South African president F W de Klerk states that he had been fully informed about the country’s CBW research programme [see 31 Jul] for the first time shortly before the 1994 election, when the UK and the USA had approached him about it [see 18 Jun]. He says that they knew that South Africa did not stockpile CBW weapons, but wanted to ensure that the incoming government would be fully briefed, having regard to the dangers of knowledge in the mind of people like Wouter Basson becoming avail-

able to countries such as Libya. {SAPA from Johannesburg 25 Aug}

**26 August** In New York, UNSCOM inspector Scott Ritter [see 5–10 Mar] resigns from the staff of UNSCOM after six years of service. He releases his letter of resignation, in which he is sharply critical of the US government, the UN Security Council and the UN Secretary-General for their failure to act more forthrightly against Iraq. {*Washington Post* and *New York Times* 27 Aug, London *Independent* 28 Aug} The core of the letter is as follows:

“Iraq has lied to the Special Commission and the world since Day One concerning the true scope and nature of its proscribed programs and weapons systems. This lie has been perpetuated over the years through systematic acts of concealment. It was for the purpose of uncovering Iraq’s mechanism of concealment, and in doing so gaining access to the hidden weapons, components and weapons programs, that you created a dedicated capability to investigate Iraq’s concealment activities, which I have had the privilege to head. During the period of time that this effort has been underway, the Commission has uncovered indisputable proof of a systematic concealment mechanism, run by the Presidency of Iraq and protected by the Presidential security forces.

“This investigation has led the Commission to the door step of Iraq’s hidden retained capability, and yet the Commission has been frustrated by Iraq’s continued refusal to abide by its obligations under Security Council resolutions and the Memorandum of Understanding of 23 February 1998 to allow inspections, the Security Council’s refusal to effectively respond to Iraq’s actions, and now the current decision by the Security Council and the Secretary General, backed at least implicitly by the United States, to seek a ‘diplomatic’ alternative to inspection-driven confrontation with Iraq, a decision which constitutes a surrender to the Iraqi leadership that has succeeded in thwarting the stated will of the United Nations.

“Inspections do work — too well, in fact, prompting Iraq to shut them down all together. Almost without exception, every one of the impressive gains made by UNSCOM over the years in disarming Iraq can be traced to the effectiveness of the inspection regime implemented by the Special Commission. The issue of immediate, unrestricted access is, in my opinion, the cornerstone of any viable inspection regime, and as such is an issue worth fighting for. Unfortunately, others do not share this opinion, including the Security Council and the United States. The Special Commission of today, hobbled as it is by unfettered Iraqi obstruction and non-existent Security Council enforcement of its own resolutions, is not the organization I joined almost seven years ago.”

At a press briefing next day, UNSCOM Executive Chairman Richard Butler says that the letter of resignation, which he had accepted, expressed the strongly held views of a man of integrity — views of any which, however, he declines to comment. {UN press briefing 27 Aug}

The Speaker of the US House of Representatives, Newt Gingrich, writes to President Clinton saying that the resignation raised “disturbing questions” and suggested that “your Administration’s tough rhetoric on Iraq has been a deception masking a real policy of weakness and concession” {*New York Times* 29 Aug}. The preparations for Congressional hearings on the administration’s policy [see 14 Aug] are expanding {*New York Times* 28 Aug}.

**27 August** In Addis Ababa, the executive of the Organization of African Unity convenes at the request of Sudan. It expresses “deep concern” about the US attack on the Al-Shifa

factory in Khartoum North and about the bombings of the US embassies in Nairobi and Dar es Salaam. It supports the sending of a fact-finding mission to the Khartoum factory [see 24 Aug]. {AFP from Addis Ababa 28 Aug}

**27 August** US Deputy Defense Secretary John Hamre has just approved a Program Decision Memorandum adding more than \$800 million to the 2000–05 budget plan for CBW defence programmes, so *Inside the Pentagon* reports.

**28 August** Cyprus deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thereby become the 115th state party to the treaty.

**31 August** North Korea launches a multi-stage rocket over Japan towards the Pacific Ocean, where, according to US officials, its third, solid-fuelled, stage breaks up before achieving orbit {*International Herald Tribune* 16 Sep}. Initial reporting had described the event as a test-firing of North Korea’s new two-stage 2000-km-range ballistic missile, the Taepo-Dong 1, into the sea off northern Japan {London *Daily Telegraph* 1 Sep}. The North Korean Foreign Ministry refers to the event as “the launch of our satellite ‘Kwangmyongsong No. 1’ ... aimed solely at the peaceful development of science and technology” {S/1998/865}.

**31 August** In Australia, the Department of Foreign Affairs and Trade announces the establishment of ASNO, the Australian Safeguards and Non-Proliferation Office. This is to combine the functions of the Australian Safeguards Office, the Chemical Weapons Convention Office [see 16 Dec 93] and the Australian Comprehensive Test Ban Office. It will also be responsible for “implementation aspects” of the BWC Protocol currently under negotiation in Geneva. The present safeguards and CWCO director, John Carlson, is to become Director-General of ASNO. {DFAT media release 31 Aug}

**31 August** Botswana deposits its instrument of accession to the Chemical Weapons Convention. In 30 days time, it will thereby become the 116th state party to the treaty.

**31 August** In Durban, where Non-Aligned Movement foreign ministers are beginning a two-day meeting in preparation for the NAM Summit later in the week, Sudanese Foreign Minister Mustafa Osman Ismail reportedly gains almost unanimous support for a draft resolution calling upon the UN Security Council to send an investigation team to inquire into the attack on the Al-Shifa factory in Khartoum [see also 27 Aug] {AFP from Durban 31 Aug}. He says that Sudan is prepared to turn the page on the attack if Washington acknowledges error {BBC News 1 Sep}.

In Khartoum next day, President Omar Hassan al-Bashir announces the formation of a judicial committee to investigate “the ownership of al-Shifa pharmaceutical factory, how it was set up and financed, and how its ownership passed to the current owners”. {London *Financial Times* 2 Sep}

In Washington later, Sudanese Ambassador Mahdi Ibrahim Mohamed tells a news conference that Sudan is filing a complaint at the International Court of Justice, and that it is asking the US Congress to investigate the attack and to review State Department policy towards Sudan. {AP and AFP from Washington 2 Sep, London *Financial Times* 3 Sep}

**31 August** In New York, by letter to the President of the UN Security Council, Iraq reportedly calls for an investigation into

alleged links between UNSCOM inspectors, Israel and the United States. {*International Herald Tribune* 1 Sep}

**1 September** In Geneva, at the Conference on Disarmament, the Ad Hoc Committee on Effective International Arrangements to Assure Non-Nuclear-Weapon States against the Use or Threat of Use of Nuclear Weapons adopts its report on work done during the 1998 session. The committee had been mandated to negotiate a legally binding instrument that could be agreed internationally; once again, it recommends that it be re-established during the next session of the Conference to continue where it had left off. The report {CD/1554} includes a summary of national positions on the issue of negative security assurances.

**1 September** In the US Senate, the Committee on Veterans Affairs issues the report of its bipartisan Special Investigation Unit on Gulf War illnesses [see 5 Feb 97], and so concludes its five-year inquiry into the subject {*Washington Post* and *Pittsburgh Post-Gazette* 1 Sep}. Based on the work of some 20 investigators over the past year, and several hundred pages long, the chief finding of the report is as follows: "While there does not appear to be any single 'Gulf War syndrome', there is a constellation of symptoms and illnesses whose cause or causes eludes explanation at this time. It is beyond the expertise of this investigation to draw firm conclusions on the many ongoing scientific debates as to the causes of Gulf War veterans' unexplained illnesses, and these inquiries likely will continue for many years. There is a great need to monitor those veterans who are ill, and who may become ill in the future, to assess whether they are getting better or worse and to define better the long-term health effects they may experience. And, there is a need to eliminate the continuing profound delays and bureaucratic hurdles that Gulf War veterans encounter in their attempts to obtain compensation benefits for health problems that appear to be connected to their Gulf War service." The report presents detailed recommendations in all these respects. On the particular matter of whether Iraqi CBW weapons might have been responsible, especially the nerve-gas munitions blown up by US engineers at Khamisiyah [see 24 Jan], the report observes that, "in the Gulf War, US military forces were not fully prepared to fight a war in which chemical or biological weapons might be used, and that this lack of readiness continues today". It then states, however, that "there is insufficient evidence at this time to prove or disprove that there was an actual low-level exposure of any troops to chemical weapon nerve agents or that any of the health effects some veterans are experiencing were caused by such exposure". The Defense Department is to respond to the report within 60 days {*Chicago Tribune* 2 Sep}.

**1-4 September** In The Hague, the OPCW Executive Council [see 16-19 June] convenes for its eleventh regular session. It approves a number of facility agreements and at last also decides what exactly the costs are that are to be borne by CW-possessor states for OPCW verification work on their chemical weapons and associated facilities. {CBWCB 41} The reimbursement criteria that are now agreed include transportation costs and the salaries of inspectors while on mission, but exclusive of benefits. The OPCW is now reckoning on 1998 reimbursements of more than \$5 million, mostly from the United States, which is the only state party in which destruction of chemical weapons has commenced, this necessitating the costly continuous presence of OPCW inspectors. {*Reuter* from The Hague 7 Sep} For Russia the 1998 reimbursement is to be in the region of \$0.5 million {*ITAR-TASS* 14 Sep}.

**2 September** In Moscow during their summit meeting, Presidents Yeltsin and Clinton issue a *Joint Statement on a Protocol to the Convention on the Prohibition of Biological Weapons* expressing "strong support for the aims and tasks" of the BWC Ad Hoc Group. The statement continues:

"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.

"We have agreed to contribute to accomplishing these tasks. Consequently, the United States of America and the Russian Federation will make additional efforts in the Ad Hoc Group to promote decisive progress in negotiations on the Protocol to the Convention, to ensure its universality and enable the Group to fulfill its mandate.

"We agree that the Protocol to the Convention must be economical to implement, must adequately guarantee the protection of national security information, and must provide confidentiality for sensitive commercial information. We also consider it extremely important to create a mechanism for implementation that will be consistent with the scope of the measures provided for in the Protocol.

"We recognize the necessity for the Protocol to include those measures that would do the most to strengthen the Convention.

"We express our firm commitment to global prohibition of biological weapons and for full and effective compliance by States Parties with the Convention prohibiting such weapons.

"We support the language in the Final Declaration of the Fourth Review Conference of the States Parties to the Convention (1996) that the Convention forbids the use of bacteriological (biological) and toxin weapons under any circumstances." {*USIA website*}

**2 September** In Kiev, President Kuchma once again transmits to the legislature draft law that would enable Ukrainian ratification of the Chemical Weapons Convention [see 20 Nov 95 and 8 Apr]. {*Intelnews* 3 Sep in *FBIS-TAC* 3 Sep}

**2-3 September** In Durban, heads of state or government of countries of the Non-Aligned Movement convene for their 12th Summit. They issue a long Final Document, in which paragraphs 114-116 address the CBW conventions. Concerning the work of the BWC Ad Hoc Group, they warn against "artificial deadlines" and state that "[s]ubstantive progress in strengthening the application and full operationalization of Article X is ... crucial for the conclusion of a universally acceptable and legally binding instrument to strengthen the [Biological Weapons] Convention". {*Disarmament Diplomacy* Aug/Sep}

In paragraph 179, the NAM heads of state or government address the US attack on the Al-Shifa factory in Sudan, considering this "a serious violation of the principles of international law and the Charter of the United Nations and contrary to the principles of peaceful settlement of disputes as well as a serious threat to the sovereignty and territorial integrity of the Sudan and regional stability and international peace and security". Although their Final Document makes no express mention of possible action by the UN Security Council [see 31 Aug], it continues as follows: "They further considered the attack as a unilateral and unwarranted act. The Heads of State and Government condemned the act of aggression and the continuing threats made by the United States Government against the Sudan ... They further expressed support to the Sudan in its legitimate demands for full compensation for economic and material losses resulting from the attack." {S/1998/879}

**3 September** In Tehran, the Director-General of the Iranian Judiciary Public Relations Office, Fotovat Nassiri-Savadkuhi, announces that a court in Tehran would hear charges filed by Iranian victims of chemical weapons against nine German firms identified as having supplied Iraq [see 4 Aug]. Some 600 victims have filed suit. On Tehran Radio the German firms are identified as Sabo, Hedergerma, Hema Labotechnik, Thyssen Rheinstahl, Leipzig Chemical Institute, Reiem Bayern, WAT, Karkold and Pilotplan [sic]. {IRNA from Tehran 2 Sep in FBIS-NES 2 Sep, Reuter from Tehran 3 Sep}

**3 September** In Israel, Beersheba District Court releases to house arrest 80-year-old Marcus Klingberg [see 11 Jul 97], former Deputy Director of the Ness Ziona institute [see 19 Aug], a convicted Soviet spy who has now served almost 16 years of an 18-year prison sentence. Security officials had continued to oppose his parole. The release is to be delayed by 15 days in case the state wishes to appeal the ruling. {Reuter from Jerusalem 3 Sep, *Jerusalem Post* 4 Sep} There is no such appeal, and he leaves jail {*Paris Libération* 19-20 Sep}.

**3 September** From the United States, researchers announce success in their work on an enzymatic method for decontaminating, in a safe and environmentally acceptable manner, large areas of ground exposed to nerve gas. The method uses organophosphorus hydrolase incorporated into aqueous fire-fighting foam. It is reported in *Nature* {395:27-8} by workers at Carnegie Mellon University in Pittsburgh and Texas A&M University.

**3 September** UNSCOM Executive Chairman Richard Butler informs the UN Security Council that Iraq, in three missile-related incidents, had recently been interfering with the ongoing monitoring and verification work of his inspectors, in addition to preventing all their disarmament work [see 5 Aug] {AFP from the UN 3 Sep}. Iraq subsequently writes to the Security Council with detailed critical comments on Ambassador Butler's briefing notes, stating that they "contained, as usual, sophistries and lies that had the objective of distorting the facts before the Council" {S/1998/837}.

**3 September** The US Senate Judiciary Committee conducts a hearing on US counterterrorism policy. FBI Director Louis Freeh testifies that, prior to the World Trade Center and Oklahoma City bombings, his Bureau had only "a very small staff" dedicated to terrorism involving weapons of mass destruction; an additional 175 field agents had been authorized since then. He has also written in his prepared statement that the FBI investigated over 100 WMD cases during 1997, a tripling of the 1996 figure. Asked what the risk of chemical and biological attack might be for the population of the United States, he responds: "I think it's probably accurate to say that the ... probability of such an attack in the United States is fairly low right now, but the impact of any such attack, even a small attack — we had the anthrax incident in Las Vegas [see 18 Feb], we had one here in Washington [see 24 Apr 97] — the impact of one small incident is so grave, and the loss of life could be so extreme that it's an odd juxtaposition of a low probability with a very devastating impact." {FNS transcript 3 Sep}

**3 September** In the US Senate, former UNSCOM inspector Scott Ritter [see 26 Aug] testifies at a joint hearing of the Armed Services and the Foreign Relations Committee {*International Herald Tribune* 5-6 Sep}. In his prepared statement he has written: "I am here today to provide you with specific details about the scope and nature of interference by this Administra-

tion in UNSCOM, the debilitating effect that such interference has on the ability of UNSCOM to carry out its disarmament mission in Iraq, and to appeal to the Administration and to the Senate to work together to change America's Iraq policy back to what it has been stated in the past." These objectives he does indeed pursue, but the hearing is strongly partisan and the great majority of the words heard are the senators' own. {FDCH transcript 3 Sep}

Appearing before the Foreign Relations Committee the following week, the US Assistant Secretary of State for Near Eastern Affairs, Martin Indyk, observes: "It is ironic that Scott Ritter, who we respect, and Saddam Hussein, whom we deplore, both argue that UNSCOM's independence has been compromised by the United States. ... It may be precisely the opposite of his intention, but Mr Ritter's allegations have profoundly undermined the perception that UNSCOM is independent. And that will make it much harder for UNSCOM to do its job." {*USIS Washington File* 9 Sep}

**3-6 September** In Boston, the Association for Politics and the Life Sciences holds its 18th Annual Meeting. Among the numerous panels and roundtables scheduled is one on *Instances and Allegations of the Use of Biological Weapons*, organized by Mark Wheelis of University of California, Davis; on *Russia and the Former Soviet Union's Biological Warfare Program*, organized by Raymond Zilinskas now of the Monterey Institute of International Studies; on *Averting Biowarfare through Moral Repugnance: Fact or Fiction?*, organized by Leonard Cole of Rutgers University; on *Responding to the Threat of Biological Terrorism*, organized by Alan Zelicoff of Sandia National Laboratories; on *Assessing Motivations for Chemical and Biological Terrorism*, organized by Jonathan Tucker of the Monterey Institute of International Studies; and two on *Strengthening the Biological Weapons Convention*, organized by Marie Chevrier of the Harvard Sussex Program at the Harvard University Belfer Center for Science and International Affairs.

**4 September** Burundi deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thereby become the 117th state party to the treaty.

**4 September** In Chuvashia, Russian Federation, Khimprom Cheboksary is described in an Adam Smith Institute company profile as "a rare turnaround story in Russian industry". After the restructuring that commenced in mid-1996, and an agreement with DuPont [see 12 Sep 97] finalized in November 1997, the organization that had in Soviet days manufactured V-agent nerve gas on a large scale [see 8 Dec 93 and see also 4 Feb 97] is now reviving rapidly, its output of some 300 different chemical products now being geared to the civilian market. {*Capital Markets Report* 4 Sep}

**6 September** In India, the chief of police in Punjab, P C Dogra, is reported in the press as saying that strikingly large quantities of chemical agents had been seized on several occasions since last October from militant Sikh separatists of the Pakistan-based Babbar Khalsa International. A recent instance involved two kilograms of German-made cyanide and bottles of Fluothane anaesthetic. {DPA from New Delhi 6 Sep, *Delhi Pioneer* 7 Sep}

**7 September** In Tokyo, the Public Security and Investigation Agency of the Japanese Ministry of Justice reports that "a strict watch is still needed" on the Aum Shinrikyo cult [see 26 May], whose membership is still more than 1500 people and which

now owns discount computer outlets whose sales amount to \$31 million per year. {AFP from Tokyo 7 Sep}

**7–10 September** In Britain the *3rd International Conference on Anthrax* takes place at the University of Plymouth, jointly organized by DERA/CBD Porton Down and the Society for Applied Microbiology. Participating are 180 people from some 25 countries, including Australia, Belgium, China, Colombia, Cuba, Denmark, France, Germany, India, Iran, Israel, Italy, Nepal, the Netherlands, Nigeria, Norway, Poland, Russia, South Korea, Saudi Arabia, Sweden, Switzerland, Turkey, the UK and the USA. {DERA press release 7 Sep, *ASA Newsletter* 19 Oct}

**9 September** The UN General Assembly opens its 53rd session. In the two-week general debate commencing on 21 September, representatives of 181 member-states — all of them except for Cambodia, Palau, Somalia and Yugoslavia — are scheduled to speak, among them 46 heads of state or government. {AFP from the UN 9 Sep}

**9 September** The UN Security Council unanimously adopts resolution 1194 (1998), which responds to Iraq's decision to suspend cooperation with the disarmament work of UNSCOM and IAEA [see 5 Aug] by suspending the Council's periodic reviews of sanctions [see 20 Aug] for as long as Iraq has not rescinded that decision. Sponsored by Costa Rica, the United Kingdom and the United States, the resolution also states that, if Iraq does rescind the decision, and if it has demonstrated that it is prepared to fulfil its disarmament and other obligations, the Council will be ready to conduct a "comprehensive review", such as the Secretary-General may propose, of Iraq's compliance with its obligations under all relevant resolutions. {UN press release 9 Sep}

**9 September** In the US House of Representatives, Congressman Frank Wolf introduces legislation that would establish a National Commission on Terrorism in order to review national counterterrorism policies and recommend ways to protect the United States more effectively from international terrorism {*Congressional Record* 9 Sep E1653-54}. The bill swiftly passes, as part of a House foreign-operations spending bill {*Washington Post* 19 Sep}.

**9 September** The US Commerce Department Bureau of Export Administration imposes a \$20,000 civil penalty on a Boston company, Kimson Chemical Inc, in settlement of charges of shipping sodium cyanide to the Dominican Republic without the necessary export license. {M2 Presswire 9 Sep}

**10 September** The UK House of Commons Defence Committee releases its report on the Defence Ministry's recent Strategic Defence Review [see 8 Jul]. The report is generally commendatory and supportive, but it expresses concern lest the gearing of UK defence policy towards greater intervention overseas may increase the "asymmetric threat" [see 10 Sep 97] to the UK to an extent unmatched by the projected nuclear, biological and chemical defence capabilities. In particular, the report argues for greater attention to home defence, especially against acts of chemical or biological terrorism. {*The Scotsman* 11 Sep, *Jane's Defence Weekly* 16 Sep}

**10–11 September** In Rotterdam, the Convention on International Trade in Hazardous Chemicals and Pesticides is adopted, and then opened for signature, at a conference attended by representatives of some 100 states. This is the PIC

(Prior Informed Consent) treaty, of which one of the major purposes is to protect people and their environment against the dangerous chemicals that their governments might otherwise have difficulty in precluding from importation into their countries. The list of chemicals covered by the treaty, which will later be extended, comprises 22 pesticides and 5 industrial chemicals. States parties are required under Article 4 to designate national authorities to administer the treaty procedures. The PIC treaty thus provides a new means for monitoring and controlling world trade in dangerous chemicals. None of the 27 chemicals is listed in the schedules of the Chemical Weapons Convention, and Article 3 (Scope of the Convention) expressly states that the PIC treaty does not extend to chemical weapons. More than 60 states sign the Convention, which will enter into force once 50 signatory states have ratified. It will remain open for signature for another year. {UNEP/FAO/PIC/CONF/5}

**11 September** Moscow City Court has just ruled in the case of Valery Borzov, accused of making and selling chemical weapons of mass destruction. He had been arrested after a police sting operation in which he had provided a sample of the nitrogen mustard gas he was offering for sale. This he had synthesized at home after losing his job in a chemical research institute. The court has found him to be mentally ill and in need of treatment in a mental hospital. {*Moscow Kommersant-Daily* 11 Sep}

**14 September** In Japan, Tokyo District Court judges inspect the production facility for sarin nerve-gas which Aum Shinrikyo had built in Satian no 7 at Kamikuishiki [see 22 Apr 95], which the Japanese government had declared to the OPCW, and which the OPCW inspectorate had visited a year previously [see 29 Jul 97] {*Kyodo* from Tokyo 14 Sep}. Dismantling of the plant, which used a five-stage sarin production process, commences two days later and is expected to be completed in December at a cost of about Yen 81 million. Reportedly, the cult had planned to produce about 70 tons of sarin in the plant at a rate of 2 tons per day. {*Asahi Shimbun* 17 Sep}

**14 September** In Iraq, the National Assembly meets in emergency session to debate the latest UN Security Council resolution [see 9 Sep] and votes unanimously to condemn the resolution and to recommend that the country's leadership suspends all remaining ties with UNSCOM {*Reuter* from Baghdad 14 Sep}. The Revolutionary Command Council, meeting two days later, decides to await "the proper time" to act on this recommendation {AFP from Baghdad 17 Sep}.

**14 September–9 October** In Geneva, the Ad Hoc Group of states parties to the Biological Weapons Convention reconvenes [see 22 Jun–10 Jul] for its twelfth session. [For further details, see *Progress in Geneva*, above.]

**14 September** The US Senate Intelligence Committee has now released written responses to questions about the former Soviet CBW capability it had put to the Central and Defense Intelligence Agencies. The DIA has written: "Key components of the former Soviet biological warfare program remain largely intact and may support a possible future mobilization capability for the production of biological agents and delivery systems. ... Moreover, work outside the scope of legitimate biological defense activity may be occurring now at selected facilities within Russia." The CIA has written that some biological-weapons facilities have been deactivated in recent years but that other facilities remain able to produce biological weapons. "We cannot establish that Russia has given up this capability and remain

concerned that some of the individuals involved in the old Soviet program may be trying to protect elements of it." On chemical weapons, the CIA responses referred to evidence from Russian "whistleblowers" who have "alleged that Moscow is hiding a program designed to ensure a continuing offensive chemical weapons capability despite arms control commitments. ... These allegations, when combined with other information, give rise to concerns that at least some factions within the Russian government desire to circumvent the Chemical Weapons Convention." {AP from Washington 15 Sep}

**16 September** In Germany, the Federal Prosecutor's Office in Karlsruhe announces that it is charging Hans-Joachim Rose with engaging in industrial espionage on behalf of Syrian military intelligence: he is said to have supplied information during 1992–94 on, among other subjects, the production of chemical weapons [see also 4 Jun 96]. In 1996 Rose had been convicted of illegally supplying equipment to a factory in Libya supposedly engaged in chemical-weapons production [see 1 Oct 96]. He had recently been released from jail after serving two-thirds of his sentence. {DPA from Karlsruhe and Reuter from Bonn 16 Sep}

**16 September** In Washington, *Rudderless: The Chemical Weapons Convention at 1 1/2* is published by The Henry L Stimson Center. It is a lengthy critical study of how implementation of the CWC has been going, done by Dr Amy Smithson. She explains in the Introduction that the report has been "compiled from the author's personal knowledge of pertinent developments, public sources, and interviews". She writes that she has found "the CWC to be a treaty under siege, surprisingly enough by some of the very nations that worked so diligently to negotiate it". She pays particular attention to the role of the United States, and comments with asperity on Washington's continuing failure to enact the implementing legislation which the Convention expressly requires [see 22 May and 21 Jul Iran]. She observes that the successes of the CWC have "been in spite of, not because of, the US example".

**16 September** The US Centers for Disease Control and Prevention in Atlanta publishes findings in *Journal of the American Medical Association* {280:981-88} from the large-scale study of Gulf War illnesses that had been commissioned from the CDC by the Defense Department in 1994 [see 15 Jun 95 and 26 Nov 96].

**17 September** The London Arabic-language newspaper *Al-Hayat* reports that "Switzerland and France have unofficially informed officials in Iraq and at the United Nations secretariat that most of tests of the samples of the Iraqi warheads ... showed they were free of the VX agent", adding that the results are not yet complete. Unidentified diplomatic sources are attributed for this information. {Reuter from London 17 Sep}

US Defense Department spokesman Kenneth Bacon tells reporters that, after the US finding of VX-associated substances on Iraqi warhead fragments [see 24 Jun], UNSCOM inspectors retrieved a further 80 warhead fragments from the same Iraqi destruction range, sending half of them to a Swiss laboratory and half to a French one [see 12–16 Jul]. "The issue now is whether they have found VX on those fragments. Whether or not they do will not invalidate the US findings, which have already been reaffirmed by an UNSCOM team, because their fragments came from a different part of the destruction area." {USIS Washington File 17 Sep} The *New York Times* {18 Sep} reports that the 80 samples sent to France and Switzerland were in fact swab-samples, the original fragments re-

maining in Iraq, and that "there is a question whether Iraqis might have had access to them" after the US findings were known but before the swab-samples had been taken.

Iraqi Presidency Adviser Amir al-Saadi states at a news conference in Baghdad two days later that Iraq could not have cleaned the warhead fragments because the area in which they were stored was closed and monitored by UNSCOM. {INA from Baghdad 19 Sep}

**17 September** Deseret Chemical Depot, Utah, announces commencement of a new chemdemil campaign at the Tooele Chemical Agent Disposal Facility [see 23 Jun]: destruction of the nearly 800,000 M360 sarin-filled 105-mm artillery rounds stored at the depot. About 16 percent of the depot's holdings have now been incinerated in TOCDF: 115-mm rockets, 750-pound bombs and bulk containers holding in all 2205 tons of sarin. More than 11,000 agent tons of sarin, VX, mustard-gas and lewisite items still remain.

**17 September** In California, suit is filed in San Jose US District Court against CNN and Time Inc by eleven former US servicemen claiming damages in respect of slander, libel, invasion of privacy and intentional infliction of emotional distress in the *Valley of Death* newscast about Operation Tailwind [see 7 Jun]. A similar suit had been filed earlier in the week in Washington, so there are now three such cases [see 6 Aug] in US courts. {*San Francisco Chronicle* 18 Sep} April Oliver, the CNN producer, continues [see 2 Jul] vigorously to defend her story {*Washington Post Magazine* 29 Nov}.

**17 September** From Atlanta, former US President Jimmy Carter issues a statement calling for an investigation into whether the Al-Shifa factory in Khartoum [see 2–3 Sep] had in fact been associated with chemical-weapons production: a technical team should inspect the plant, analyse remaining chemicals and pharmaceuticals, and take samples of soil and building materials. "If the evidence shows that the Sudanese are guilty, they should be condemned for lying and for contributing to terrorist activities. Otherwise, we should admit our error and make amends to those who have suffered loss or injury." {Reuter from Atlanta 17 Sep, AP from Atlanta 18 Sep}

Administration spokesmen say next day that such an investigation is unnecessary. Commenting to reporters, President Clinton's National Security Adviser Sandy Berger says: "We had overwhelming grounds to strike this facility. For us to have not struck that plant I think would have been irresponsible." {White House press briefing} A Khartoum newspaper later reports that President Omar el-Bashir has invited former President Carter to visit the factory site {AFP from Khartoum 22 Sep}.

During the week following, the *New York Times* {21 Sep} publishes a detailed investigation of how the decision to strike the factory had been taken, based on interviews with participants and other officials. It reports that the decision was "based on surmise inferred from evidence". An even more probing and detailed account is published two weeks later in *New Yorker* {12 Oct} magazine by Seymour Hersh, who ends his long article with a quote from an unidentified "former high-level State Department official": "If [President] Clinton was not in all this trouble, he wouldn't have done it [authorized the Tomahawk raids]. He's too smart."

French Foreign Minister Hubert Vedrine, when asked by reporters in New York whether he was convinced that the factory had been producing VX precursor, responds: "I don't think anyone's fully convinced of that, not even the US press from what I've seen" {AFP from the UN 23 Sep}. Italian Foreign Min-

ister Lamberto Dini says in interview: "It's a pity that so many experts that have visited the site believe that no chemical arms were built in that factory" {*Boston Globe* 24 Sep}.

The Arab League is now reported to be promoting a draft UN resolution that would mandate the Secretary-General to send a "technical" fact-finding mission to Khartoum to investigate whether the plant had produced CW agents and whether it had any links with Osama bin Ladin {London *Al-Hayat* 26 Sep}. President Mubarak of Egypt subsequently appears to be distancing himself from this initiative when, in interview, he says: "The Americans monitored the factory for some time. There is a chemical factory near the pharmaceutical factory." {MENA from Cairo 29 Sep in FBIS-NES 30 Sep}

**18–21 September** In Washington, DC, the 3rd Annual Gulf War Veterans' Illnesses Conference takes place, organised by the National Gulf War Resource Center, and attended by several hundred Gulf War veterans, their families, veterans' organizations and others.

**21 September** At the UN General Assembly [see 9 Sep], President Clinton urges all nations to "put the fight against terrorism at the top of our agenda". Among the concrete steps he advocates to this end are strengthening the Biological Weapons Convention and enforcing the Chemical Weapons Convention. {*USIS Washington File* 21 Sep}

**21 September** At the UN General Assembly, speaking immediately after President Clinton, the acting president of the Organization of African Unity [see 27 Aug], President Blaise Campaore of Burkina Faso, says: "Africa hopes that the UN Security Council will send an investigatory mission to Sudan following the US bombardment of the pharmaceutical facility in Khartoum" [see also 17 Sep]. {AFP from the UN 21 Sep}

At the non-governmental level, a six-person fact-finding mission organized by the International Action Center concludes a four-day visit to the Sudan to inspect the bombed facility. Team member Ramsey Clark, former US Attorney General, tells a press conference next day in New York that the destruction of the factory was "a violation of international law", here referring to the provision of the 1977 protocols additional to the 1949 Geneva Conventions which protects "works and installations containing dangerous forces" (Article 56 of Protocol I). {[www.iacenter.org/sudanrt.htm](http://www.iacenter.org/sudanrt.htm)}

**22 September** UK television Channel 5 broadcasts a documentary, *Exporting Evil: Saddam's Hidden Weapons*, which reports that Iraq has been translocating CBW weapons programmes to the Sudan [see also 24 Aug]. The producer of the film, Damien Lewis, subsequently publishes further information on this subject, again largely unsourced, in *ASA Newsletter* {19 Oct} [see also 10 Feb Iraq].

**22 September** UN Secretary-General Kofi Annan meets with the Security Council to discuss how the "comprehensive review" envisaged in resolution 1194 (1998) [see 9 Sep] might be conducted {*USIS Washington File* 22 Sep}. He later presents a paper to the Council containing proposals for a comprehensive review of Baghdad's relations with the UN {Reuter from the UN 23 Sep}. The foreign ministers of the five permanent Council members, in a subsequent joint statement, say: "They agreed that, once Iraq has resumed full cooperation as required by resolution 1194, such a review should take place and that it should address Iraq's compliance and what remains to be done under the relevant resolutions. The Ministers decided that they would work closely with the Secretary-General to

bring about the necessary first step in this process — the unconditional resumption of Iraqi cooperation with UNSCOM and IAEA. In the meantime, they would consider how the comprehensive review might be conducted in accordance with resolution 1194." {S/1998/890}

**22–26 September** In Armenia, there are joint Armenian-Russian military manoeuvres at the Oktemberjan Training Centre near Yerevan. The scenario is the defence of a motorized infantry unit and a counter-offensive in the mountains. Among the Armenian formations participating is a chemical defence unit. {Moscow *Nezavisimiya Gazeta* 24 Sep}

**22–27 September** In China, 80 Chinese, Japanese and US scholars assemble in Changchun for the 5th international symposium on the history of Sino-Japanese relations during the past 100 years. Among the papers presented are six that address Japanese use of CBW weapons in China during period 1931–45. Participants are able to visit the Museum of the Puppet Palace in Changchun, where a Japanese CW display has recently opened, and the Unit 731 Memorial Museum in the Harbin suburb of Pingfang. The symposium is organized by Northeast Normal University with support from the Chinese Academy of Social Sciences Institute of Modern Chinese History and the American Association for the Study of the Japanese Invasion of China. {*ASA Newsletter* 19 Oct}

**23 September** In New York, the informal ministerial meeting on the projected BWC verification protocol convened by the Australian Foreign Ministry [see 2 Mar] is chaired by New Zealand Foreign Minister Don McKinnon {DFAT media release 24 Sep}. It produces a declaration co-sponsored by 57 countries in which ministers affirm their strong support "for strengthening the effectiveness and improving the implementation" of the BWC; express their determination "to see this essential negotiation brought to a successful conclusion as soon as possible" call on all states parties "to accelerate the negotiations and to redouble their efforts" within the Ad Hoc Group; and state their commitment to "sustaining high level political support for the negotiations, including, after consultation among all States Parties to the Convention, through convening a high level meeting at the most appropriate time during the negotiating process in 1999, open to all States Parties to the Convention, in support of the work of the Ad Hoc Group". {BWC/AD HOC GROUP/WP.324}

**23 September** The US General Accounting Office transmits to the Congress its report on the Defense Department approach to the question of US troop exposures to low levels of CW agents. This question has come to the fore in relation to Gulf War illnesses, especially the possibility of a link between the illnesses and the US demolition of Iraqi chemical munitions at Khamisiyah [see 1 Sep]. The GAO has been investigating the subject since September 1997. The report draws attention both to the absence of a Defense Department strategy for addressing low-level exposures and to a low level of knowledge of what the consequences of such exposure could be, notwithstanding a widespread belief that, in the case of the nerve gases, the consequences would not be significant. {GAO/NSIAD-98-228}

**23–24 September** In The Hague, the OPCW Technical Secretariat convenes a technical seminar on the different legitimate uses of saxitoxin. The transfer regulations concerning such use, which stem from the presence of saxitoxin on Schedule 1 of the Chemical Weapons Convention, are in some cases impeding, even blocking, legitimate uses, but the OPCW Execu-

tive Council has thus far been unable to provide a solution to the problem [see 980616-19] {CBWCB 41}. The seminar has several technical papers before it. The scientists participating — from Australia, Canada, Chile, Hungary, Jordan, Latvia, Mexico, the Philippines, Portugal and the UK — issue the following statement: “We, the undersigned, as scientific experts participating in this meeting, agree that: (1) The 30-day notification period [required before export of saxitoxin-containing testing kits for Paralytic Shellfish Poisoning] puts at risk human lives. (2) There is an urgent need for tritiated saxitoxin for medical research and testing purposes. (3) That urgent research and health related needs could be accommodated by transfers of saxitoxin in amounts of less than 5 mg.” {OPCW S/78/98}

**24 September** In Israel, the High Court of Justice issues a restraining order against the expansion of the Israel Institute for Biological Research at Ness Ziona [see 19 Aug], plans for which had just been announced under which the institute would acquire a further 5.6 hectares of suburban-area land. The mayor of Ness Ziona, Yossi Shvo, tells reporters that the court “decided to accept our request to freeze the expansion of the institute while conducting an environmental study, and based on the findings, the court will make a decision on the expansion”. {Reuter from Jerusalem 23 Sep, Reuter and AFP from Jerusalem 24 Sep}

**24 September** The UK Department of Health announces that it has asked independent experts to review the safety of the CS spray weapon that is now widely used by UK police forces [see 6 Aug]. Home Office minister Alun Michael describes the decision as a positive move, saying also: “CS spray has been scientifically tested to a level similar to that which would be required for a new pharmaceutical drug, and there is no evidence that it poses any significant threat to health. Scrutiny by the Committees on Toxicity and Mutagenicity will provide independent review of the safety of CS.” The Association of Chief Police Officers also welcomes the review, one of its members saying he hoped it would clear up a lot of misinformation circulating about the spray. {PA 24 Sep}

**24 September** The US House of Representatives passes its FY 1999 Defense Authorization bill. It calls for the Defense Secretary to provide, by 1 March 1999, an assessment of the extent of Russian compliance with international agreements relating to biological weapons control. This report must also outline the potential political and military costs and benefits of collaboration between Russia and the United States in research on dangerous pathogens [see 7 Nov 97]. {*Post-Soviet Nuclear & Defense Monitor* 1 Oct}

**24–25 September** In New York, UNSCOM convenes an international expert meeting to discuss the analytical findings that have now been reported to it by the French and Swiss laboratories that received swab samples from fragments of Iraqi missile warheads similar to those in which a US laboratory had found traces of VX-associated chemicals [see 17 Sep London]. Participating in the meeting are 14 scientists from China, France, Russia, Switzerland, the UK and the USA. {*London Financial Times* 24 Sep, AFP from the UN 24 Sep} Iraq has not been invited {INA from Baghdad 19 Sep in FBIS-NES 20 Sep}. Neither the findings of the meeting nor the results of the French and Swiss analyses are publicly disclosed, but newspaper leaks suggest that neither laboratory had found evidence of VX {*Washington Post* 29 Sep}. UNSCOM Executive Chairman Richard Butler says at a press conference a week later: “I want to put the record straight: All the lab work is not yet done. We

do not have all the results.” {*USIS Washington File* 1 Oct} An UNSCOM report issued soon afterwards states that final reports from the laboratories are not expected until mid-October {S/1998/920}.

**25 September** In Russia, near Shchuchye [see 8-10 Jul 97] in the Kurgan region of southwestern Siberia, a foundation stone for the projected chemdemil facility there is laid at a ceremony attended by federal and regional officials and also by Brigadier Thomas Kenning of the US Defense Department Nunn-Lugar Cooperative Threat Reduction Program, which is providing assistance. The facility will be destroying some 5400 agent-tons of chemical weapons, nearly 14 percent of the declared Russian stockpile. {Russia TV 25 Sep in BBC-SWB 25 Sep}

**25 September** US Defense Secretary William Cohen, addressing an informal meeting of NATO defence ministers in Portugal, outlines the issues he considers should be addressed at the 1999 NATO summit meeting in Washington during which the Czech Republic, Hungary and Poland are formally to be admitted into the alliance. One such item is the launching of an initiative to address the risks posed by nuclear and CBW weapons, missile proliferation and terrorism. He goes on to outline elements of such a ‘WMD Initiative’. One such element would be: “Agreement at the Summit to an Alliance response mechanism dedicated to protection of NATO populations in the event of chemical or biological weapons use against our cities and towns. The mechanism could include designation of national forces, trained and exercised for specific scenarios and, thus, capable, on an ‘if asked’ basis, of providing directed assistance to civil authorities.” Another element: “Agreement to establish a WMD-focused Center created from within existing Alliance structures that would serve to coordinate WMD-related activities including the development and dissemination of appropriate intelligence assessments.” {*USIS Washington File* 25 Sep}

**25 September** Russian Foreign Minister Igor Ivanov and US Secretary of State Madeleine Albright have been meeting in New York on the margins of the General Assembly and now issue a *Joint Statement on Terrorism*, which includes the following: “We agree on certain key principles. First, we recognize the legitimate right of countries to protect their citizens from terrorist attacks and to find the means to deter them. Second, we agree that no safe haven shall be given to terrorists. Third, we agree on the usefulness of action to block access by terrorist organizations to financial institutions as one way to curb their attacks. ... We are determined to strengthen the international legal basis of the fight against terrorism. We will intensify our efforts to implement the twenty-five anti-terrorism measures adopted by the P-8 at its July 1996 Paris Ministerial [see 30 Jul 96]. We renew our call for prompt ratification of the 1998 Convention for the Suppression of Terrorist Bombings [see 15 Dec 97] and advocate prompt conclusion of a Convention for the Suppression of Acts of Nuclear Terrorism. We also intend to become party to all existing universal anti-terrorism conventions by the year 2000 and call upon all others to do likewise.” {US Dept of State press statement 25 Sep}

**25 September** The US Defense Department awards a contract to BioPort Corporation [see 7 Jul] to manufacture, test, bottle and store anthrax vaccine over the next 26 months. The contract is worth up to \$29 million. {UPI from Lansing 25 Sep}

**25 September** In New York, former UNSCOM Chief Inspector Scott Ritter [see 3 Sep US Senate] is interviewed for the Tel Aviv *Ha'aretz* {28 and 29 Sep}, which subsequently quotes him



on how, from 1995 onwards, Israeli authorities had assisted his design and direction of the UNSCOM campaign against Iraqi concealment operations [see 19–22 Jun 96 and 26 Aug]. He says: “One reason why I went to Israel [in 1994, with the authority of UNSCOM Executive Chairman Rolf Ekéus] and started working with the Israelis is because I believe that the methodology that Israel uses to hunt down terrorists are the same methodologies we needed to use to go after the weapons of mass destruction. So I asked Israel to help the Commission formulate analytical models, analytical techniques and to advise on operational issues.” Later: “I can honestly say that, if it weren’t for Israel, the Special Commission would not have been able to carry out the anti-concealment effort. ... It’s Tel Aviv that can be hit by these missiles, not New York City, and we were actually, frankly speaking, a little dismayed with the lack of intensity, the lack of enthusiasm that emanated from Washington DC on this issue. The [US] treated [concealment] more as an academic exercise, and I thought Israel treated it as it is — a matter of life and death.” He outlines how exactly the Iraqi concealment effort was run and why he so deplored what he saw as US and British interference with his campaign [see 14 Aug]: “So we started with nothing and in the end we were down to where we knew when, where, how, why, who and what was happening. ... It was not a single source of information. We used everything that we had available to us. And that’s why what happened in July and August was so frustrating. Because now that we have identified how they’re doing it, and now that we get the kind of information we need on the timely basis we need, we’re inside their decision-making cycle. We’re reacting before Iraq can react.” The *Washington Post* {29 Sep}, quoting unidentified officials, says that “Israel had become, by July 1995, the most important single contributor among the dozens of UN member states that have supplied information to UNSCOM”.

Ritter has by now given many press and other interviews, which, as with testimony before Congressional committees {Melbourne *The Age* 8 Oct}, he continues to do. To the London *Sunday Telegraph* {27 Sep} he says that, in July, the head of the UK Foreign Office Middle East department, Derek Plumbley, had flown to the United States to inform the US government and the UN that Britain would not support additional inspections of presidential sites in Iraq: “Earlier in July they had given me the complete opposite signal when I had attended meetings in London. The reality of what we were about to do is that we were going after hard intelligence, going after sites that most probably contained components of prohibited weapons and were protected by people close to the president.”

UNSCOM Executive Chairman Richard Butler tells reporters on 1 October that he has written Ritter a letter reminding him of his confidentiality obligations to the UN and asking him to desist from “improper disclosure of information” {*New York Times* 2 Oct}. A month later Ambassador Butler says to the London newspaper *Al-Sharq al-Awsat* {19 Nov in FBIS-NES 19 Nov}: “Scott Ritter did the Commission a lot of damage. Not all that he said was wrong, nor was all that he said correct, but what he did has harmed us. It alarms me very much when people associate Scott Ritter with this Commission. UNSCOM includes hundreds of good men and women who are doing their job; they do not behave like Scott Ritter. Those people in the Arab world who think that Ritter represents UNSCOM are very wrong. This saddens me because it is unfair to the other UNSCOM employees who are doing their job well.”

**25–27 September** In England, at Wiston House, there is a Wilton Park conference on *Chemical and Biological Weapons Disarmament: Achieving and Ensuring Compliance*, convened in coöperation with the Chemical and Biological Arms Control

Institute (CBACI) in the United States. There are 64 participants, from 17 countries (Australia, Belgium, Canada, China, Finland, France, Germany, Israel, the Netherlands, Norway, Poland, Russia, Sweden, Switzerland, Ukraine, the UK and the USA). {*ASA Newsletter* 19 Oct}

**26 September** In San Diego, California, a novel decontaminant of anthrax spores is announced at the American Society of Microbiology annual Interscience Conference on Antimicrobial Agents and Chemotherapy. Known as BCTP, the material is a nanoemulsion of water, oil, detergent and tri-n-butyl phosphate, jointly developed by Novavax Inc of Columbia, Maryland, and the Center for Biologic Nanotechnology in the University of Michigan Medical School. Novavax chief scientific officer Craig Wright says: “When properly formulated, the components in BCTP form an emulsion of tiny liquid droplets suspended in solvent. These lipids fuse with anthrax spores causing the spore to revert to its active state. During this process, which takes four to five hours, the spore’s tough outer membrane changes, allowing BCTP’s solvent to strip away the exterior membrane. BCTP’s detergent then degrades the spore’s interior contents. In scanning electron microscope images, the spores appear to explode.” With funding from the DARPA Unconventional Pathogen Countermeasures Program [see 19 Jun 97], studies are planned to determine the effectiveness of BCTP against inhaled anthrax spores. {PR Newswire from San Diego 26 Sep, University of Michigan news release 26 Sep}

**27–30 September** In Germany there is an international workshop on *Efforts to Implement and Strengthen the NBC Non Proliferation Regime* organized by Peace Research Institute Frankfurt as an activity of its European Non-Proliferation Project, which has hitherto been concerned exclusively with nuclear weapons. The workshop is held in Bad Zwischenahn, near Bremen. There are 28 participants from 17 countries (Austria, Belgium, Bulgaria, Denmark, France, Germany, Greece, Hungary, Italy, the Netherlands, Norway, Poland, Russia, Spain, Turkey, the UK and the USA). {*ASA Newsletter* 19 Oct}

**28 September** In New York, UN Secretary-General Kofi Annan receives a high-level Iraqi delegation to discuss the “comprehensive review” envisaged in Security Council resolution 1194 [see 22 Sep]. The leader of the delegation, Deputy Prime Minister Tareq Aziz, subsequently tells reporters that Iraq will not rescind its decision on not cooperating with UNSCOM. {*New York Times* 29 Sep} He remains in New York until 7 October, engaged in a succession of talks with members of the Security Council and the Secretary-General {*USIS Washington File* 7 Oct}. In a note to the Security Council on 5 October, the Secretary-General presents “a possible concept for a comprehensive review” {UPI from the UN 5 Oct}. The Deputy Prime Minister next day characterizes the just-issued latest six-monthly UNSCOM report as “falsification” and he tells reporters that the Security Council has a “legal and moral” obligation to lift the sanctions on Iraq, but has not done so because the United States is blocking such action {AFP from the UN 6 Oct, *New York Times* 7 Oct}. The president of the Security Council for the month of October, Ambassador Jeremy Greenstock of the UK, tells reporters that he had informed Aziz that “the Security Council is united — there is no difference at all on the council — that there must be a rescinding of the decision and cooperation demonstrated with UNSCOM and then we will move ... to a comprehensive review as soon as that happens. ... The council has seen the way forward. It is now for Baghdad to take that opportunity.” {*USIS Washington File* 7 Oct}

**28 September–1 October** In New York, UNSCOM convenes for its 16th plenary session. Technical briefings are presented to the Commissioners. Draft elements for inclusion in the six-monthly UNSCOM report due in mid-October are considered and discussed. {S/1998/920} There is press speculation that last week's expert meeting on the VX analyses [see 24–25 Sep] is under discussion, and also aspects of the projected "comprehensive review" of Iraq's relations with the UN [see 28 Sep] {Reuter from the UN 25 and 28 Sep}.

**29 September** Netherlands Secretary of State for Economic Affairs Ybema declines to give more details to the Second Chamber about his ministry's denial of an export licence for a shipment of chemicals to Sudan. He says only that there were indications of possible misuse for the manufacture of chemical weapons. {Amsterdam *De Volkskrant* 29 Sep in FBIS-WEU 29 Sep}

**29 September** In the US Congress, senior Republicans introduce a bill, *Iraq Liberation Act of 1998*, into both chambers that would provide up to \$97 million in military aid to Iraqi rebels seeking to drive President Saddam Hussein from power. The proposed legislation would also authorize an additional \$2 million for the US Information Agency to spend on broadcasting assistance for the rebels. {*International Herald Tribune* 2 Oct} Described as a "bill to establish a program to support a transition to democracy in Iraq", it states in Section 3 that "It should be the policy of the United States to support efforts to remove the regime headed by Saddam Hussein from power in Iraq and to promote the emergence of a democratic government to replace that regime". At Section 2(3) it states: "On March 16, 1988, Iraq used chemical weapons against Iraqi Kurdish civilian opponents in the town of Halabja, killing an estimated 5,000 Kurds and causing numerous birth defects that affect the town today". {*Congressional Universe* 10 Nov} The bill passes the House by a vote of 360–38 on 6 October and, next day, the Senate without dissent. {AP from Washington 6 and 7 Oct}

**29 September** The US Department of the Army formally approves the environmental impact statement for the projected hydrolytic chemdemil facility for the 1623 tons of mustard gas held in 1-ton bulk-storage containers at Aberdeen Proving Ground [see 15 Dec 96]. The bidding process for building the facility has already begun, although state permits have still to be issued. {Baltimore *Sun* 30 Sep} On 2 October the Army awards a \$306 million systems contract to Bechtel National Inc for the design, construction, equipment procurement and installation, systematization, operation and closure of an Aberdeen Chemical Agent Disposal Facility {*Engineering News-Record* 19 Oct}.

**30 September** Viet Nam deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thereby become the 118th state party to the treaty.

**30 September** In Iran, military manoeuvres commence close to the border with Afghanistan in what is described on state television as a coordinated joint practice of armour, commandos and army aviation units over a 50,000 square kilometre area involving 200,000 troops. An anti-CW operation is included. {Reuter from Tehran 30 Sep} The commander of the chemical unit, Captain Hoseyn Niknam, says of the operation: "After the fictitious enemy has bombarded the area, the unit forces will cleanse the area of chemicals". He describes the unit as self-sufficient in facilities and equipment, saying also that "the years of sacred defense and participation in different

war games" have heightened its capability. {IRIB Television 1 Oct in FBIS-NES 1 Oct} The exercises, *Zolfaqar-2*, continue until the beginning of November, deployed forces thereafter remaining in the border region. {IRNA from Zabol 2 Nov in BBC-SWB 2 Nov}

**30 September** In the Netherlands, the Rotterdam newspaper *NRC Handelsblad* reports that the Israeli cargo aircraft that had crashed into a densely inhabited outlying part of Amsterdam in 1992 had been carrying a shipment of chemicals from a US firm to the Israel Institute for Biological Research at Ness Ziona [see 24 Sep], and that the shipment included 240 kilograms of dimethyl methylphosphonate (DMMP), which can be used to make, among other things, a variety of different nerve gases. The airline concerned, El Al, states that it had fully informed Dutch authorities at the time, with copies of cargo documentation that identified the DMMP shipment {Reuter from Jerusalem 1 Oct}, and the Netherlands Foreign Ministry confirms that it knew, before the newspaper article, about the chemicals on the plane {BBC News 1 Oct}. In Israel, the Office of the Prime Minister issues a statement saying that the DMMP was to have been used to test filters that protect against chemical weapons {Reuter from Jerusalem 1 Oct}. Old rumours are revived, and, two weeks later, a special parliamentary inquiry begins in the Netherlands, with powers of subpoena {Reuter from Amsterdam 26 Oct}.

**1 October** In northern Bohemia, the defence and foreign ministers of the Czech Republic and Poland — Vladimir Vetchy, Jan Kavan, Janusz Onyszkiewicz and Bronislav Geremek — visit the first training and mobilization base of the Czech CW force, at Liberec. Base commander Vlastimil Cadilek says that the antichemical equipment of the Czech Army is comparable to that of NATO. As of 1 April 1999, the Czech 9th Chemical Protection Company becomes assigned to the NATO rapid reaction corps, which is the reason for this ministerial visit. {CTK from Liberec 1 Oct 98}

**1 October** In the US Army, the Chemical and Biological Defense Command (CBDCOM) and the Soldier Systems Command (SSCOM) merge into a single new command, the US Army Soldier and Biological Chemical Command (SBCCOM) [see 11 Feb], headquartered at Edgewood Area, Aberdeen Proving Ground. {SBCCOM press release 1 Oct}

**1 October** In the US Defense Department, the new Defense Threat Reduction Agency (DTRA) is formally established, headquartered for the time being near Dulles International Airport. The FY 1999 budget now projected for the agency is \$1.9 billion, for a staff of 2089 personnel, most of whom have transferred from the agencies or bureaux now amalgamated into DTRA [see 19 May]. {*USIS Washington File* 1 Oct} At the stand-up ceremony, Defense Secretary William Cohen says: "Your charge is perhaps the most vital national security mission ever to face our nation. To persevere in reducing the nuclear, chemical and biological arsenals of the world. To prevent the seepage into the global arms bazaar of those that remain. To protect America from those who would use these terror weapons against us. And to peer into the opaque windows of tomorrow and to avoid the future shock of unknown threats." The chief architect of DTRA, Deputy Defense Secretary John Hamre, describes its mission as "finding ways to mitigate the spread of dangerous technologies, finding ways to contain the proliferation of weapons to other countries, finding ways to lower the threat to the United States and our allies". {DefenseLink 1 Oct.} And he writes: "This new defense agency

has three primary missions: to maintain America's current nuclear deterrent capability; to reduce the threat from nuclear, chemical and biological weapons; and to counter threats posed by those weapons of mass destruction". {Armed Forces Information Service *Defense Viewpoint* 4 Oct} Among the expectations of the US military establishment for DTRA are, in the words of Joint Staff director Vice-Admiral Dennis Blair, that it will provide "certain knowledge" that arms control treaties are being implemented. {*USIS Washington File* 2 Oct}

**2 October** In Cambodia, the Cabinet approves the request of the National Assembly for ratification of the Chemical Weapons Convention (referred to, however, as the Biological Weapons Convention — which Cambodia has already ratified — in the report carried in Cambodian radio {2 and 3 Oct in BBC-SWB 2 and 3 Oct}).

**2 October** In the US House of Representatives, a hearing on the Nunn-Lugar-Domenici Domestic Preparedness Program [see 17 Mar] is conducted by the National Security, International Affairs and Criminal Justice Subcommittee of the Government Reform and Oversight Committee. There is testimony from the General Accounting Office, the Department of Justice and the FBI, the Department of Defense, and the Department of Health and Human Services, as well as non-governmental testimony. {FNS transcript} The impression reportedly conveyed is that the the 18-month-old federal effort to train 'first responders' (local police, fire and emergency service teams) that may have to deal with terrorist weapons of mass destruction has been poorly conceived, and has suffered from inefficiencies and inadequacies. Another problem has been confusion about who, at the federal level, is in charge. The Defense Department is now 33 cities through a training programme for first-responders in the 120 largest US cities, while the Justice Department has a programme to help 120 cities (not quite the same ones) purchase appropriate preparedness equipment. Administration witnesses, however, refer to an agreement in principle that has just been reached which assigns lead responsibility to the Justice Department for coordinating and expanding the training, to which end the FBI is planning to establish a National Domestic Preparedness Office. By 1999 Justice will take over the training itself. {*Washington Post* 3 Oct, *National Journal* 10 Oct}

The subcommittee learns from Robert Blitzer, chief of the FBI Domestic Terrorism and Counterterrorism Planning Section, that the number of WMD threats and incidents has been growing: in 1997 the FBI had initiated 68 new investigations into the use or threatened use of chemical, biological, radiological or nuclear materials, whereas in 1998 the number has already exceeded 86 [see also 3 Sep Senate Judiciary]. In most of the incidents the perpetrators have either been "lone offenders" or "extremist elements of right wing groups", and most of the cases have been hoaxes. {FNS 2 Oct}

Testimony from Larry Johnson, formerly of the CIA and then deputy director of the State Department Office of Counter Terrorism, includes specific comments on the threat of CBW terrorism: "We cannot ignore the possibility that a terrorist group will try again to produce such weapons, but we should acknowledge that producing such weapons is not easy. Unfortunately that is not the message the American people are receiving. ... The Secretary of Defense also warned that 'a lone madman or nest of fanatics with a bottle of chemicals, a batch of plague-inducing bacteria, or a crude nuclear bomb can threaten or kill tens of thousands'. ... The truth is otherwise. Producing these types of weapons requires infrastructure and expertise more sophisticated than a lab coat and a garage. Besides being

tough to produce these weapons also are difficult to use." {FNS 2 Oct}

**4 October** Israel possesses F-16 strike aircraft that have been equipped to carry CBW weapons, according to unidentified military sources quoted in the London *Sunday Times*, which also prints a photograph of what it says is an F-16 fitted with chemical weapons. The newspaper reports the sources also to have said that F-16 crews "have been trained to fit an active chemical or biological weapon within minutes of receiving the command to attack". It states that the weapons are manufactured at the Nes Ziona Institute for Biological Research.

**5 October** In Germany, the Economics Ministry has written to the country's major trade associations warning that the Iranian government is "making intensive efforts to acquire sensitive high technology for military purposes", particularly in the sphere of "nuclear and carrier technology as well as the production of biological and chemical weapons". The letter identifies 81 Iranian companies with which "extreme caution is required in initiating business deals". {Hamburg *Der Spiegel* 5 Oct}

**5 October** In Brownsville, Texas, jury selection begins for the impending trial of the three men charged with conspiring "to use a weapon of mass destruction, including any biological agent, toxin or vector" — poisoned cactus needles, apparently — and with threatening federal and state officials [see 1 Jul] {*Laredo Morning News* 5 Oct}. After a pretrial hearing of a prosecution witness the following week {AP from Brownsville 14 Oct}, the trial commences on 19 October. The defence alleges entrapment, portraying the three men — Johnnie Wise, Oliver Emigh and Jack Grebe — as unwitting targets of a government informant described as a "con man" {*Houston Chronicle* 20 Oct}. The prosecution produces audio and video tapes {AP from Brownsville 22 and 26 Oct}. All three are acquitted of the "weapon of mass destruction" conspiracy charge, but Grebe and Wise are convicted on two counts of sending e-mail threats. Sentencing is set for 29 January. {*Houston Chronicle* 30 Oct, AP from Brownsville 7 Nov}

**6 October** In Geneva, the US Acting Under Secretary of State for Arms Control and International Security Affairs, John Holum, addresses the BWC Ad Hoc Group [see 14 Sep]. He calls for a renewal of efforts so that 1999 can be "the year of the BWC Protocol". He identifies five elements as "the core and backbone" of a successful Protocol:

—"First, there must be legally binding, mandatory declarations to provide transparency about activities of potential relevance to the Convention. Transparency must be unambiguous so all can understand what is expected of them. We must all accept that they are a binding obligation, in contrast to voluntary undertakings.

—"Second, there must be means to get investigators on-site, quickly and with a mandate flexible enough to do their job efficiently. These mandates should include responding to legitimate concerns about possible use of biological weapons, or suspicious outbreaks that may be from unnatural causes, or inspecting suspect locations where there is real concern that activities in violation of the Convention are being conducted. Investigations and visits must be conducted in ways to protect legitimate proprietary and national security sensitivities, but they also must be conducted vigorously, to provide confidence in compliance.

—"Third, there must be ways to ensure that all sites whose activities merit declaration are in fact declared, and that the

declarations are accurate. We cannot allow a proliferator the refuge of simply ignoring the international community and the norms of humanity by failing to provide complete or accurate information about relevant activities.

“— Fourth, there must be a professional organization to implement the Protocol. It must be talented, small, and cost-effective. We cannot afford a bloated, cumbersome bureaucracy — which would cost too much and have low operational effectiveness.

“Another element of these negotiations is how to build on the principles of Article X of the Convention for more effective cooperation and coordination of peaceful biotechnology among States Parties to the Protocol. The Protocol will impose additional, legally binding requirements on its participants. Those obligations must be carried out accurately and promptly. If assistance to States Parties will promote compliance, it will be to everyone’s benefit.” {*USIS Washington File 6 Oct*}

Speaking later at a press conference, Secretary Holum says that the United States is seeking an expansion of the Ad Hoc Group negotiating effort from the 11 weeks allocated during 1998 to 20 weeks during 1999. He also speaks of the difficult outstanding issues. Thus, in regard to BWC Articles III and X, and hence the future of the Australia Group, he says: “Our position on that is very clear. We will not, in the name of strengthening compliance with this treaty, allow an undercutting of the regimes that presently limit proliferation of biological weapons. We think those are indispensable and need to continue.” He says that, although some of the outstanding issues are very difficult, “countries’ positions have been sufficiently developed so that we can now move to the end game, which will, of course, involve some serious political decision-making in capitals as well as some very difficult technical work lying ahead here in Geneva”. {*USIS Washington File 8 Oct*}

**6 October** The UN Security Council receives its sixth six-monthly consolidated report [see 16 Apr] on the work of UNSCOM in Iraq during the previous six months {S/1998/920}. The report states its principal conclusion as follows: “It is suggested that three central facts emerge ... : the disarmament phase of the Security Council’s requirements is possibly near its end in the missile and chemical weapons areas but not in the biological weapons area; Iraq is permitting the monitoring work of the Commission to be exercised only at a less than satisfactory level, yet its development is vital to the future; and full disclosure by Iraq of all necessary materials and information remains the crucial ingredient for both an end to the disarmament process and future monitoring.” {Para 67}

Regarding Iraq’s weaponization of BW agents, the report sheds no new light on how far or how successfully the programme had in fact progressed. It mentions an Iraqi document reporting the successful testing in August 1988 of helicopter-borne commercial chemical insecticide disseminators that had been modified for aerosolization of BW agent, but says that this had not been verified. Likewise, it says that BW-agent dissemination via aircraft spraytanks developed from drop tanks “had been pursued with the utmost vigour by Iraq”, but again the account given of this work in the biological full, final and complete disclosure could not be verified. Nor was it known how many R-400 aircraft bombs had been filled with agent, and there were now also doubts about the BW warheads produced for the Al Hussein missile. {Para 34(a)}

As for Iraq’s unilateral destruction and concealment actions, on which the report also presents new information, it observes: “The Security Council may need to consider, at some stage, that these actions by Iraq may have the ultimate effect that the Commission will be obliged to conclude that it is unable to pro-

vide 100 per cent verification of the claimed fate or disposition of prohibited weapons.” {Para 75}

**6–7 October** Turkish armed forces use chemical weapons during an operation against guerrillas of the People’s Liberation Army of Kurdistan (ARGK) in the Dersim region, according to a Dem News Agency report quoted on Kurdish television from London. The report states that three ARGK guerrillas “lost their lives as a result of the chemical weapons released from a plane”. {*MED TV 9 Oct in FBIS-TAC 10 Oct*}

**6–7 October** In Washington an international conference, *Chem-Bio ’98: Combating the Terrorist Threat*, is convened by Jane’s Information Group, a publisher of information on military topics, whose publicity material describes the conference as “a must for organizations aiming to be part of the \$2-billion federal chem-bio incident preparedness program”. About 170 people participate. Keynote speakers are Dr Gordon Oehler [see 19 Nov 97], now at Science Applications International Corporation, and Dr Jerome Hauer, director of the New York City Office of Emergency Management. Among the 16 other speakers are Dr Jean Pascal Zanders, who now leads the SIPRI CBW Project, and the US National coordinator for Security, Critical Infrastructure Protection and Counter-terrorism, Richard Clarke [see 22 May].

Dr Clarke talks about impending organizational changes in the Nunn-Lugar-Domenici programme [see 2 Oct]. He portrays the vulnerability of US cities to chem-bio terrorism as the country’s Achilles’ heel. In describing the strategy of the United States for dealing with chem-bio attack, he touches on the role of the Biological Weapons Convention. Just as the US government had worked with the Chemical Manufacturers Association to design an inspection system for the CWC that would be effective even while protecting proprietary information, he says that we must now “work with the biological manufacturers, the medicine manufacturers of the United States and the world to create a similar system that allows for on-site inspection of biological laboratories throughout the world”. {*USIS Washington File 8 Oct*}

**6–9 October** In The Hague, the OPCW Executive Council [see 1–4 Sep] convenes for its twelfth regular session. It is unable to finalize the draft OPCW budget for 1999, and therefore agrees to reconvene on 20 October, with informal consultations taking place during the interim. {For further details, see *Progress in The Hague* above.}

**7 October** In South Korea, the recently released *1998 Defence White Paper* reports the development of further CBW weapons by North Korea, saying that this reflects a doctrinal shift away from conventional warfare. {*Jane’s Defence Weekly 7 Oct*}

**7 October** The *New York Times* reports that the French laboratory analysing swab-samples of Iraqi warhead fragments [see 24–25 Sep] has in fact found traces of VX-associated chemicals, according to “several weapons experts” whom it does not identify. The newspaper also states that several diplomats, also unidentified, “charged that the French delayed releasing the final results because they did not want to undermine Iraq’s push at the United Nations this week to lift economic sanctions” [see 28 Sep]. Next day, French Defence Ministry spokesman Jean-Francois Bureau says: “Our conclusions right now are that we do not have any definitive conclusions about traces of VX on the samples”. He also says: “Nobody could imagine that France would want to slow down the discussion in

UNSCOM". The analyses have been done at the Ministry's Centres d'études du Bouchet. France calls for a new technical meeting on the subject. {AFP from Paris 8 Oct} UNSCOM says that such a meeting was planned anyway, and would take place during 22–23 October. {Reuter from the UN 8 Oct, *New York Times* 9 Oct}

**7 October** Panama deposits its instrument of ratification of the Chemical Weapons Convention [see 7 Jul]. In 30 days time, it will thereby become the 119th state party to the treaty.

**8–9 October** In northern California, sheriffs in Humboldt County use pepper spray (a police-issue chemical weapon in which the active ingredient is the toxin known as oleoresin capsicum or OC [see 13 Feb 97]) against Earth First! activists protesting the logging of Headwaters Forest. Protestors had chained themselves across a logging road, and, unable to cut the chains, the sheriffs pour liquid pepper-spray into the eyes of the protestors, in the case of one young woman three times in 30 minutes. {Environmental News Service 14 Oct}

**9 October** In Frederick, Maryland, a reunion has recently been attended by some 230 participants in Project Whitecoat, a US Army BW-related activity that ran from 1954 to 1973. They came to reminisce and to hear from the Army what their participation had meant. The project involved the exposure of volunteers to a variety of biological materials, including aerosols of Q fever rickettsiae (in the open air, at Dugway Proving Ground) and of tularemia bacteria, and developmental vaccines against anthrax, plague, VEE, WEE, EEE and yellow fever. The volunteers, about 2300 conscripts in all, were Seventh Day Adventists, members of a church which discouraged military service involving combat duties. The Army is conducting a medical follow-up study, and has thus far located 735 of the participants in the project. {*Chicago Sun-Times* 9 Oct, NPR *All Things Considered* 13 Oct, *Washington Times* 17 Oct}

**9–15 October** In Paris, the Australia Group meets for what its agreed press statement describes as "informal consultations ... on chemical and biological weapons proliferation". The statement includes the following: "Participants reaffirmed their strong support for the Chemical Weapons Convention. In line with Convention obligations, participants committed to keep under review their respective national export licensing policies to ensure that they promote the object and purpose of the CWC, are applied fairly and remain fully consistent with it." {AG/Oct98/Press/Chair/21} In the plenary session of the Group, during 12–15 October, participants share information on their legal and regulatory efforts to counter the threat of chemical and biological terrorism. In-depth political discussion of CB terrorism had begun within the Group, at the behest of the United States, during the 1995 plenary, held in the aftermath of the Tokyo sarin release. {President Clinton in *USIS Washington File* 12 Nov}

**10 October** In Turkey, where tension with Syria is mounting, National Defence Minister Ismet Sezgin dismisses as "not serious" reports that Syria will use chemical weapons in the event of a clash {TRT TV 10 Oct in BBC-SWB 13 Oct}. An Istanbul newspaper reports that Syria is believed to have an inventory of more than 500 tonnes of nerve, asphyxiating and blister gases, and that, on a limited scale, Syria conducts biological-weapons research and development at the Barzah facilities. {*Sabah* 13 Oct in FBIS-WEU 14 Oct}

**13 October** The Japanese Ministry of Health and Welfare receives requests from the prefectural government of Kanagawa on behalf of the 63 petitioners who had been among the 300 workers manufacturing mustard gas at Sagami naval arsenal, in the prefecture, during 1943–45, and who were now seeking aid for the respiratory disease from which they are suffering and which they attribute to mustard gas [see 18 May]. {*Asahi News Service* from Tokyo 14 Oct}

**13 October** The UN Security Council considers the latest 6-monthly reports from UNSCOM [see 6 Oct] and the IAEA on Iraq's compliance with Council resolutions. Its president issues a statement saying that, "in the light of these reports, members of the council look to Iraq to take the decision to resume full cooperation" [see 28 Sep]. {*USIS Washington File* 13 Oct} In Baghdad, the representative of the UN Secretary-General, Ambassador Prakash Shah, is resuming talks with Deputy Prime Minister Tareq Aziz and Foreign Minister Saeed al-Sahaf on ways of resolving what is by now a two-month standoff between Iraq and UNSCOM inspectors. Iraq News Agency reports on 19 October that President Saddam Hussein has discussed with his aides the projected comprehensive review of relations between Iraq and the UN {Reuter from Baghdad 19 Oct}. Iraq soon afterwards transmits to the UN a list of nine questions it wants answering before considering a resumption of cooperation, including questions about when the comprehensive review would begin and the role in it of the Secretary-General {AP from the UN 21 Oct, Reuter from the UN 22 Oct}. After informal consultations the Security Council decides, on 23 October, to postpone discussion on the nine questions {Reuter from the UN 26 Oct, Reuter from Baghdad 28 Oct}. On 30 October, after further informal consultations, the president of the council tells reporters that the text of a formal letter from him to the Secretary-General is now being finalized conveying the council's consensus view on the comprehensive review {*USIS Washington File* 30 Oct}.

**13 October** In the United States, PBS television airs a *Frontline* documentary about biological weapons, *Plague War*. It is an adaptation of a BBC *Panorama Special* shown in the UK three months previously as [see 13–14 Jul]. The bioterrorism aspect, in particular, has been emphasized for US viewers. Footage is included of Defense Secretary William Cohen alleging that the New York City World Trade Towers bombers had contemplated "setting off cyanide in the process"; he says: "It failed to ignite, and therefore the great catastrophe did not take place". What seem to be full transcripts of interviews from which both the original BBC documentary and the new version were constructed are posted on the *Frontline* website {at [www.pbs.org/wgbh/pages/frontline/shows/plague/](http://www.pbs.org/wgbh/pages/frontline/shows/plague/)}.

**14 October** The World Health Organization, in consultation with the Iraqi Ministry of Health, is reported to be planning for a possible study into the effects on Iraqi civilians of the depleted uranium munitions used during the Gulf War [see 4 Aug Washington]. The London *Independent* states: "A three-man WHO team has already visited Iraq's Hospital for Nuclear Medicine in Baghdad to inspect its records of cancer increases since the war, and is due to report in the next few weeks on how an investigation can be conducted into the use of the Allied ordnance". {London *Independent* 14 Oct}

**14 October** In Utah, state environmental officials have now issued permits enabling chemdemil work at the Tooele Chemical Agent Disposal Facility to move from half-rate to full-rate operations. TOCDF will now be able to advance its new cam-

paign for destroying M360 sarin projectiles [see 17 Sep] at a rate of 12,000 instead of 6,000 rounds per week. {AP from Tooele 14 Oct}

**14–16 October** In Strasbourg, the Parliamentary Assembly of the Council of Europe organizes a conference, *European Democracies Facing up to Terrorism*, bringing together experts from the 40 European governments and the police bodies Europol and Interpol. The purpose is to arrive at a definition of terrorism, to agree upon preventative measures, and to strengthen international cooperation against terrorism. {Council of Europe news release 16 Oct}

**14–16 October** In Washington *Defense Week* convenes what it describes as “the first major conference and trade show focusing on weapons of mass destruction (WMD) and domestic preparedness”, with speakers from the military and industry, and from federal, state and local government {PR Newswire 12 Aug}. US Principal Deputy Assistant Defense Secretary (Reserve Affairs) Charles Cragin speaks on the now-familiar Achilles’-heel theme [see 6–7 Oct]: “With no peer competitors, we are the world’s only superpower. And yet, despite our unchallenged strength abroad, we may prove to be weakest here at home.” {DefenseLink 15 Oct}

**14–31 October** In China, a Japanese government team visits two northeastern cities — Mudanjiang in Heilongjiang Province, and Fushun in Liaoning Province — in preparation for the disposal of abandoned chemical weapons [see 24 Jun]. A press conference in Beijing on 30 October is told by Norio Saito, Assistant Director of the China and Mongolia Division of the Japanese Foreign Ministry, that the team has packed and sealed 331 chemical munitions, including 326 identified as abandoned by the Japanese Imperial Army [see also 14 Aug China]. The munitions will be stored in Chinese warehouses pending decision on where and when the requisite chemdemil facilities are built, matters which are still the subject of bilateral negotiation. Before setting up a full-scale disposal plant, the Japanese government plans to build a small experimental plant, and will shortly announce the general outline of the plant construction. {Kyodo from Tokyo 13 Oct, Jiji Press Ticker Service from Beijing 30 Oct} Later, in Tokyo, the head of the responsible Cabinet office [see 24 Jun], Seigi Hinata, states that the government has yet to decide which ministry or agency is to take charge of the project, including the requisite budget and new legislation. He estimates the total cost, including facility construction, at Yen 200-500 billion. {Kyodo from Tokyo 22 Nov}

**16 October** Sudanese Foreign Minister Mustafa Osman Ismail has said in interview that Sudan will allow the UN to investigate any site where Sudan is alleged to be making chemical weapons, so *The Wall Street Journal* reports. The minister has also said that, although Sudan would want the UN to focus first on the Al-Shifa factory [see 21 Sep], it would not object to separate UN probes if the US or other member states raise allegations about other sites elsewhere in the country. The minister later tells the *Washington Post* {22 Oct} that the Sudanese government does not possess chemical weapons and that, to prove it, Sudan is likely to sign the CWC.

**16 October** In Ukraine, parliament votes to ratify the Chemical Weapons Convention. Of the 342 deputies present in the 450-seat Supreme Council, 285 vote for ratification and 16 against. {Interfax from Kiev 16 Oct in FBIS-TAC 16 Oct, AP from Kiev 16 Oct} Ratification had been put to the vote 10 days previously [see 2 Sep] but had then failed to gain the 226 votes

needed to pass, apparently because too many deputies were absent {Kiev *Segodnya* 8 Oct in BBC-SWB 8 Oct}. The instrument of ratification is deposited with the UN Secretary-General later in the day, meaning that, in 30 days time, Ukraine will become the 120th state party to the treaty.

**17 October** In Germany, where Chancellor Gerhard Schröder’s coalition of Social Democrats and Greens is now assuming office, the coalition partners are negotiating a treaty between themselves, of which the sections on foreign policy, defence and arms control are agreed today. They make no mention of what the new government’s position should be on the issue of BWC verification. They do, however, state that the new government “will campaign to lower the alert status of nuclear weapons and for a renunciation of the first use of nuclear weapons” {London *Guardian* 19 Nov}. When the suggestion of moving to NATO no-first-use is later mooted during Alliance consultations on the projected new “strategic concept”, US Defense Secretary William Cohen expresses opposition, saying: “We think the ambiguity involved in the issue of the use of nuclear weapons contributes to our own security, keeping any potential adversary who might use either chemical or biological unsure of what our response would be.” {London *Financial Times* 24 Nov}

**18 October** President Clinton has just signed the Defense Authorization and Defense Appropriations bills for FY 1999 into US law {*International Herald Tribune* 19 Oct}. As regards the Nunn-Lugar Cooperative Threat Reduction Program, both acts support the administration request for \$88.4 million in assistance to the Russian chemdemil programme. Release of the funds is contingent, however, on the president certifying that not funding the work would jeopardize US national security and that Russia has fully declared its inventories of chemical weapons, including binary weapons. Also authorized and appropriated are \$2 million for prevention of biological weapons proliferation. {*Post-Soviet Nuclear & Defense Monitor* 1 Oct}

The Defense Authorization legislation requires the Defense Secretary to conduct research into the effects on human health of low-level and chronic exposures to CW agents [see 23 Sep]. {Washington *Defense News* 12–18 Oct}

**18–20 October** In Prague, there is a NATO Advanced Research Workshop on *Scientific and Technical Means of Distinguishing between Natural and Other Outbreaks of Disease*. It takes place at the National Institute of Public Health Centre of Epidemiology & Microbiology under the co-direction of its head, Professor Bohumir Kriz, and Professor Graham Pearson of the United Kingdom. There are some 40 participants from 16 countries (Brazil, the Czech Republic, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Romania, Russia, South Africa, Sweden, Ukraine, the UK and the USA).

**19 October** OPCW Director-General José Bustani addresses the First Committee of the UN General Assembly. He states that, in the declarations thus far received from states parties, a total of 59 chemical weapons production facilities have been disclosed, 24 of them Russian, and all of them have now been inspected pending their destruction or conversion. Inspectors have observed the destruction of about 2000 tonnes of CW agent and nearly 200,000 chemical munitions in the United States. About 100 industrial facilities have been inspected in 25 states parties. Besides these accomplishments, the Director-General also reviews some of the problems still confronting his organization: the reviews of export-control policies required of states parties, including Australia Group participants, under

Article XI; the adverse impact of the South East Asian financial crisis on ratifications within that region; the lack of success in establishing dialogue between the OPCW and North Korea, despite the assistance of China; the fact that only 29 of the 53 states of Africa are states parties; the question of the possible membership of the Federal Republic of Yugoslavia; Israeli non-ratification and the continuing unwillingness of some but not all of the neighbouring countries and their allies to sign the Convention; the failure of the United States to enable inspections of its chemical industry; and the belatedness of the declarations of some other states parties as well, including Iran. {OPCW S/80/98}

**19 October** In the UK House of Commons debate on the Strategic Defence Review [see 10 Sep], the Opposition welcomes the plan to form an NBC reconnaissance regiment, but notes that “it appears to be solely to assist and defend deployed British forces”; the Review “makes no mention of the possibility of an NBC attack on the United Kingdom”.

**19 October** From East Gomeldon, the Winterbournes and other parishes near Salisbury, England, a petition is presented to Parliament asking that the Ministry of Defence be urged to clear a former firing-range adjacent to the homes of the nearly 500 petitioners where more than 2000 long-buried metal objects have been identified, some of which might contain phosgene or mustard gas. {*Hansard (Commons)* 19 Oct}

**19 October** In the US Congress as it nears the end of its 105th session, House-Senate conferees agree a conference report on an omnibus appropriations bill that conflates 8 out of the 13 appropriations bills that would normally have been enacted as stand-alone legislative items, plus many other items as well, among them the *Chemical Weapons Convention Implementation Act of 1998* [see 23 Jun]. The conference report, occupying some 500 pages of *Congressional Record* (pp H11044–545), has resulted from intense negotiation over the past week between the White House and congressional Republicans. It is agreed by both houses over the next two days, and the *1999 Omnibus Consolidated and Emergency Supplemental Appropriations Act* is signed into law by President Clinton on 21 October, as PL 105-277. The CWC implementing legislation, as thus enacted, follows the language of S.610 passed by the Senate seventeen months previously [see 23 May 97]. The \$500 billion omnibus spending legislation also provides for the merging into the State Department of the US Arms Control and Disarmament Agency and the US Information Agency, but it does not provide for payment of the outstanding US debt to the United Nations, which stands at \$900 million. {AP from Washington 19 and 20 Oct, *Washington Post* 21 and 22 Oct, *Chemical & Engineering News* 26 Oct}

**19–21 October** In Switzerland, the 3rd International Security Forum and the first conference of the PfP Consortium of Defense Academies and Security Studies Institutes takes place in Zurich. For its workshop on arms control and disarmament, chaired by Ambassador Yuri Nazarkin of the Geneva Center for Security Studies, a systematic collection of individual studies has been prepared in accordance with the agreement between the Swiss government (represented by the head of the Interdepartmental Coordination Committee for Partnership for Peace, Ambassador Anton Thalmann) and the “Cluster of Competence” on arms control and disarmament (represented by its Coordinator, Ambassador Nazarkin). Among the eleven papers in the collection, one from the AC-Laboratorium Spiez addresses the prospects for effective implementation of the CBW conventions.

**21 October** In Bulgaria, chief prosecutor Nestor Nesterov announces closure of the criminal inquiry into the murder of Georgi Markov, killed in London in September 1978 by a ricin-containing micro-projectile [see 28 Jan 97], the time-limit for prosecution now having expired. {London *Daily Telegraph* 22 Oct}

**21–23 October** In Prague, there is a NATO Advanced Research Workshop on *The Role of Biotechnology in Countering BTW Agents*. The co-directors are Dr J Sedivy of the Prague Institute of International Relations and Dr Alexander Kelle of Peace Research Institute Frankfurt.

**22–23 October** In New York, UNSCOM hosts a seminar of international experts to consider the final reports on the analyses of swab-samples from Iraqi warhead fragments carried out in France, Switzerland and the United States [see 7 Oct]. Participating are 21 experts from China, France, Russia, Sweden, Switzerland, the UK and the USA, as well as UNSCOM experts. It transpires that methylphosphonic acid had been found in one of the 40 French samples; this substance is a possible degradation product of a nerve gas, though not necessarily VX. All three laboratories had found chemicals known to be degradation products of a decontaminating compound. The French experts also report that, as a result of their investigation of two samples which had been previously reported as containing ethyl- and methyl-phosphonic compounds, the presence of those compounds could not be confirmed. The unanimous report {S/1998/995} of the meeting is transmitted to the UN Security Council on 26 October. It recommends “that UNSCOM invite Iraq to explain first the origin and history of the fragments analysed by all three laboratories and then the presence of degradation products of nerve agents”. In a letter to the president of the Security Council, Iraqi UN Ambassador Nizar Hamdun criticises the report and states that there is “nothing new or fundamental” that can be added to what Iraq has already disclosed to UNSCOM {INA from Baghdad 29 Oct in BBC-SWB 31 Oct}.

**25–31 October** In Croatia, a conference on *Eco-Terrorism and Chemical and Biological Warfare without CB Weapons* takes place in Zagreb as the fifth in the series of Chemical and Biological Medical Treatment Symposia organized by Applied Science and Analysis, Inc. The focus is on the possibility of chemical or pharmaceutical factories becoming terrorist or military targets. Participating are about 125 people from government, industry and academia in 26 countries. {*ASA Newsletter* 19 Oct}

**26 October** In London, a criminal court hears how a cache of terrorist weapons intended for the Groupement Islamique Armé in Algeria had been found in May 1997 during a combined operation by police and the Security Service in south London. The prosecution says that the cache included chemicals from which lethal poisons could be made. {London *Independent* 27 Oct}

**29 October** Israel completed development of an “ethnic bullet” two years ago, according to an “unconfirmed report from South African sources” quoted in the UK periodical *Foreign Report*. This publication would have its readers believe that Israelis have found a genetic difference between Jews and Arabs which, after many years of secret research at several centres, they became able to exploit in a biological weapon which, when used to contaminate water supplies, causes illness only among Arabs. The story is repeated in the London *Sunday Times* {15 Nov} two weeks later, this time attributed to unidentified “Israeli

military and western intelligence sources". A senior aide, David Bar-Illan, to Israeli Prime Minister Benjamin Netanyahu says that the story proves "there is no limit to human gullibility and also no limit to the desire to sell newspapers" {AP from Jerusalem 15 Nov} *Ha'aretz* recalls a science-fiction short story which had a Ness Ziona scientist working on a virus that could attack only Arabs: a satirical fantasy offered to Israeli newspapers by its author, Tel Aviv academic Doron Stanitsky, two years previously {London *Private Eye* 11 Dec}.

**29 October** In South Africa, the Truth and Reconciliation Commission presents its final report to President Nelson Mandela, in five volumes totalling about 3500 pages. The account of the special investigation into Project Coast, the secret CBW programme [see 31 Jul], appears in volume two. Here the investigators describe an activity which existed, at least in part, for the self-enrichment of several of its participants, and also to provide the Civil Co-operation Bureau with poisons and germs for covert use. Ostensibly the activity was to provide the country with a defensive capability against adversary CBW, including some capacity to launch retaliatory attacks.

An analysis is presented that includes the following: "Despite the fact that the South African CBW programme during the period under review has now been exposed as showing gross aberrations of intent, discipline, actions, command structures, financial dealings and professional relationships, it was highly regarded within the military, which considered it a successful programme. The military command maintained that *cognoscenti* in the international military community shared this opinion. One of the astonishing aspects that emerged in the hearings was that the professionalism, competence and mystique of the programme were stripped away by the evidence of the very people who participated in it. The hearings revealed a nepotistic, self-serving and self-enriching group of people, misled by those who had a technical grasp of what was happening. They conducted work they deemed to be scientific, but which was underpinned by ideas, suggestions and hypotheses that were bizarre and incompetent. ... Inevitably the CBW programme achieved little of value or of common good. Enveloped as it was by secrecy, threats and fear, opportunism, financial mismanagement, incompetence, self-aggrandisement, together with a breakdown in the normal methods of scientific discourse, the results were paltry. Tens, even hundreds, of millions of rands were squandered on ideas that had no scientific validity. At best, the programme succeeded in producing for manufacture analogues of CR and BZ incapacitants, and in making local arrangements for protective clothing for troops against mass chemical and biological attack. At worst, the programme had criminal intent."

The findings of this part of the report single out for particular comment the nominal head of the programme, Surgeon General D P Knobel. One of the things it says of him is that he "advised the Minister of Defence, on 7 January 1993, that South Africa should conceal from the Chemical Weapons Convention that the country possessed NGT (a new generation of tear gas related closely to CR), recommending that South Africa should proceed with the research and development of NGT in a covert manner while at the same time concealing it." {TRC final report as posted at [www.truth.org.za](http://www.truth.org.za)}

**30 October** From Hanoi, findings are released from a preliminary assessment of environmental impacts related to the spraying of Agent Orange during the Vietnam War [see 9 Jun]. Done by Hatfield Consultants Ltd of Canada in co-operation with the Vietnamese 10-80 Committee — the National Committee for the Investigation of the Consequences of the Chemicals

Used during the Viet Nam War — the five-year investigation has combined satellite assessment with field studies, including much sampling and analysis, and is portrayed as one of the most comprehensive studies ever done on Agent Orange. {*Los Angeles Times* 31 Oct} It has focused on one of the many heavily sprayed areas of the country: the Aluoi valley 65 km west of Hue, near the border with Laos. The study reports high levels of dioxin in pond sediment, in fish and animal tissue, and in the blood of local inhabitants born after the war. Its overview {[www.hatfieldgroup.com/reports/614overview.htm](http://www.hatfieldgroup.com/reports/614overview.htm)} observes: "The detection of dioxin in the younger generation provides evidence that the valley environment remains contaminated and dioxin is presently moving through the food chain into humans". Also: "Soil dioxin contamination levels in A So commune if they occurred in a western jurisdiction would probably result in the area being declared a 'contaminated site'. Fish dioxin levels would trigger a consumption advisory process (i.e., recommendations on maximum human consumption levels) and possibly prohibitions against consumption if they were from a location in Canada."

The teratogenicity and carcinogenicity of dioxin are addressed thus: "The ultimate receptacle for dioxin moving through the local environment near A So in the Aluoi Valley is human beings. In this isolated valley both the older and younger generation have significant levels of dioxin in their blood relative to data from northern Viet Nam where agent Orange was not applied. Deformities, early cancers, and other medical conditions have been noted in the valley. Vietnamese health studies have indicated that birth defects are an order of magnitude higher in the A So area than similar areas of unsprayed northern Viet Nam. A thorough multinational epidemiological investigation is required before defensible conclusions regarding the relationship between dioxin exposure and human health problems can be made."

**30 October** President Clinton announces that he is making emergency funds available to the Department of Health and Human Services of which \$139 million is to prepare for and manage the response to the medical and public health consequences of a chemical-biological weapons incident [see 8 Jun]. The funds are provided by the 1999 Omnibus Appropriations Act [see 19 Oct]. Of the \$139 million, \$127 million are to be used by the Centers for Disease Control and Prevention to establish a civilian pharmaceutical stockpile and to improve public health surveillance, communications, epidemiologic capabilities and laboratory capacity to respond to chemical-biological weapons incidents. {White House release 30 Oct}

**31 October** In Iraq, a joint meeting of the Revolutionary Command Council [see 14 Sep] and the leadership of the Baath Party chaired by President Saddam Hussein decides, according to a government statement, "to halt all kinds of dealings with the [UN] Special Commission and its chief and stop all their activities inside Iraq, including the monitoring, starting from today". IAEA monitoring activities are exempted, however, so long as they are independent of UNSCOM. This announcement comes just after the UN Security Council has finally stated to the Secretary-General its agreed terms of reference for the projected comprehensive review of Iraq's compliance with UN resolutions [see 13 Oct] — a statement which contains no guarantee of what Iraq had been demanding, namely that the review would lead to a lifting of sanctions. {AP from Baghdad 31 Oct, *USIS Washington File* 2 Nov} The Security Council immediately issues a condemnation of Iraq, and both the British and the US government are evidently contemplating military action.



**31 October** President Clinton signs into US public law the Iraq Liberation Act of 1998 [see 29 Sep]. {*USIS Washington File 2 Nov*}

**1 November** In the United Kingdom, large-area BW defence trials during 1957–63 involving simulated BW agent sprayed from aircraft traversing the country are reported in the *Sunday Telegraph*, which is quoting hitherto withheld Defence Ministry information released to Liberal Democrat environment spokesman Matthew Taylor. In contrast to the *S. marcescans*, *B. globigii* and *E. coli* used in the later South Coast BW trials [see 22 May], the simulant in these ones was a fluorescent chemical, zinc cadmium sulphide, in fine-powder form. Reports from the trials have been released in the Public Record Office. {*London Sunday Telegraph 1 Nov*, *Western Morning News 2 Nov*, *Western Mail 6 Nov*}

**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, "diplomatic 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* after a six-month investigation based on interviews with Richard Albanese, a civilian doctor at Brooks Air Force Base. Dr Albanese had been one of the four scientists who originally designed the study, which he had headed until 1984. The study [see 29 Mar 91] had begun in 1978 and is due to end in 2006; it is monitoring the health of about a thousand Ranch Hand veterans and a similarly sized control group of Air Force personnel not associated with the operation. Dr Albanese is quoted as saying that the study has been manipulated to downplay the health problems of Vietnam veterans. Senate Minority Leader Tom Daschle announces that he will be seeking a \$2-4 million Congressional appropriation for independent research into the matter, possibly in the form of help for the Air Force study from the National Academy of Sciences {*San Diego Union-Tribune 19 Nov*}.

**2 November** The OPCW Technical Secretariat states that 82 of the 119 member states have now provided information, as required under CWC Art VII.4, on their National Authorities. {*OPCW Synthesis Nov*}

**2 November** The US Army Project Manager for Non-Stockpile Chemical Materiel, Col Edmund Libby, announces that more than 142,000 of the country's 201,728 M687 155mm binary chemical munitions have now been demilitarized through recycling. The munitions are held, at Umatilla and Tooele, with uploaded M21 canisters of OPA. Their demilitarization, which began in November 1997, takes place at Hawthorne Army Depot, Nevada. The M20 canisters of DF that would complete the munitions are held separately at Pine Bluff Arsenal, and will be destroyed in due course. {*PR Newswire 2 Nov*}

**4 November** In New York, a US federal grand jury issues an indictment against Usama bin Ladin [see 20 Aug] alleging that he and others engaged in a long-term conspiracy to attack US facilities overseas and to kill Americans. The 238-count indictment states that at "various times from at least as early as 1993 Usama Bin Laden and others known and unknown, made efforts to produce chemical weapons". {*Washington Post 5 Nov*, *USIS Washington File 6 Nov*}

**5 November** The OPCW Technical Secretariat issues a review of the status of analytical support for OPCW verification activities. This informs member states that "the use of sampling and analysis as an effective and independent OPCW inspection tool has yet to be realised". This, it says, is because of "an unfortunate combination of several factors", which it lists as follows: "the limitations built into the technical specifications of on-site analytical equipment to protect confidential business information not related to compliance with the Convention ('blinding'); the small number of analytical reference spectra approved for inclusion in the Central OPCW Analytical Database ...[in fact spectra for only a very small fraction of the chemicals covered by the Schedules]; the unwillingness of some Member States to accept the inclusion into that database of reference spectra for chemicals other than scheduled chemicals and their derivatives; uncertainty about whether it would actually be possible to transport samples collected by inspection teams by means of commercial aircraft; the very limited availability of sound alternatives to chemical on-site analysis in the form of suitable NDE equipment; the problems associated with the use of analytical equipment belonging to the inspected State Party as an alternative to analysis conducted by the inspection team on site or by designated laboratories off site; the emerging tendency in some States Parties to perform analysis themselves, without validation; and, in relation to the United States of America, a reservation prohibiting the removal of samples from its territory". The Secretariat paper doubts whether "the drafters of the Convention would have envisaged the emergence of such a situation". It sets out detailed recommendations for retrieving the situation. {*OPCW S/81/98\**}

**5 November** In Washington, the Office of the Special Assistant to the Deputy Secretary of Defense for Gulf War Illnesses [see 4 Aug] issues two new reports. One is an environmental exposure report on the smoke from burning oil-wells to which US troops were exposed. The findings from this investigation and the associated literature-review by the Rand Corporation indicate that the levels of toxicant in the smoke were not high enough to cause short or long term health effects. {*DefenseLink and GulfLink from Washington 5 Nov*}

The second report is a case narrative assessing the 18 incidents during the Gulf War in which chemical alerts were recorded by the 11th Marines, an artillery regiment. The report concludes that, in each case, it was "unlikely" that chemical agent had in fact been present. Dr Bernard Rostker, the Special Assistant (now nominated as Under Secretary of the Army), says: "In retrospect, it is clear that fallout from the oil well fires could affect detection equipment and could have caused many of the chemical alerts recorded by the 11th Marines". {*DoD news release 5 Nov*}

**6 November** The US Department of Energy is considering building at least three biological facilities for analysis of possible BW-agent samples, including rapid identification of any pathogens they may contain. The facilities would contribute to federal anti-terrorist effort, which the Congress is now funding at a rate of about \$3 billion per year. They would be built to

Biosafety Level 3 containment standards at Los Alamos, Lawrence Livermore and Oak Ridge National Laboratories. The Los Alamos facility would be directed by molecular biologist Paul Jackson, whose DNA analyses of samples containing dead anthrax bacteria have attracted widespread notice [see 3 Feb]. {*Albuquerque Journal* 6 Nov}

**10 November** The US Central Intelligence Agency reaffirms the assessment of Iraqi capability in weapons of mass destruction (WMD) it had made in a 24 July written response to questions from the Senate Intelligence Committee [see 14 Sep]. The CIA response had included the following: "On the basis of remaining gaps and inconsistencies in Iraqi declarations to the UN, we assess Iraq could retain a small force of Scud-type missiles, a small stockpile of chemical and biological munitions, and the capability to quickly resurrect WMD production absent UN sanctions and UNSCOM and IAEA monitoring. ... Absent inspections, Baghdad could restart limited production of the blister agent mustard within a few weeks, full scale production of sarin within a few months, and pre Gulf War production levels — including VX — within two to three years. ... Iraq is capable of restarting BW agent production virtually overnight at facilities that currently produce legitimate items, such as vaccines. ... If sanctions were lifted and inspections ceased, Iraq could resume production of Scud-type missiles perhaps within one year." {AFP from Washington 10 Nov}

**10 November** In Washington, a seminar on *New Evidence on the Allegations of the Use of Biological Warfare during the Korean War* is sponsored by the Woodrow Wilson Center Cold War International History Project {*US News & World Report* 16 Nov, AP from Washington 16 Nov}. The presenters are Milton Leitenberg, who describes how recently discovered documents of the Politburo of the USSR Communist Party dating from 1952-53 show the BW allegations to be contrived and fraudulent [see also 8 Jan], and Kathryn Weathersby, who considers the documents in the context of relations at the highest levels between Moscow and Beijing and of the post-Stalin struggle for power in Moscow. They caution that the record displayed by the documents — which comprise a fragment of a 21 February 1952 message, and 11 documents from the 50-day period commencing 13 April 1953 — is far from a complete history of the events. Although in their view the papers show the entire episode of germ-warfare allegation to be false, they say that more evidence is needed if the actual roles of the conspiring parties are to be established.

**10 November** In Panama, the Ministry of Health and US Army-South initiate a joint seminar programme to train Panamanian citizens living in communities adjacent to former US military training areas in how to deal with accidental discovery of live ordnance. Under the 1977 Panama Canal treaty governing US handover of the canal, the US had undertaken to clear unexploded ordnance from areas it had occupied, insofar as that was "practicable". The US has decided that, for 3171 hectares, it is not practicable. {DoD release 10 Nov} Abandoned chemical weapons are present [see 31 Jul]. The Panamanian Foreign Ministry states that 21 Panamanians have been killed by unexploded ordnance, and 200 injured, over the past two decades {NPR 22 Nov}. *La Prensa*, in its issue of 24 September, had quoted the Panamanian co-director of the joint clean-up task force, Fernando Manfredo, as follows: "It is unacceptable for us that they leave without removing threats to life, health and human security". A US official in Panama City, who had asked not to be identified, was then quoted thus: "Panama's complaint about the firing ranges is like someone

receiving a Mercedes and complaining there are ashes in the ashtray". {Reuter from Panama City 25 Sep}

**11 November** From Vienna, IAEA Director-General Mohamed ElBaradei, after consultation with the UN Secretary-General, announces his decision to "temporarily relocate all IAEA inspectors currently in Baghdad to Bahrain due to concern for their safety in view of the escalating situation in Iraq". UNSCOM Executive Chairman Richard Butler is likewise withdrawing UNSCOM personnel. {UN press release 11 Nov} In Israel next day, the army opens 66 distribution centers for civilian antigas kits, even though Defence Ministry Director-General David Ivry says that the "likelihood of an Iraqi attack on Israel is next to zero" {AFP from Jerusalem 12 Nov}. US/UK military preparations for an attack on Iraq [see 31 Oct] now seem far advanced {London *Guardian* 13 Nov}.

**12 November** Indonesia deposits its instrument of ratification of the Chemical Weapons Convention [see 29 Jun]. In 30 days time, it will thereby become the 121st state party to the treaty.

**12 November** From Doha, the foreign ministers of Bahrain, Egypt, Kuwait, Oman, Qatar, Saudi Arabia, Syria and the United Arab Emirates issue a declaration calling on Iraq to comply fully with all UN Security Council resolutions and to reverse its decisions not to cooperate with UNSCOM. {USIS Israel website.}

**12 November** The US General Accounting Office transmits to the Congress its report on the Nunn-Lugar-Domenici Domestic Preparedness Program [see 2 Oct], which it has reviewed in detail. The report recommends ways for improving the focus and efficiency of the programme, noting that opportunity for doing so is still open. This is because the Defense Department is only about one-third of the way through its programme for training 120 US cities in how to respond to terrorist weapons of mass destruction. It is also because, as the report puts it, "the FBI and the intelligence community conclude that conventional weapons will be terrorists' weapons of choice for the next decade". {GAO/NSIAD-99-3}

**12 November** President Clinton extends for another year the national emergency he had originally declared in 1994 with respect to the "unusual and extraordinary threat to the national security, foreign policy, and economy of the United States posed by the proliferation of nuclear, biological, and chemical weapons ... and the means of delivering such weapons". He also transmits to the Congress a formal report on measures taken by his administration over the past to respond to the threat. Here he notes that the Chemical Weapons Convention includes a provision "specifically designed to penalize in a concrete way countries that refuse to join the rest of the world in eliminating the threat of chemical weapons", continuing: "We anticipate rapid promulgation of US regulations implementing these CWC trade restrictions." {*USIS Washington File* 12 Nov}

**13 November** President Yeltsin sends a message to President Clinton in which he states that Moscow firmly supports "acceleration of work on the Protocol meant to strengthen the 1972 Convention on [the] Prohibition of Biological Weapons" [see also 2 Sep]. {ITAR-TASS from Moscow 13 Nov}

**14 November** Iraq declares its willingness to resume coöperation with UNSCOM. This is conveyed by letter from Deputy Prime Minister Tariq Aziz to UN Secretary-General Kofi Annan, and subsequently clarified in a letter from Iraqi UN am-

bassador Nizar Hamdoun to Security Council president Peter Burleigh. Britain and the United States recall their strike forces [see 11 Nov Vienna] which, it subsequently transpires, had already been ordered into action against Iraq. {London *Observer* 15 Nov}

The members of the Security Council next day issue a consensus press statement in which they note that this Iraqi declaration “constitutes a rescinding of the decisions of 5 August and 31 October, and that Iraq’s cooperation with the Special Commission and the IAEA will allow the return of inspectors to resume all their activities on an immediate, unconditional and unrestricted basis, in accordance with the relevant resolutions and with the MOU of 23 February 1998”. The statement also says: “Council members reaffirmed their readiness to proceed with a comprehensive review, once the Secretary-General has confirmed, on the basis of reports from the Special Commission and the IAEA, that Iraq has returned to full cooperation, on the basis of resolution 1194 (1998) [see 9 Sep] and the Council President’s letter of 30 October to the Secretary-General [see 31 Oct]”. {AFP from the UN 15 Nov}

British and US leaders then issue statements indicating that their forces would remain on alert until the compliance of Iraq with its undertakings was assured, and that they would strike without warning if the undertakings were broken. {AP from Washington 15 Nov, London *Financial Times* and *Daily Telegraph* 16 Nov, DoD News Briefing 16 Nov}

**16 November** OPCW Director-General José Bustani announces the seven laboratories which, on the basis of the criteria approved by the Conference, he has decided to designate for the analysis of authentic samples as part of the OPCW verification regime. Besides the Finnish Institute for Verification of the Chemical Weapons Convention, they comprise CW defence laboratories in China, the Netherlands, South Korea, Sweden, Switzerland and the United States. {OPCW S/84/98}

**16 November** The US representative to the OPCW, Ambassador Ralph Earle, speaks about US implementation of the CWC in a statement to the Conference of the States Parties, warning that submission of the US industry declarations “cannot happen overnight”: “There are mandatory legal requirements that must be met. For example, we must allow 30 days for public comment on proposed domestic regulations that implement CWC requirements. In addition, there is a Congressional review period after the regulations are in final form. After that, industry will need a period of time to submit its data. This burdensome and time-consuming process could only be initiated after enactment of the legislation [see 19 Oct]. Nevertheless, the United States administration is continuing to seek various ways to accelerate this process, and we are committed to fulfilling our reporting obligation as promptly as possible.”

Ambassador Earle continues: “I would be remiss if I did not also address criticism that has been leveled at our implementing legislation, regarding sample analysis, the national security exception and concentration declaration thresholds for certain commercial chemicals. With regard to sample analysis, the United States is consulting with other states parties and the Technical Secretariat on an approach for off-site, in-country analysis that will ensure analytical integrity and be fully compatible with CWC obligations. As domestic legislation, the national security exception does not, in itself, have any international legal effect. The United States is confident that in practice this provision will not lead to circumstances in which member states would find the US in noncompliance. Finally, we believe the legislation’s eighty percent declaration threshold for concentra-

tions of certain chemicals will not fundamentally affect the verification regime.” {Text from US delegation}

**16–18 November** In California, the Hoover Institution on War, Revolution and Peace at Stanford University convenes a conference on chemical and biological weapons. Participating are more than a hundred specialists from the Departments of Justice and State, the CIA and universities around the country. The theme is that the CBW threat is increasing and is now menacing the shores and heartland of the United States; new ways of responding must be found. {*San Francisco Chronicle* 18 Nov, *USIS Washington File* 20 Nov}

**16–20 November** In The Hague, the Conference of the States Parties to the Chemical Weapons Convention reconvenes [see 1–5 Dec 97] for its third session. [For further details, see *Progress in The Hague*, above.]

**17 November** Iranian Foreign Ministry Director General Mohammad Alborzi, addressing the Conference of the States Parties to the Chemical Weapons Convention [see 16–20 Nov], speaks of his country’s declarations under the Convention, submitted today, which “include information concerning capabilities that were developed during the last years of the war”:

“Faced at the time with continued and expanding use of chemical weapons against our soldiers and civilians alike, and persistent muteness and inaction on the part of the United Nations Security Council, Iran was left with no alternative but to seek an effective means of deterrence in the hope that it could halt or at least limit the barrage of these barbarous weapons on its people. This particularly became an absolute necessity when threats were made of chemical bombardment of the cities in the final stages of the conflict, and some indeed were carried out against civilian centers [see 28–29 Jun 87 and 18 Mar 88] as reported by United Nations investigating missions.

“In this context, the decision was made that, on a strictly limited scale, capability should be developed to challenge the imminent threat particularly against the civilian populated centers. We declared, at the time, that Iran had chemical weapons capability [see 30 Dec 87], while maintaining the policy not to resort to these weapons and rely on diplomacy as the sole mechanism to stop their use by its adversary. The war ended soon after. Following the establishment of cease fire, the decision to develop chemical weapons capabilities was reversed and the process was terminated. It was reiterated consequently that Iran would not seek or produce chemical weapons and would accelerate its efforts to ensure early conclusion of a comprehensive and total ban under the CWC. This has continued to be my government’s policy ever since.” {Text from Iranian delegation}

**17 November** The OPCW Director-General issues a revision of his Note of 11 June [q.v.] on the matter of compliance with CWC Article VII {C-III/DG.1/Rev.1}. Also issued by the Technical Secretariat is a survey of national implementing legislation, prepared by the Office of the Legal Adviser {OPCW S/85/98}. As of 11 November, only 40 of the 119 states parties were in compliance with CWC Article VII.5, requiring states parties to inform the OPCW of the legislative and administrative measures they have taken to implement the Convention. Of these measures, according to the revised Note, only those of 26 states parties appear to be comprehensive enough for the state party to be able to implement the Convention effectively in its jurisdiction. In only 18 has the requisite penal legislation been extended to nationals extraterritorially, as required by Article VII.1(c). In fact the survey identifies only 17 such states parties: Australia,

Belarus, France, Germany, Ireland, Italy, Lithuania, Luxembourg, Malta, the Netherlands, New Zealand, Romania, South Africa, Sweden, Switzerland, the UK and the USA.

**17–20 November** In Maryland, at Aberdeen Proving Ground, US Army Edgewood Research, Development & Engineering Center hosts the annual *Scientific Conference on Chemical and Biological Defense Research*.

**18 November** In Iraq, UNSCOM has reopened its offices and is today resuming its on-going monitoring operations. Executive Chairman Richard Butler, asked the day previously on US television about what he thought might have been happening while the monitoring had been halted, had said: “Well, we know that they moved some machines and dual-purpose equipment that could be used for making biological or chemical substances, some machines in the missile area. I’m not accusing them here now in public of doing bad things with that, because we weren’t able to see. We weren’t there. But we did have a certain awareness, and it’s fact, that they moved equipment.” Asked what would now happen if Iraq did not hand over the documents UNSCOM had requested and was today once more formally requesting, Ambassador Butler had replied: “Well, I believe that would constitute evidence of lack of cooperation; the promise that was made on Sunday night after nine, ten hours on the weekend in the Security Council, after planes were brought back not many minutes away from their targets [see 14 Nov]. Iraq promised full cooperation. Documents — the production of the documents we need would be the first good instance of giving that cooperation. Failure — I guess I’d have to tell the Security Council what happened and that this didn’t seem to me to be cooperation.” {*USIS Washington File* 17 Nov} This he repeats in another interview, during which he is also asked when he expects the next stage towards the lifting of sanctions to be reached, namely Security Council initiation of the projected “comprehensive review”. He responds: “I do not know, but the process will not need many months. Iraq spoke of a period not exceeding seven days, but this is a very short period. Whereas the United States spoke of a six to eight week period. The process could take that much time or less, but what is certain is that, if Iraq cooperates in all spheres, I will immediately go to the Secretary-General to tell him that I am satisfied. He will just have to inform the Council, and matters will proceed from there.” {*London Al-Sharq al-Awsat* 19 Nov in FBIS-NES 19 Nov}

**18 November** Sudan, by letter to the president of the UN Security Council, renews its request that a mission of investigation be dispatched to investigate the El-Shifa pharmaceutical plant [see 16 Oct] {*Reuter from the UN* 18 Nov}. A revised draft resolution on the issue is submitted to the Council {*Hansard (Commons)* 30 Nov}.

**18 November** The UK Defence Ministry, asked in Parliament whether short-term exposure to Agent CR can harm human health in the long term [see 17 Feb], responds: “Biomedical studies conducted at ... Porton Down, and elsewhere, show CR to be a potent sensory irritant with a relatively low toxicity. It has no organ-specific toxicity. CR does not appear to accumulate following short term exposure and it is apparently devoid of long term or chronic toxic effects.” {*Hansard (Commons)* written answers 18 Nov} The Home Office reaffirms [see 25 Mar] to Parliament that CR is not issued to police forces in the United Kingdom. {*Hansard (Commons)* written answers 19 Nov}

**18–19 November** In Washington, the Kurdish Institute convenes a seminar bringing together more than a hundred medical and other experts, Kurdish ones among them, to initiate a project that may bring aid to those in Halabjah who are still suffering from the Iraqi CW attacks a decade ago [see 29 Jul and 29 Sep]. The meeting has been funded by a \$35,000 grant from the US State Department, reportedly a first step in a \$2 million project which, if Congress approves, the US administration will support to study the long-term health effects of chemical warfare in northern Iraq and to gather information for pursuing war crimes charges against President Saddam Hussein. Among the seminar participants is Professor Christine Gosden [see 22–23 Apr] of Liverpool University in the UK, who is promoting a collaborative programme of study involving universities in the northern Iraqi towns of Dohuk, Salaheddin and Sulaymaniyah. She later tells reporters: “We are talking about emergency help 10 years after the attack”. Another participant is Ehsan Ali Abdulaziz, spokesman for the Islamic Movement in Kurdistan, which effectively controls Halabjah: “I would make one point: we are not ready to turn Halabja into a laboratory without also helping the people. Without committing to long-term humanitarian aid, no-one is going to get security from us.” {*UPI from Washington* 18 Nov, *Reuter from Washington* 20 Nov}

**19 November** Human Rights Watch releases the results of its two-year investigation of the allegation that Agent BZ, a psychochemical, had been fired against Bosniaks fleeing Srebrenica during the Bosnian War [see 1 May]. HRW says that its report {posted at [www.hrw.org/hrw/reports98/bosniacw](http://www.hrw.org/hrw/reports98/bosniacw)} does not present conclusive proof substantiating the allegations, but its investigation had nevertheless found much suggestive evidence. HRW therefore calls for “a broader international investigation of the allegations in order to bring justice to the victims, strengthen international controls over the proliferation of chemical weapons, and prevent a dangerous arms race in the former Yugoslavia”. HRW presents its report to the International Criminal Tribunal for the former Yugoslavia in The Hague, whose prosecutors are reportedly considering whether to continue the investigation. {*Human Rights Watch news release* 19 Nov, *AFP from The Hague* 19 Nov, *Reuter from Amsterdam* 19 Nov, *BBC News* 19 Nov}

A former chemical officer in the Yugoslav National Army, Mujo Alic, subsequently states on Netherlands television that BZ was used, not only in Srebrenica, but also in Zena [*sic*], another Muslim enclave in Bosnia. {*Brussels De Morgen* 20 Nov in FBIS-EEU 20 Nov}

**19 November** The UK Ministry of Defence tells Parliament that it has now completed its review of CS gas holdings [see 17 Feb], and that this “has confirmed a continuing requirement for CS gas as part of a generic, non-lethal weapon capability for operational deployments, and for use in NBC training”. {*Hansard (Commons)* written answer 19 Nov}

**19–20 November** Washington, the US Presidential Special Oversight Board for the Department of Defense Investigations of Gulf War Chemical and Biological Incidents [see 24 Feb] conducts its first public hearings. They are occasion for veterans service organization, individual veterans and other interested persons to express their views on the Defense Department investigations and to draw attention to specific areas of concern. {*AP from Washington* 19 and 20 Nov}

**20 November** OraVax Incorporated officers write in *Science* {282:1423} about attitudes of industry towards the Biological

Weapons Convention and the present negotiation to strengthen it. Their Cambridge, Massachusetts, company produces biopharmaceuticals. The Vice President for Research and Medical Affairs, Thomas Monath, and Chief Executive Officer Lance Gordon conclude: "It is the time for US industry to take the moral high ground and to focus collective wisdom and creativity to bring about a resolution of the issues surrounding on-site activities and the compliance protocol. The fundamental starting place is the recognition of the importance of strengthening the BTWC and the positive results that would ensue, not on hypothetical and unlikely outcomes of a compliance regime. Leaders in the US biopharmaceutical industry need to rally behind the objectives of a strengthened treaty. Only then can the operational details be resolved."

**20 November** The US General Accounting Office transmits to the Congress its report on FBI use of federal funds over the past four years for counterterrorism and related activities. The report estimates that the FBI more than doubled its allocation of resources for combating terrorism, from about \$256 million in FY 1995 to \$581 million in FY 1998. The Congress had directed or provided guidance to the FBI on the use of about a quarter of that funding, which, so the GAO now reports, the FBI had "generally followed". {GAO/NSIAD-99-7}

**20 November** At the US National Academy of Sciences there is a workshop on *Assessment of Future Needs for Live Variola Virus* in which US and Russian scientists participate. The US government is preparing for the June 1999 meeting of the World Health Assembly at which a final decision will be taken on the destruction of the two official stocks of smallpox virus remaining in the world [see 2 Feb]. The Departments of Defense, Energy and Health have commissioned the Institute of Medicine to assess the scientific need for the virus. This workshop is to enable information-gathering by the committee which the Institute's Board on International Health has accordingly established.

**22 November** Iraqi Deputy Prime Minister Tariq Aziz, in an 18-page letter to the president of the UN Security Council, states that Iraq will not be providing the documents which UNSCOM Executive Chairman Richard Butler had requested — in three letters dated 17, 18 and 19 November — because "we have no choice but to doubt the motives of the requests made to us". An earlier letter to Ambassador Butler from Iraqi Foreign Ministry Under Secretary Riyadh al-Qaysi had said that the requested documents either did not exist or were irrelevant. The full Security Council meets two days later and is briefed by Ambassador Butler, but Russia, reportedly alone, blocks its adoption of a statement demanding the documents; the statement instead says that "Council members expressed their continued full support for UNSCOM in fulfilment of its mandate". {*Washington Post* 25 Nov, Reuter from the UN 25 Nov, London *Financial Times* and *Independent* 26 Nov}

Among the requested documents is an Iraqi air force logbook containing details of the movement of chemical weapons during the Iraq-Iran war, a part of which had been found by an UNSCOM team earlier in the year but then withheld from it [see 17 Jul]. The London *Independent* {20 Nov} quotes General Wafiq al-Sammarai [see 3 Jul], former head of Iraqi military intelligence, as follows: "The logbook contains details of all operations carried out by the air force and is hand-written for the sake of secrecy. It also documents the use and movement of weapons of mass destruction. ... It shows Iraq used VX in the battle of Fao on 17 and 18 April 1988" he also says that it shows Iraq to have used sarin against Halabja in 1988. On an-

other of the documents denied to UNSCOM, a May 1991 memorandum drawn up by Lt-Gen Hazen Abdel Razaq, Maj-Gen Mustafa Kemal and Lt-Gen Mozahem Saeb al-Tikriti, he is quoted as saying: "It gives exact information about what remained of Iraq's weapons of mass destruction after the Gulf War", including about 100 usable Scud missiles and also warheads containing VX.

**22 November** The London *Sunday Times* reports on the market availability of pathogenic organisms suitable for use in biological weapons. Undercover reporters had posed as middlemen for a medical laboratory in north Africa and approached a sample of 20 of the 450-odd culture collections around the world asking for strains. The newspaper now reports that two organizations had responded positively and apparently without making any checks: an Indonesian institute, which offered mail-order anthrax, plague and *Brucella* bacteria for \$1000, and a Czech institute, which would provide *Clostridium botulinum* for DM 50. The Czech institute strongly rejects the allegation, saying that Czech authorities would have been informed once the order had been confirmed {CTK from Brno 25 Nov}.

**23 November** Libyan leader Muammar Qadhafi, during an address to a visiting Egyptian delegation, states that, in order to create a balance in the region, the Arabs "have the right to possess arms of mass destruction in the face of the fact that these weapons are now indeed in the hands of the Zionists, both chemical, bacteriological and nuclear weapons". {Libyan TV 23 Nov in BBC-SWB 23 Nov}

**23 November** In London, UK Foreign Office Minister Derek Fatchett meets with representatives of 15 Iraqi dissident groups. Afterwards he tells reporters that Britain would support an initiative to establish an international war crimes tribunal for Iraqi President Saddam Hussein: evidence sufficient to prosecute, he says, remains from Iraq's invasion of Kuwait and from its use of chemical weapons against Kurdish rebels [see also 18-19 Nov]. {UPI from London 23 Nov}

**24 November** In the UN General Assembly the Sixth Committee concludes its sessional work, approving among other things, a draft Assembly resolution that would empower the Secretary-General to convene the Preparatory Commission for the Establishment of an International Criminal Court for three sessions in 1999, the first during 16-26 February. {UN press release 24 Nov}

**24 November** In Washington, Senator Lugar describes to reporters his recent nine-day oversight and fact-finding mission to Russia and Ukraine, in which he, Senator Levin, former Senator Nunn and an accompanying team of US Defense Department officials had visited locations of dismantlement operations and proliferation-prevention constructions funded through the Nunn-Lugar Cooperative Threat Reduction Program. One such location was the Obolensk State Research Center of Applied Microbiology [see 7 Nov 97, ca 1 Dec 97 and 3-6 Dec 97] on which Senator Lugar speaks as follows: "Obolensk was the premier biological weapons research and development institute for the bacterial pathogens plague, tularemia and glanders, as well as the world's leading anthrax research institute. Today, through the Nunn-Lugar program, the scientists at Obolensk are cooperating in vaccine research with the United States Army Medical Research Institute for Infectious Disease and the Los Alamos National Laboratory. We were given complete access to the facility. We examined the laboratories on eight floors of the building, various culture facilities, and observed the

Nunn–Lugar pilot projects [see 7 Nov 97]. ... The director of Obolensk pointed out that without support from Moscow or collaborative efforts with the West, he is convinced that institute security will fall to dangerous levels. We discussed Nunn–Lugar plans to develop a system to safeguard and enhance security and access denial for biological weapons materials at Obolensk and to an equally dangerous situation at an institute in eastern Siberia which we call Vector [see 7 Nov 97 and 3–6 Dec 97]. The need for Nunn–Lugar to move into the biological field is clear. We must attempt to prevent proliferation and reduce the loss of trained biological scientists to rogue nations. But we must also increase transparency in these facilities to enhance American military protection and US counter-terrorism capabilities. Our meeting [at ISTC Moscow] with the 13 [biological] institute directors [from across Russia] and our visit to Obolensk were dramatic steps forward in this critical area.” {FNS Transcript 24 Nov}

**26 November** China and Japan issue a joint press communiqué in Tokyo during the state visit of President Jiang Zemin to Japan. In it, “Japan reiterated that it will treat sincerely with the chemical weapons it has left in China, take up responsibilities and take concrete measures as soon as possible to destroy these abandoned chemical weapons” [see also 14–31 Oct]. {Xinhua from Tokyo 26 Nov}

**27 November** In Baghdad, Iraqi Interior Minister Mohammed Zamam Abdel Razzeq and his Sudanese counterpart, Brigadier Abdel Rahim Mohammed Hussein, sign a cooperation agreement on nationality, police and other security matters. {UPI from Baghdad 27 Nov}

**28 November** In Geneva, the Pugwash Study Group on Implementation of the CBW Conventions holds its tenth workshop [see 15–17 May], on *The BWC Protocol Negotiation: Unresolved Issues*. Participating are 33 people from 13 countries (Brazil, China, Germany, India, Iran, Israel, Italy, Japan, Nigeria, Russia, Switzerland, the UK and the USA).

**29 November** US Senator Arlen Specter, speaking on the Fox News talk show, says that the Congress should hold

“closed-door hearings” to examine the evidence which led to the US missile attack on the pharmaceutical plant in Sudan [see 18 Nov]. He says: “I do not believe that the evidence is overwhelming. We ought to be finding the facts.” {AFP from Washington 29 Nov}

**30 November** The UK Defence Ministry temporarily suspends its programme of anthrax immunization of service personnel [see 22 Jun] following delays during the manufacture of new stocks of the vaccine. {*Jane’s Defence Weekly* 11 Nov}

**30 November** In New York, UN officials state that Iraq has not yet handed over a key document which UNSCOM Executive Chairman Richard Butler had, in a letter three days previously to Iraqi Deputy Prime Minister Tariq Aziz, asked for by this date {AFP from the UN 30 Nov}. The document is the one found by, and then seized from, UNSCOM inspectors in July [see 22 Nov].

Ambassador Butler had also told Minister Aziz, by another letter dated 27 November, that, as he had informed the Security Council during informal consultations on 24 November, he expected “to be in a position to formulate a report in two or three weeks time on whether or not Iraq has returned to full cooperation”. This would be the report to the UN Secretary-General prepared “in accordance with the statement to the press by the President of the Security Council on 15 November” [see 14 Nov]. {S/1998/1127}

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CBW Events *data-base* is compiled from news reports and other open-source documentation furnished to the Sussex Harvard Information Bank by ad hoc correspondents and systematic scanners, including: Joachim Badelt (in Germany), Gordon Burck (in the US), Rob Evans (in the UK), Daniel Feakes (in the Netherlands), Richard Guthrie (in the UK), Milton Leitenberg (in the US), Cairiona McLeish (in the UK), Tony Randle (in the UK), Sandy Ropper (in the US), Jenny Smith (in the US), Jonathan Tucker (in the US), Emmanuelle Tuerlings (in Switzerland), Jean Pascal Zanders (in Sweden), and Elisabetta Zontini (in the UK).

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## Forthcoming events

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The thirteenth session of the BWC Ad Hoc Group will held in Geneva during 4–22 January 1999, with subsequent sessions during 29 March–9 April, 28 June–23 July, 13 September–8 October and 22 November–10 December.

The fourteenth session of the OPCW Executive Council will be held in The Hague on 2–5 February 1999, with subsequent sessions during 26–29 April; 21–24 September; and 30 November–3 December.

A US *National Symposium on Medical and Public Health Response to Bioterrorism* will be held in Arlington,

Virginia, during 16–17 February 1999. Enquiries to Gary Stephenson at Johns Hopkins Medical Institutions on tel \*\*1 410 955 5384, e-mail: gstephenson@jhmi.edu

A regional course for personnel involved in the implementation of the CWC will be hosted in Tehran by the OPCW during 1–9 March 1999. Enquiries about participation to fax \*\*31-70 306 353, e-mail: webmaster@opcw.org.

A Wilton Park conference *The Verification Revolution: Human and Technical Dimensions* will take place at Wiston House, England during 5–7 March

1999. Enquiries to Heather Ingrey, e-mail: heather.ingrey@wiltonpark.org.uk, fax \*\*44-1903 814217.

The Fourth Session of the Conference of the States Parties to the CWC is to be held in The Hague during 28 June–2 July 1999.

The fifth international *Chemical and Biological Medical Treatment Symposium* (CBMTS III) will take place in Spiez, Switzerland, during 11–16 July. Enquiries about participation to Rudolf Portmann, fax \*\*41-33 228 1402, e-mail: rudolf.portmann@x400.gr.admin.ch.

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