

THE CBW CONVENTIONS BULLETIN

News, Background and Comment on Chemical and Biological Weapons Issues

ISSUE NO. 38

DECEMBER 1997

Quarterly Journal of the Harvard Sussex Program on CBW Armament and Arms Limitation

IMPLICATIONS OF THE US RESOLUTION OF RATIFICATION

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Overview

The US Senate approved its resolution of ratification for the Chemical Weapons Convention (CWC) by 74 votes to 26 on 24 April 1997, exceeding by 7 votes the required two-thirds majority. By simple majority, the Senate approved 28 conditions to the resolution in a single vote ('en bloc') and defeated 5 other conditions in individual votes.

It is axiomatic that compromise was needed to achieve this result. Tradeoffs are often necessary to ensure sufficient support for Senate passage of resolutions of ratification for arms control treaties. Nevertheless, such tradeoffs sometimes run the risk of impairing subsequent implementation. In this connection, some argue that the US conditions will impede full and effective international implementation of the CWC.

This article describes the conditions to the US Senate's resolution of ratification and addresses some misconceptions. It argues that the conditions to the US resolution do present some operational implementation challenges, but still allow the United States to implement the CWC fully and effectively. Nor will the conditions necessarily encourage others to avoid their CWC commitments, as some suggest. In contrast, if any of the five defeated conditions had instead been approved, the US would have been unable to meet its obligations under the CWC and other countries might have hesitated to implement the Convention fully.

The basis for US implementation is the Convention itself, the Senate's resolution and the US implementing legislation. The United States and other states parties have the opportunity, indeed, the obligation, to promote the Convention's effectiveness through domestic implementation and responsible, active participation in the Organization for the Prohibition of Chemical Weapons (OPCW) in The Hague. To set a high standard for states parties' compliance, the US must devote considerable effort and attention to its own implementation efforts. Without the Senate's conditions, this was already a formidable task. With the conditions, it is still more challenging. However, neither the Convention nor the Senate's conditions pose insuperable obstacles to implementation.

To date, the most serious obstacle to effective implementation of the CWC is the long delay in congressional

approval of US implementing legislation. As a result of this delay, the United States has not yet submitted its industry declarations (required under Article VI), nor has it satisfied the CWC's requirement (under Article VII) to establish "penal" legislation that would make a CWC violation also a violation of US law. In addition, the US does not yet have the benefit of the proposed implementing legislation's additional law enforcement tools against chemical terrorism, nor is industry able to benefit from its protections. Until the US enacts CWC implementing legislation, it will be difficult for the US to persuade others to submit declaration information or meet a high standard for implementation and compliance. Moreover, OPCW Director-General, José Bustani, indicated at the second session of the Conference of the States Parties on 1 December 1997 that those parties which have not submitted complete declarations face additional obstacles in pursuing other Convention activities, such as challenge inspections.

The Conditions

The 28 conditions to the Senate's resolution of ratification center on five substantive themes. These focus on; 1) the Senate's views; 2) reporting, consultation and notification of Congress; 3) financial and resource commitments; 4) implementation tasks; and 5) US safeguards. (Some conditions include more than one theme.) They express the Senate's views on aspects of the CWC or issues the Senate believes have relevance to future actions on other treaties, establish requirements that the Executive Branch keep the Senate informed and notify it of key developments once the CWC is in force, set parameters for financial or resource

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commitments the US makes in connection with the CWC, establish requirements that have an impact on the way the US implements the Convention, and, finally, provide assurances that implementing the CWC will not hamper the US ability to defend itself effectively.

Senate Views

These conditions express the Senate's perspective on matters related directly to the CWC, its implementation and issues relevant to other Senate actions such as future treaty ratifications. They reflect general concerns and interpretive views of the Senate, with particular regard to the Senate's constitutional prerogatives, such as the "power of the purse" and the Senate's right to take reservations to treaties. Although these conditions do not establish specific requirements for action, they serve as important guideposts, especially regarding Executive Branch activities that could give rise to new resource requests or treaty commitments.

Examples of conditions that contain the Senate's views are Conditions 1 (Effect of Article XXII), 12 (Primacy of the US Constitution), 17 (Constitutional Prerogatives), 19 (Effect on Terrorism), 20 (Constitutional Separation of Powers), 21 (On-Site Inspection Agency), 24 (Treaty Interpretation), and 25 (Further Arms Reduction Obligations).

- *Conditions 1 and 17* indicate the Senate's view that it retains the right to take reservations to treaties and that US negotiators should not agree to exclude reservations. (The CWC bars reservations to its Articles.) While the Senate stressed its right to take reservations to international treaties, it chose not to do so in the case of the CWC.
- *Condition 12* states the Senate view that the CWC does not require or authorize any action prohibited by the US Constitution. This view is generally supported by the CWC in Article VII (National Implementation Measures), para 1, which requires each Party to implement the CWC "in accordance with its constitutional processes", and in Part X of the Verification Annex (Challenge Inspection), para 41, which requires parties to allow the greatest degree of access "taking into account any constitutional obligations it may have with regard to proprietary rights or searches and seizures".
- *Condition 19* expresses the Senate's view that the CWC would not have prevented the terrorist use of chemical weapons by the Japanese cult, Aum Shinrikyo. This constitutes a commentary within a broader, ongoing debate regarding the potential use of weapons of mass destruction for terrorist purposes and the applicability of diverse arms control, nonproliferation policy and law enforcement instruments for preventing such use.
- *Condition 20* expresses the Senate's view that the US should not be denied its vote in the Organization for the Prohibition of Chemical Weapons (OPCW) if it is behind in paying its assessment. Article VIII.8 of the CWC requires that a member will lose its vote if its arrears equal or exceed the preceding two-year total of its assessments. However, the other members may allow a member in arrears to vote if they are satisfied the arrears are due to conditions beyond the control of the member. The Senate stressed its constitutional authority to "pay the debts" of the United States and its view that payment

of debts under Article VIII.8 is considered "beyond the control" of the Executive Branch of the US Government.

- *Condition 21* maintains that an agency of the US Government, the On-Site Inspection Agency, should have a role in assisting US facilities that are subject to routine or challenge inspections under the CWC, as long as the facility owner agrees. This reflects a Senate view regarding US efforts to organize existing resources efficiently to host international inspections at a wide array of military and civilian facilities.
- *Condition 24* affirms the Senate's view regarding treaty interpretation, as expressed in Article 1(1) of the Senate's resolution of ratification for the Intermediate-range Nuclear Forces (INF) Treaty, which says that a treaty will be interpreted in accordance with the common understanding of the President and the Senate at the time that the Senate provides its advice and consent. Such interpretations would be based on a combination of the treaty text and authoritative representations from the President or representatives with regard to the meaning or legal effect of the treaty.
- *Condition 25* indicates that the Senate intends to consider treaties which reduce or limit US armed forces in a militarily significant manner, pursuant to Article II, section 2, clause 2 of the US Constitution. In other words, the Senate intends to apply the "advice and consent" process to these treaties, including the requirement for approval by a two-thirds majority. This refers implicitly to other agreements, such as the recently concluded ABM demarcation agreement, which the Senate considers sufficiently significant from a military standpoint to deserve consideration as treaties under the referenced provisions of the US Constitution, although they may not actually "reduce or limit US armed forces."

Reporting, Consultation and Notification

These conditions establish requirements that the Executive Branch keep the Senate informed, notify it of key developments and consult regularly on important issues once the CWC is in force. The net effect of these conditions is to help the Senate keep track of the status of implementation and compliance, as well as key developments that could affect US industry interests. Although, in some cases, these conditions include requirements for further action depending on the substance of a report or notification, they generally reflect the recognition that appropriate policy responses will depend on specific circumstances and consequently stress the importance of close consultation between the Senate and the Executive Branch.

These conditions put special emphasis on the need to maintain and strengthen Australia Group non-proliferation controls, on the need for close consultation with the Senate regarding international compliance with the CWC and on any measures that might be taken in the event US national security interests are threatened by non-compliance. They also stress the need to keep the Senate informed on developments relevant to industry competitiveness, such as possible losses of confidential business information, proposed changes in the Annex on Chemicals, or constraints on emerging commercial activities such as applications of Schedule 1 chemicals for legitimate commercial purposes.

Conditions that include requirements along these lines are 7 (Continuing Vitality of the Australia Group and National Export Controls), 10 (Monitoring and Verification of Compliance), 13 (Noncompliance), 16 (Protection of Confidential Information), and 23 (Additions to the Annex on Chemicals):

- *Condition 7* requires that the President certify prior to deposit of the US instrument of ratification and periodically thereafter that the Australia Group remains viable and its members agree that national export controls should not weaken as a result of the CWC. In the event that the President is unable to provide these certifications, the President must consult with the Senate regarding continued adherence to the Convention. This condition sends a strong signal regarding the importance to the Senate of the continued strength and viability of the Australia Group and the priority the Senate attaches to its contribution to the fight against the spread of chemical and biological weapons. This condition highlights the Senate's recognition that continuous national efforts are needed to maintain vigorous international enforcement of nonproliferation policies and that other nations must also actively sustain these efforts.
- *Condition 9* establishes a requirement for an annual report certifying that US chemical, biotechnology and pharmaceutical firms are not being significantly harmed by the CWC's restrictions on access to and production of chemicals and toxins listed in Schedule 1 of the Annex of chemicals. This addresses the Senate's concern that at some point in the future a Schedule 1 chemical or toxin might become commercially useful and that the CWC should not rule out legitimate commercial applications of such chemicals.
- *Condition 10* calls for reporting on the status of compliance by other countries with the CWC, on any determination of noncompliance reached by the President, on any specific compliance issues the United States plans to raise in the OPCW or which are raised by others in the OPCW and on measures the US has taken or is taking to redress noncompliance. In addition, this condition requires detailed annual country reports regarding chemical weapons developments, the extent of relevant trade in chemicals, a description of US monitoring efforts associated with the CWC and relevant chemical weapons activities being undertaken by subnational groups, including terrorists and paramilitary organizations.
- *Condition 13* requires that if the President determines that a state party is in violation of the CWC so as to threaten the national security interests of the USA, the President must consult with and report to the Senate, seek a challenge inspection and take other actions to redress the violation. If the violation persists for longer than a year, the President must consult with the Senate regarding continued US adherence to the Convention.
- *Condition 16* requires notification of the Senate if an OPCW employee has disclosed confidential business information and certification to the Senate that the OPCW Director General has waived the employee's immunity from jurisdiction. If the employee's immunity is not waived, the condition requires that 50 per cent of the US assessment be withheld until the President can make the

necessary certification or until the situation has been resolved in a manner satisfactory to the US person or corporation that has suffered the damages.

- *Condition 23* mandates that the President must notify the Senate when additions are proposed to a Schedule of the Annex on Chemicals, report on the impact of the proposed changes and consult with the Senate as to whether the US should object to the proposed addition.

Financial and Resource Commitments

These conditions establish limits or guidelines for commitments by the US related to implementation of the Convention. Overall, they stress the need to limit US contributions to the Organization, to emphasize burden-sharing with other members, to protect US intelligence resources and to maintain good management practices within the Technical Secretariat of the OPCW that prevent waste, fraud and abuse.

Reflecting a strong congressional predisposition to limit US commitments to the United Nations and other international organizations, to improve management and operational effectiveness of these organizations and to spur burden-sharing, these Senate conditions set strict constraints. They require that Congress approve financial payments associated with CWC implementation, that a cost-sharing arrangement is required before the US can go ahead with verification research and development (or share the products of such research with the OPCW), that the annual US contribution to the regular OPCW budget will be limited to \$25 million (adjusted periodically for inflation) and that the US not offer assistance for Russian CW destruction in exchange for Russian ratification of the CWC.

Reinforcing strongly held US views regarding effective management of international organizations, the US Senate put a high priority on establishing an internal oversight office. With regard to non-financial resources, the Senate emphasized constraints on provision of defensive assistance, (such as equipment), to a state party, wherever the recipient is already barred from receiving such aid under the Foreign Assistance Act of 1961. Nevertheless, the Senate condition would permit the US to provide antidotes or medical treatment to such countries in fulfillment of its obligation under Article X of the CWC. Finally, these conditions stress requirements and protections that would help avert damage to US intelligence resources that might result from sharing intelligence information with the OPCW.

The conditions that establish requirements along these lines are: 2 (Financial Contributions), 3 (Establishment of an Internal Oversight Office), 4 (Cost Sharing Arrangements), 5 (Intelligence Sharing and Safeguards), 14 (Financing Russian Implementation), 15 (Assistance Under Article X), and 22 (Limitation on the Scale of Assessment):

- *Condition 2* requires that payments or assistance to the OPCW be provided only through statutory authorization or appropriation. Such payments include costs for verification of storage and destruction (Article IV.16), costs of verification for chemical weapons production facilities (Article V.19), financial contributions to the regular budget (Article VIII.7) and any other costs, such as those relating to a challenge inspection (Article IX.23) assistance for protection against chemical weapons (Ar-

article X) or any other provision of the Convention. This reflects established budget authorities of the Congress and serves as a cautionary message on potential growth in US financial or resource commitments to the OPCW.

- *Condition 3* requires that the OPCW establish an independent internal oversight office whose obligations include protecting confidential information, as well as conducting management and financial audits, performance evaluations and laboratory assessments. The condition also requires that the US make its first year assessment payment, notwithstanding the requirement to withhold 50 per cent if the President does not certify that the office has been established. This reflects the Senate view that the OPCW needs to maintain high standards of management, financial, personnel and technical practices in order to operate effectively and to protect the interests of the members.
- *Condition 4* requires that the US and OPCW must conclude a cost-sharing arrangement before the US undertakes research or development expenditures related to improvement of OPCW verification (e.g., research and development on training, equipment, or on-site sample analysis techniques) or shares the product of any such previous R&D. The condition stresses the Senate's view that others should contribute as well to improvements in the OPCW's verification capabilities.
- *Condition 5* articulates the requirements that US intelligence information may not be provided to the OPCW unless the President certifies that procedures for its protection have been established, it is devoid of information that would betray intelligence sources and methods, the OPCW staff is capable of protecting it and its loss would result in no more than minor damage to US national security. However, a waiver may be made by the Director of Central Intelligence (DCI) if the DCI certifies in writing to the appropriate Congressional committees that it is in the vital national security interests of the US to provide such information to the OPCW or an affiliated organization. In each instance where such information is provided, the DCI must inform the appropriate Congressional committees in writing.
- *Condition 14* indicates that the US would not provide guarantees to pay for Russian implementation as a condition for Russian ratification of the CWC. Russia has now ratified and deposited its instrument of ratification, declaring its strong commitment to provide funds for implementation. In so doing, Russia has already begun to satisfy the concern expressed in this condition, which stresses that Russian resources need to play a major role in ensuring full and effective implementation of the CWC in Russia. In addition, Russian ratification clears the way for discussions regarding additional international assistance that would complement Russia's own implementation efforts.
- *Condition 15* requires Presidential certification that the US would not make a contribution to the CWC's Voluntary Fund for Assistance and protection against chemical weapons, leaving the US free to provide assistance under Article X, (e.g., in the form of protective equipment, medical antidotes, medical treatment or advice). Further, where member states are barred from receiving

aid under the Foreign Assistance Act of 1961, they may be given assistance only in the form of antidotes or medical treatment.

- *Condition 22* limits the total annual US contribution to the budget of the OPCW to US\$25 million, adjusted every three years for inflation. However, additional contributions may be made if approved by Congress, and for the first ten years, the US may make additional contributions to cover the costs of verification under Articles IV and V.

CWC Implementation Tasks

These conditions establish requirements that have an impact on the way the US implements the Convention. Although this group of conditions does pose a challenge for US and international implementation of the CWC, they also serve to underscore Senate concerns regarding their own constitutional prerogatives and constitutional protections for US citizens and businesses, as well as protection of US industry interests. As it turns out, however, even Condition 18, which has attracted widespread criticism, can be implemented in accordance with the CWC, as illustrated below. This will require some adjustment in the OPCW's approach to sample analysis, but does not, as some have argued, prevent effective implementation of CWC requirements regarding analysis of samples taken during inspections, nor will it allow other countries to evade effective sample analysis.

Examples of these conditions are Conditions 6 (Amendments to the Convention), 18 (Laboratory Sample Analysis), and 28 (Constitutional Protections Against Unreasonable Search and Seizure):

- *Condition 6* requires that the United States be present at all Amendment Conferences and that the United States cast a vote on all proposed amendments to the CWC considered at such conferences. In turn, any amendment adopted by an Amendment Conference must be submitted to the Senate for its advice and consent to ratification. Although the CWC merely provides the option of voting on proposed amendments, this condition requires that the United States exercise this option, and provides the Senate the opportunity to exercise its constitutional prerogatives regarding any amendment agreed upon by the states parties.
- *Condition 18* requires that no sample collected in the United States pursuant to the CWC may be transferred for analysis to any laboratory outside the United States. The implication of this controversial condition is that analysis of any sample taken off-site would need to occur at a laboratory within the United States. One consequence of this requirement is that other countries might decide to do the same. Accordingly, to comply with CWC requirements, the OPCW would need to ensure that at least two designated laboratories could be identified within the territory of each state party and that samples could be analyzed at these laboratories by qualified analytical chemists. Although the OPCW had not initially envisioned certifying so many laboratories, this might be accomplished effectively if certification focused primarily on whether each laboratory's analytical equipment met OPCW standards. In the event that per-

sonnel at a certified laboratory were not fully conversant with analytical techniques required for CWC verification, the OPCW might provide trained chemical analysts to do the job. This would ensure that effective sample analysis could be carried out, even, if necessary, under the requirements of Condition 18.

It is important to emphasize that the contingency envisioned in this condition, off-site analysis of samples, is expected to be very rare, mainly because inspected facilities are unlikely to relinquish material that contains sensitive non-chemical weapons information outside the purview of the CWC. The likelihood of off-site analysis would be even further reduced by US (and OPCW) efforts to ensure that samples could be analyzed on-site.

- *Condition 28* requires that in cases where consent to the inspection is withheld by a facility owner, a criminal search warrant must be obtained for a challenge inspection and an administrative warrant must be obtained for a routine inspection. This affirms that US constitutional protections for individuals and businesses will be carefully observed in the process of carrying out CWC-related inspections. In accordance with this condition, a criminal search warrant would need to be obtained based on “probable cause” and would need to be supported by an oath or affirmation from the US National Authority as well as a description of the person or things to be seized.

One theoretical concern is that if an initial challenge inspection request provides too little information to satisfy the US legal test of “probable cause”, it might be difficult for the National Authority to promptly secure a criminal search warrant ensuring that CWC challenge inspection timelines are met. In practice, however, the US, including its chemical industry, has long relied on the CWC’s “managed access” provisions to help protect against potential damage to sensitive national security or confidential business information during a challenge inspection. Managed access allows facility owners a large role in determining how and where to provide access, permitting them to limit their exposure while also facilitating the inspection. These facilities would be able to exercise their constitutional rights and protect sensitive information under managed access provisions. Under these circumstances, they would have little incentive to withhold consent for an inspection and warrants would not likely be needed for inspections of US facilities.

US Safeguards

Traditionally, in the course of treaty ratification, the US Senate considers “safeguards,” designed to establish assurances that implementing a treaty will not hamper the United States’ ability to defend itself effectively and in accordance with the treaty in question. The CWC “safeguards” require a series of reports and activities more directly related to defense than to CWC implementation itself. They concern potential responses to an attack with chemical or biological weapons, improvements to US and allied abilities to equip and prepare for operations in a chemically and biologically contaminated environment, permitted uses of riot control agents and adoption of alternative technologies for destruction of the US CW stockpile. In some cases, these condi-

tions establish parameters for defense policy, while in others, they set in motion a process through which such parameters may be established.

Conditions that reflect these concerns are: 8 (Negative Security Assurances), 9 (Protection of Advanced Biotechnology), 11 (Enhancements to Robust Chemical and Biological Defenses); 26 (Riot Control Agents [RCA]), 27 (Chemical Weapons Destruction):

- *Condition 8* requires that the President provide a classified report to the Congress regarding the results of a detailed review of US policy regarding negative security assurances to non-nuclear weapons states, which would include a determination of the appropriate response to a chemical or biological attack against the US military or civilians, our allies or third parties in light of the fact that the US has now foresworn both chemical and biological weapons.
- *Condition 11* requires that specific steps be taken to enable US forces to operate effectively in regional conflicts despite the threat of use, or use of chemical or biological weapons. The condition also requires consultation with allies and potential regional coalition partners to determine the necessary steps to adequately equip and prepare allied and coalition forces as well as other critical civilians to operate in a chemically and biologically contaminated environment. Although this does not directly relate to implementation of the CWC’s provisions, it is a key safeguard that will require significant financial and resource commitments.
- *Condition 26* requires that the President certify to Congress that the CWC does not restrict the US use of riot control agents (RCAs), including their use against combatants, in three cases: 1) peacetime military operations within an area of ongoing armed conflict when the US is not a party to the conflict (examples are Somalia, Bosnia and Rwanda); 2) peacekeeping operations when the use of force is authorized by the receiving state, including pursuant to Chapter VI of the UN Charter; 3) peacekeeping operations when force is authorized by the Security Council under Chapter VII of the UN Charter. In addition, Executive Order (EO) 11850 of 8 April 1975, which outlines four additional types of permitted RCA use, remains in force. Under EO 11850, the President would authorize each case in which the US armed forces plan to use RCAs. While not a perfect response to concerns that the presence of RCAs near a combat theater could be used as a pretext for illegal chemical weapons acquisition or use, it does establish that RCAs may not be used, as the CWC stipulates, as a method of warfare. That they may be used in other specified circumstances provides some assurance to those concerned that deadly force might have to be used in lieu of RCAs. As research and development work progresses in the United States on non-lethal alternatives to RCAs, options may become available that remove the potential requirement to choose between using RCAs or deadly force.
- *Condition 27* requires that the President certify to Congress that alternative technologies for destruction of US chemical weapons will be explored, that the deadline for completion of destruction of the US stockpile will be 29

April 2007 (in accordance with the CWC), that declaration of a particular destruction technology does not preclude changes in the US approach, and that the President will consult with Congress on whether to request an extension of the destruction deadline, as provided for in the CWC (Part IV(A) of the Annex on Implementation and Verification to the Convention). This refers to aspects of the US chemical weapons destruction program and reflects US efforts to ensure that the US program meets CWC requirements, while also taking into account congressionally mandated requirements regarding safety, economy and the application of emerging destruction technologies.

Conclusion

The most significant challenge to effective implementation arising from the CWC conditions arises from Condition 18. This is primarily due to the fact that the OPCW originally envisioned an approach to sample analysis that required cross-border transport of samples. For the US, this would be precluded by Condition 18, which bans transport of US samples outside US territory. It appears, however, that even this potential obstacle could be overcome by using on-site capabilities or other adequate resources within the borders of states parties that choose to bar transport.

Other conditions require close, careful consultation between the US Executive Branch and the US Senate. For CWC implementation, the message of the Senate resolution

is clear. Implementation requires the exceptionally close attention and strong commitment of the Executive Branch together with the Congress. This is not due to flaws in the CWC or the Senate's resolution. Rather, the CWC breaks new ground, demanding a unique combination of resources and collaborative activities between parts of the Executive Branch and the Congress not accustomed to such collaboration. This need not obstruct effective implementation of the CWC, as long as consultation and cooperation are adequately maintained.

With the CWC in force and US ratification complete, the US now has two-thirds of the sound basis it needs for effective participation in the international fight against the spread of chemical weapons. With Congressional approval of domestic implementing legislation, the conditions for a sound regime will be in place. Next steps for the US must be based on a long-term commitment, grounded in close cooperation between the US legislative and executive branches, to set a high standard for our own and others' compliance, while actively supporting the work of the OPCW.

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Text of Russian Federation Federal Law No 138-FZ On Ratification of the Convention on Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, And On Their Destruction

signed by President Yeltsin on 5 November 1997 [unofficial translation]

Article 1. Ratification of Convention

The Convention on Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction, signed in Paris on 13 January 1993, shall be ratified.

Article 2. Provision for implementation of Convention

1. Fulfillment of the obligations of the Russian Federation stemming from the Convention shall be ensured by the federal agencies of state authority and the agencies of state authority of subjects of the Russian Federation within the limits of their powers and authorities, in accordance with the principles of the present federal law, the federal law *On Destruction of Chemical Weapons*, other federal laws, as well as the federal target programme, *Destruction of Chemical Weapons Stockpiles in the Russian Federation*.
2. Expenditures for chemical disarmament shall be provided within the structure of the federal budget as a separate entry.
3. The President of the Russian Federation:
 - a) determines the primary directions of policy of the Russian Federation in the sphere of chemical disarmament, the measures necessary for provision of safety of citizens and protection of the environment in the course of destruction of chemical weapons in accordance with the Convention, and likewise the measures of control over their realization;
 - b) based on the principles of the Convention, establishes the terms for destruction of chemical weapons, with consider-

ation for the economic situation in the Russian Federation and the need for utilizing the safest technologies for destroying the chemical weapons;

- c) ensures the capacity of the Russian Federation to counteract the development, acquisition, production and accumulation of chemical weapons by other states, to maintain means of protection against chemical weapons at an adequate level, as well as to maintain the military potential for deterrence of use of such weapons, and likewise the appropriate intelligence provision;
 - d) exercises general management of the activity of the Russian Federation in the Organization for the Prohibition of Chemical Weapons; ensures the participation of the Russian Federation in adoption of decisions on questions associated with the Convention, including changes and amendments to it, and submits for ratification amendments to the Convention adopted by the Conference for Review of Amendments in accordance with Article XV of the Convention;
 - e) establishes the procedure of formulating a unified state system of managing the process of chemical disarmament.
4. The Government of the Russian Federation:
 - a) defines the order of performance and the volume of work necessary for implementation of the Convention, and likewise implements measures necessary for ensuring the safety of the population and protection of the environment in the course of destruction of the chemical weapons;

- b) provides financing of work on chemical disarmament in the necessary volumes at the expense of budget and extra-budgetary sources, including uncompensated assistance and possible foreign borrowings in the form of unsecured credits;
 - c) develops federal draft laws aimed at ensuring the safety and social protection of the population and protection of the environment in the course of destruction of the chemical weapons, and also on other questions associated with fulfillment of the Convention principles by the Russian Federation;
 - d) provides for development of a technical base for destruction of chemical weapons stockpiles, including performance of scientific-research and experimental-design work, for purposes of ensuring predominantly the application of domestic technology in the process of realization of the Convention; also takes measures to create favourable conditions for attracting domestic and foreign investors to projects on converting chemical weapons production facilities;
 - e) provides for development of the social infrastructure in places of storage and destruction of chemical weapons; In accordance with the legislation of the Russian Federation, coordinates with subjects of the Russian Federation all questions associated with realization of the Convention, including the order of performance and volumes of work on storage, transport and destruction of chemical weapons; develops a system of compensation to the regions where facilities for destruction of chemical weapons are located;
 - f) implements measures directed at ensuring protection of economic interests of the Russian Federation in the process of realization of the Convention, including conversion of appropriate chemical weapons production facilities, reduction of expenditures associated with participation of the Russian Federation in the Organization for the Prohibition of Chemical Weapons, and performance of the inspections specified in the Convention on the territory of the Russian Federation;
 - g) coordinates international cooperation on realization of the Convention with consideration of the need for reducing expenditures for chemical disarmament and development and application of leading domestic technology for destruction of chemical weapons;
 - h) adopts necessary measures for purposes of ensuring the complete and honest adherence to all principles of the Convention by other participant states; ensures a non-discriminatory regimen in regard to the Russian Federation, specifically as concerns implementation of control measures and conversion specified in the Convention;
 - i) develops and realizes a system of measures for preventing and combatting possible terrorist attacks with application of chemical weapons.
5. The Chambers of the Federal Assembly of the Russian Federation:
- a) participate in development of federal laws and adopt federal laws necessary to ensure safe destruction of chemical weapons, safety and social protection of the population and protection of the environment in regions affected by implementation of the Convention, and likewise federal laws on other questions associated with the Russian Federation's fulfillment of the principles of the Convention;
 - b) review the annual informational report of the Government of the Russian Federation on the course of fulfillment of the Convention, and adopts the appropriate decisions;
 - c) within the scope of annual review of the draft federal law on the federal budget, participate in the adoption of decisions on volumes of financing of chemical disarmament, social protection of the population and measures for protection of the environment in the process of implementation of the Convention;
 - d) if necessary, issue instructions to the Accounting Chamber of the Russian Federation on conducting audits of the application of funds allocated for purposes of chemical disarmament;
 - e) review information, including from the regions, on the course of implementation of the Convention, measures for social protection of the population and protection of the environment, and adopt the appropriate decisions.
6. The agencies of state authority of subjects of the Russian Federation:
- a) participate, within the limits of their powers and authorities, in the development of draft federal laws and statutes regulating questions of ensuring safety and social protection of the population and protecting the environment in the course of destruction of chemical weapons, and likewise in other questions associated with provision for fulfillment of the responsibilities of the Russian Federation stemming from the Convention;
 - b) develop and adopt, in accordance with the federal laws, normative legal statutes of subjects of the Russian Federation on questions of ensuring safety and social protection of the population and protecting the environment in the course of performance of work on destruction of chemical weapons in accordance with the Convention.
- Article 3. Informational report on the course of fulfillment of the Convention*
- At the instruction of the President of the Russian Federation, the Government of the Russian Federation forwards to the chambers of the Federal Assembly of the Russian Federation an annual report on the course of fulfillment of the Convention, which contains information on the following questions:
- a) volumes of destroyed chemical weapons; construction of facilities for destruction of chemical weapons, liquidation or conversion of facilities for production of chemical weapons; status of chemical weapons in the Russian Federation; ecological situation in places of storage and destruction of chemical weapons in the Russian Federation; status of health of personnel at facilities and population living in places of storage and destruction of chemical weapons;
 - b) financing measures for fulfillment of the Convention; social protection of the population and protection of the environment in connection with fulfillment of the Convention; involvement of extra-budgetary sources of financing; volumes of international aid and level of general financing for fulfillment of the Convention as compared with the requirements set forth in the federal target programme *Destruction of Chemical Weapons Stockpiles in the Russian Federation*.
 - c) activity of the Organization for the Prohibition of Chemical Weapons; participation of the Russian Federation in the activity of this organization;
 - d) fulfillment of principles of the Convention by other participants; activity of other states which may affect the implementation of the Convention; measures adopted by federal agencies of executive authority for purposes of ensuring universality of the complement of participants to the Convention;
 - e) basic problems arising for the Russian Federation in connection with fulfillment of the principles of the Convention; cases of using information obtained by the Organization for the Prohibition of Chemical Weapons associated with infliction of loss upon the interests of the Russian Federation; decisions on changes in conditions of fulfillment of the Convention for individual states;
 - f) status of anti-chemical protection of the population and the Armed Forces of the Russian Federation; status of the troops for radiation, chemical and biological defence; production of means of protection against chemical weapons, as well as scientific-research developments in this sphere; financing of mea-

asures associated with provision of a high degree of readiness of the armed forces and civil defense formations for repelling attack or possible terrorist acts with the application of chemical weapons.

Article 4. Protection of interests of the Russian Federation in connection with the Convention

1. In case of disputes over exercising the right of inspection in regard to the Russian Federation, refusal by the Organization for the Prohibition of Chemical Weapons to authorize conversion of facilities at the request of the Russian Federation, or in the case of adoption of other measures which inflict loss upon the Russian Federation, the Russian Federation, for purposes of protecting its interests, shall implement procedures in accor-

dance with generally recognized principles and standards of international law and international treaties of the Russian Federation.

2. In the case when extraordinary events, including of an economic or technogenic nature, concerning the subject of the Convention threaten the supreme interests of the Russian Federation, the procedures specified in Section V — Termination or suspension of effect of international treaties of the Russian Federation — of the federal law *On International Treaties of the Russian Federation*, shall be invoked.

Article 5. Implementation of the present federal law.

The present federal law shall become effective on the day of its official publication.

Developments in the Organization for the Prohibition of Chemical Weapons

Over 200 days have elapsed since the entry into force of the Chemical Weapons Convention in April this year. The last months of 1997 have been marked by some significant additions to the list of states parties to the Chemical Weapons Convention. Since the last quarterly review, six states have deposited instruments of ratification or accession with the UN Secretary-General: Pakistan, Jordan, Iran, the Russian Federation, Nepal and Venezuela. These deposits bring the total number of ratifying or acceding states to 106, with 62 signatory states yet to ratify. They also mean that all five permanent members of the UN Security Council are now parties to the Convention.

The first four states listed above were able to participate in the second session of the Conference of the States Parties (CSP) as full members of the OPCW. This first regular session of the CSP reached a number of significant decisions related to the implementation of the CWC and to the establishment of subsidiary bodies. It also adopted the 1998 OPCW Programme and Budget and reviewed the activities of the OPCW during its first few months of operations.

In the months preceding the second session of the CSP, a number of deadlines related to verification set by the Convention expired; some were met while others were not, often due to circumstances unforeseen at the time the deadlines were fixed. The number of inspections is set to reach 120 by the end of the year with attention currently focused on preparing facility agreements and beginning a small number of industrial inspections.

Executive Council

In the period covered by this review, the Executive Council held three sessions: its fifth during 29 September–1 October, its sixth during 28–31 October and a specially scheduled seventh session during 18–20 November.

As suggested in the last quarterly review, such regular meetings are more a reflection of the workload currently

facing the Organization than a deliberate policy, and their frequency is unlikely to continue into 1998.

Reflecting this the Council has decided to meet on the following dates in 1998: 27–30 January, 21–24 April, 16–19 June, 1–4 September, 6–9 October and 8–11 December. This timetable does not preclude the calling of special sessions as and when necessary.

Report of the Executive Council on the Performance of its Activities In accordance with CWC Article VIII.32(b), the Council's seventh session submitted the *Report of the Executive Council on the performance of its activities (13 May–31 October 1997)* to the second session of the CSP. This report detailed the activities of the Council, including decisions it had taken, reports from the Director-General and subsidiary bodies it had noted and recommendations it had made to the second session of the CSP.

Article VIII of the CWC clearly defines the roles and functions of each of the organs of the OPCW. While the CSP is the principal organ of the Organization, the Council is mandated to oversee the implementation of the Convention. For this reason, the first 200 days after entry into force have been particularly busy for the Council as it has involved itself in all aspects of the implementation process.

Confidentiality The issues of confidentiality and transparency have continued to be important themes during the period under review. The OPCW Policy on Confidentiality specifically states that information relating to a specific state party or site can be released only with the express consent of the state concerned. The Director-General wrote to all states parties, asking their cooperation in releasing certain limited amounts of information. On 5 September, the Secretariat eventually released, beyond the Organization, an "Overview of declarations received and the status of completed and ongoing inspections", a more detailed version of which had been distributed to states parties during the Council's third session. The released version contained

general information on the verification activities of the Organization on a state by state basis but excluded information submitted by Finland, India, Singapore and South Korea. Later, similar such documents were released beyond the Organization, with information from Finland and Singapore included. Other states parties continued to opt for the restriction of information relating to them for reasons of security, and because universal membership had not been achieved in their regions. The Council itself has continued to review such information, which is contained in the reports on the status of implementation of the Convention submitted by the Director-General. During the second session of the CSP, some states parties called for the inclusion of more information in these reports to ensure that, at least within the Council, there was as much openness as regards chemical weapons as possible.

This gradual, albeit sporadic, release of information by the Organization perhaps demonstrates that more states parties are beginning to see the advantages of releasing certain information, both for the international profile of the Convention and for the building of confidence between states parties.

However, as reflected in many statements to the second session of the CSP, many states parties are still concerned at the lack of transparency, particularly in the area of chemical weapons, since entry into force. It is argued that greater openness would not only be beneficial politically, it would also prevent the publication of misleading reports by the media on declarations and verification activities. But, in the end, the release of information is dependent on the political will and the security perceptions of the states parties.

Transitional Verification Arrangements and Facility Agreements During its fifth session, the Council approved two Transitional Verification Arrangements (TVAs) which had been submitted at its previous session. Both TVAs dealt with Chemical Weapons Destruction Facilities (CWDFs) in the USA, bringing the total number of sites under long-term monitoring in that country to five.

Three facility agreements were submitted to the sixth session of the Council; two for Schedule 1 facilities and one for an Old/Abandoned Chemical Weapons (O/ACW) Facility. The two Schedule 1 agreements were approved by the seventh session of the Council, while consideration of the O/ACW facility agreement was postponed at the request of the state party involved. It was understood that the draft facility agreement would be provisionally applied until formally approved by the Council.

Destruction of Chemical Weapons Production Facilities A request to delay the start of the destruction of a Chemical Weapons Production Facility (CWPF), which is currently the subject of criminal proceedings in the state party concerned, was submitted to the sixth session. This request presumably relates to the facility in Japan owned by the Aum Shinrikyo cult {see *News Chronology* 10 Oct}. In accordance with Article V, paragraph 8 of the Convention destruction activities must begin not later than one year after the Convention enters into force for the state party concerned, and should finish not later than 10 years after entry into force. The exceptional circumstances surround-

ing this particular situation could warrant a delay, although it could also be argued that the timelines and requirements laid down by Article V and the Verification Annex in relation to CWPFs should be stringently adhered to. The issue will be discussed further at a subsequent Council session.

UN Relationship Agreement The text of the draft relationship agreement with the UN submitted to the Council's fourth session, despite discussions at further sessions, has not yet been finalised and therefore it was not submitted to the second session of the CSP. The agreement is to be further discussed at a subsequent Council session, but during his address to the second session of the CSP the Director-General stated that without approval by the second session of the CSP an agreement would have to be deferred for a year. The Director-General warned that deferment could have certain operational consequences. For example if there was an allegation of alleged use of chemical weapons a state party could receive investigation teams from both the OPCW and the UN Secretary-General.

Practical issues Since the last quarterly review there have also been examples of the sort of practical issues with which the Executive Council will increasingly have to deal as the Convention is implemented around the world.

One of these issues is the transfer of saxitoxin for research, medical and diagnostic uses. The Convention lists saxitoxin as a Schedule 1 chemical, meaning that it can only be transferred to other states parties, that 30 days notification has to be provided to the Secretariat before each transfer and that re-transfers to third parties are prohibited. However, it has been brought to the attention of the Council that saxitoxin is used, in minute quantities, in kits for diagnosing Paralytic Shellfish Poisoning (PSP) and, in a tritiated form, for electrophysiological research. Such uses make it essential that products containing saxitoxin can be transferred around the world. The protagonists who want an exception made argue that the transfer provisions for Schedule 1 chemicals, if interpreted rigidly, would severely restrict trade in PSP diagnostic kits and medical research. This could ultimately lead to the Convention losing credibility if it is seen to be restricting humanitarian activities. The quantities under discussion, it is argued, pose no measurable risk to the object and purpose of the Convention and restrictions on the transfer of saxitoxin for humanitarian uses appear to be an unintended consequence of the decision by the negotiators of the Convention to include saxitoxin in Schedule 1. The Council has been studying ways of expediting transfers of saxitoxin for humanitarian uses. Possible measures include states parties providing advance notifications of transfers in the following year, permission to re-transfer to a third, but not a fourth, state party and permission to transfer to non-states parties but only if they agree to abide by the Convention's terms regarding saxitoxin. At the time of writing around 30 transfers of saxitoxin have been notified to the Secretariat.

Another issue brought to the attention of the Council concerns the procedures for transfers of Schedule 2 and 3 chemicals to non-states parties. Acting on a request for clarification from the Council the Secretariat issued a legal opinion stating that, in accordance with Parts VII and VIII

of the Verification Annex, end-user certificates are required from the relevant governmental agency within the recipient state before Schedule 2 and 3 chemicals can be exported to non-states parties. Therefore, documents from any other commercial, governmental or non-governmental agency do not fulfil the requirements of the Convention.

Second Session of the Conference of the States Parties

The second session of the CSP took place in The Hague during 1–6 December. It was attended by 81 states parties (including Iran and the Russian Federation which became states parties during the session), 19 signatory states (including Venezuela which became a contracting state party when it ratified the Convention on 3 December), two observers (Botswana and Libya), four international organizations and eight non-governmental organizations. In all, the number of participants was around 440.

Opening of the session A statement by UN Secretary-General, Kofi Annan, was read out in which he described the Convention as “a truly historic step” and noted that the Convention on the Prohibition of Anti-Personnel Mines, the signing ceremony of which he was attending, incorporates mechanisms modelled on those of the CWC. The Secretary-General also remarked on the OPCW’s role as an instrument for confidence-building between states and as a spur to additional disarmament initiatives.

The Director-General of the OPCW presented a detailed overview of the activities of the Organization since the first session of the CSP. Matters of substance in his address included the evolution of the verification regime, the issue of “technical non-compliance” caused by the late or incomplete submission of initial declarations, the universality of the Convention and unresolved issues facing this session of the CSP. The Director-General stressed that one of his most important aims is the development of a culture of transparency for the work of the Organization. He said that “[w]e have a duty to inform the international community of the Organization’s activities, as well as of the progress being made in identifying and destroying chemical weapons and their associated facilities. Our mandate is after all to protect confidential information, not to perpetuate secrecy”.

General debate Many states parties, signatory states and international organizations choose to make statements to the session. Almost all of those who spoke took time to welcome the newly ratified states to the Organization, with particular emphasis being placed on ratification by the Russian Federation, and to encourage more states to ratify or accede to the Convention. Most speakers also complimented the Director-General and the Secretariat on their performance during the first seven months. As in the Director-General’s address, the subject of “technical non-compliance” was frequently raised with many states urging those who had not done so to submit their declarations, in full, as soon as possible.

Transparency was also a major concern expressed in statements, with many speakers arguing that transparency in relation to chemical weapons programmes, both past and

present, increases confidence in the Convention and its verification regime. However, other speakers noted that the confidentiality provisions of the Convention were of particular relevance to states with regional security concerns.

China took the opportunity to restate its position on the conversion of CWPFs, namely that “as a principle, chemical weapons production facilities should be completely destroyed”. In contrast, the Russian Federation expressed its hope that the approach to conversion would remain “rational” and declared that “conversion is intended as a means to facilitate, rather than aggravate the tasks of economic development.” On the subject of finance, Japan stated its view that “the retroactive application of the future United Nations scale of assessment should not be accepted”. Divergent views on the activities of the Executive Council were expressed by Italy and India, with the former criticising the Council for “endless discussions of a budgetary or technical nature”, while the latter praised the “accomplishments of the EC”. Taken together though, the statements expressed satisfaction with progress to date and optimism for developments in the future.

Appointment of officials In accordance with its rules of procedure, one of the first actions of the second session of the CSP was the election of its officials, who will hold office until the next session in November 1998. Ambassador Simbarashe Simbanenduku Mumbengegwi (Zimbabwe) was elected as chairman, replacing Mr Pieter Cornelis Feith (Netherlands), with the following vice-chairmen: Algeria and Kenya (Africa); Pakistan and Korea (Asia); Belarus and Bulgaria (Eastern Europe); Chile and Mexico (Latin America and the Caribbean) and France and USA (WEOG). The new chairman of the Committee of the Whole, replacing Ambassador Gustavo Eduardo Figueroa (Argentina), is Ambassador Bjørn Barth (Norway).

Election of the Executive Council One of the most immediate tasks facing the second session of the CSP was the election of new members to the Executive Council. The following states parties will serve two-year terms beginning on 12 May 1998:

- Africa — Algeria, Kenya, Morocco, South Africa
- Asia — Iran, Pakistan, Philippines, Sri Lanka
- Eastern Europe — Czech Republic, Russian Federation, Slovakia
- Latin America and the Caribbean — Cuba, Ecuador, Peru, Venezuela
- WEOG — Australia, Switzerland, Belgium, Finland, Spain

Some of these states parties replace those which were elected for a one-year term at the first session of the CSP, while others have their terms renewed.

1998 OPCW Programme and Budget The adoption of the 1998 budget was the most important decision facing the second session of the CSP, and also the most intensely debated. The budget had been under detailed discussion since its submission to the Executive Council’s fourth session. After extremely thorough and lengthy discussions within the Council the budget was referred to the CSP by the Council’s seventh session. At the same session the

Council decided to defer consideration of the draft *Medium-Term Plan 1999–2004* to a future session, as it was felt that further operational experience of the Secretariat was necessary before a decision was possible.

There were three issues relating to the budget which provoked the most discussion at the CSP. The first issue was that of the scale of assessments for financial contributions to the Organization from member states. As reported in the last quarterly review, the fourth session of the Executive Council retroactively applied revised floor and ceiling rates of 25 per cent and 0.01 per cent respectively for contributions to the 1997 budget, pending approval by the second session of the CSP. After prolonged debate this recommendation was approved by the CSP and thus applied retroactively to the 1997 budget. Some states parties expressed the view that this recommendation was technically in contradiction of Article VIII.7 of the Convention which states that member states shall pay contributions in accordance with the UN scale of assessment adjusted to the size of the OPCW membership. Others pointed out that the UN scale of assessments had applied a ceiling and floor for many years. Despite these concerns a similar arrangement was also approved for contributions to the 1998 budget, with the proviso that it is without prejudice for the 1999 budget.

Personnel levels were also a major concern of the CSP as recent ratifications, especially that by the Russian Federation, will cause an increase in work for the Secretariat. However, many states stated the need to ensure that each post was really necessary and that the Organization be run in the most cost-efficient way possible. After much discussion, 15 new posts were created bringing the total number of posts approved in the 1998 budget to 491. These 15 new posts consist of one D-1 post, Director (Special Projects), two P-5 posts, two P-4 posts, four GS posts and six GS posts for security guards.

Perhaps the most contentious, and also the most complex, budgetary issue related to the costs of verification under Articles IV and V. A decision on this issue became even more urgent in the light of the budgetary impact of ratification by the Russian Federation, which has previously declared a stockpile of around 40,000 agent-tons of chemical weapons. According to Article IV, paragraph 16 and Article V, paragraph 19 each state party making a declaration related to Articles IV and V shall reimburse the costs of verification of the storage and the destruction of their chemical weapons and of the destruction of their CWPFs to the Secretariat. In addition such states parties must pay the actual costs of destroying such weapons and facilities, the so-called “possessor pays” principle. However, there had been no final agreement upon which criteria these reimbursements should be calculated. In the absence of a finally agreed solution, the second session of the CSP agreed that, as recommended by the seventh session of the Council, the reimbursement criteria contained in the 1997 budget should also apply to the 1998 budget. However, this decision was qualified by the decisions that the issues of salary and the attribution of costs related to inspections of O/ACW will be addressed and resolved at the Council’s June 1998 session in the light of experience gained in the first half of 1998. The CSP tasked the Secretariat to gather more definitive details on the overall costs of verification so that reimburse-

ment criteria can be finally elaborated for application in the 1999 budget.

The CSP agreed that interpretation from a language which is not one of the languages of the Convention into one of those languages will be reimbursed to states parties for non-Article IV and V inspections, if the Secretariat requests such interpretation. As approved by the second session, the total budget for 1998 amounts to NLG 140.79 million (NLG 57.468 million for administrative costs and NLG 83.328 million for verification costs).

Contributions from states parties make up NLG 122.444 million of this amount, while the Organization expects to receive NLG 18.352 million in miscellaneous income, which includes reimbursements under Articles IV and V and payments by the host country for obligations related to the OPCW headquarters building.

Confidentiality Commission The Confidentiality Commission, established pursuant to the Convention’s Confidentiality Annex, met during 22–26 September and on 17 November. Dr Laurraine H Lotter (South Africa) was elected as the Commission’s chair, supported by four vice-chairs:

- Asia — Mr Wang Xiaoyu (China)
- Eastern Europe — Mrs Anca Roxana Visan (Romania)
- Latin America and Caribbean — Mr Camilo Sanhueza Bezanilla (Chile)
- WEOG — Prof Dr Eric PJ Myjer (Netherlands)

The Commission’s draft operating procedures and its first report were presented to the CSP for consideration and approval. The report included six recommendations which the Commission asked the CSP to approve. The CSP approved the recommendations concerning the delegation of certain functions to the Executive Council, the timing of Commission meetings, the use of the International Bureau of the Permanent Court of Arbitration as the Commission’s Registry and the provision of funding for training in dispute resolution. The CSP referred to the Executive Council for decision at its next session in January, the issue of whether states parties or the Organization should pay for cases submitted to the Commission.

Under a “silence procedure” the draft operating procedures of the Commission were provisionally adopted by the CSP and will be formally adopted by 15 January 1998 if no objections are forthcoming from states parties.

The Director-General announced the resignation of Mr Luis Carlos Da Silva Cavalheiro (Brazil) from the Commission and the CSP duly elected Mrs Ana Maria Cerini (Argentina) to replace him.

Scientific Advisory Board The CSP decided to direct the Director-General to establish a Scientific Advisory Board in accordance with Article VIII, paragraph 21(h) of the Convention. From 1998, the OPCW budget will include resources for travel and other costs associated with the meetings of the Board.

According to its terms of reference, which are annexed to the decision, the Board’s role is “to enable the Director-General, in the performance of his functions, to render specialised advice to the Conference, Executive Council or States Parties in areas of science and technology relevant to

the Convention.” Its functions include: assessing and reporting to the Director-General on scientific and technological developments; providing advice on proposed changes to the Annex on Chemicals; providing scientific and technological advice to the Secretariat; assessing the merits of verification methodologies, technologies and equipment and advising the CSP of scientific and technological developments to be taken into account in its review of the operation of the Convention.

The Board’s 20 members are to be appointed by the Director-General from a list of nominees put forward by states parties. Nominees should be eminent citizens of states parties active in the research, industrial or military fields and will be appointed for a term of three years, which may be renewed once.

In addition to appointing recognised experts, the Director-General must also ensure that there is a fair regional distribution among the members of the Board. The decision thus attempts to create a balance between the nomination of members based on their qualifications and experience and the political need to ensure an equitable geographical representation.

The rules of procedure of the Board are to be provided by the Director-General after notification of the Executive Council. The Director-General is also able to establish temporary working groups of experts under the Board to provide recommendations on specific issues. The Board is to meet prior to, or in conjunction with, the session of the Executive Council which immediately precedes the annual session of the CSP.

Reports of the Organization and Executive Council

In accordance with Article VIII.32(b) of the Convention, the Executive Council submitted a *Draft Report of the Organization on the implementation of the Convention (29 April–28 October 1997)* to the CSP for its consideration and approval. After some debate on a number of recommendations included in the report it was adopted by the CSP. The report summarises the achievements of the Organization since entry into force and contains much information on the implementation of the Convention in its annexes and appendices. Similarly, the Council also submitted a *Report of the Executive Council on the performance of its activities (13 May–31 October 1997)* which was noted by the CSP.

Further decisions of the CSP The second session of the CSP took a number of other important decisions relating to the implementation of the Convention.

Two requests for the conversion of Chemical Weapons Production Facilities (CWPFs) were referred to the CSP by the fifth and sixth sessions of the Executive Council. These facilities, one in the USA and one in the UK, were converted to purposes not prohibited by the Convention between 1 January 1946 and the entry into force of the Convention. Under Article V, paragraph 13 of the Convention, it is the CSP which decides on approval. During the plenary debate on these conversion requests two differing viewpoints emerged, one arguing that, as a matter of principle, all CWPFs should be destroyed, and the other more flexible approach arguing that, in compelling cases or when economically justifiable, conversion should be allowed. In

the end, the requests were approved but the final report of the CSP includes a paragraph noting that, in accordance with Article V, paragraph 15, all such converted facilities will be subject to stringent verification.

A number of decisions were taken relating to chemical industry issues. The CSP decided that the term “production” in Article II.12(a) of the Convention should be understood to include a scheduled chemical produced by a biochemical or biologically mediated reaction. The issue of the reporting of aggregate national data for Schedule 2 and 3 chemicals remains unresolved but the CSP decided that the Executive Council should address the issue and report back to the next CSP. On the subject of low concentrations in relation to plant site declarations, it was decided that in their 1998 and subsequent annual declarations, states parties should indicate which concentration limits were applied for such declarations and that they should retroactively inform the Secretariat of limits used in their initial declarations. Aspects of this issue remain to be further addressed. The CSP further decided that the Director-General should task the Scientific Advisory Board to report to it, within six months, on the issue of the declaration of ricin production.

The CSP adopted the recommendation of the fourth session of the Executive Council on the mechanism for updating the OPCW Central Analytical Database. A decision was adopted on including the spectra which the Council recommended for incorporation (except for certain spectra which were objected to by a state party) providing that no objections are received from new states parties by 2 February 1998, in the Central Analytical Database.

The first session of the CSP did not consider the terms of appointment of the Director-General and so this session of the CSP directed the Secretariat to conduct a survey of the terms of appointment of the heads of other international organizations and specialised agencies in the UN system and circulate it to member states not later than 1 January 1998. When it meets later the same month, the Executive Council will take a decision on the Director-General’s terms of appointment, in line with those of the heads of other international organizations.

The CSP appealed to all signatory states and non-signatory states to ratify or accede to the Convention and recommended that the Director-General and states parties make every effort in this regard.

In addition, the revised OPCW logo as recommended by the fourth session of the Council was adopted by the CSP.

Unresolved issues During the first intersessional period facilitators appointed by the Chairman of the Committee of the Whole worked on the “unresolved issues”, that is, those issues not resolved by the Preparatory Commission. The Committee met twice to review the progress made by the facilitators on the following subjects: Canada — industrial declarations; Germany — costs of verification; USA — terms of reference of the Scientific Advisory Board; The Netherlands — sampling procedures; South Africa — chemical weapons issues; Uruguay — agreements between the OPCW and states parties; Brazil — relationship agreements between the OPCW and international organizations and conversion of CWPFs; Mexico — model facility agreements; Argentina — issues related to Articles X and XI; UK

— old and abandoned chemical weapons; Algeria — inspection equipment; China — challenge inspection issues; South Korea — legal aspects of confidentiality; and Switzerland — costs of verification of old chemical weapons. While some issues were addressed by the second session of the CSP, others were not, and therefore a revised procedure for addressing unresolved issues during the second intersessional period was adopted.

This procedure builds on that for the first intersessional period but states that the Chairman of the Committee of the Whole shall set goals and timelines for the resolution of issues and that once resolved, issues should be introduced to the Executive Council for immediate implementation, pending final approval by the CSP. This decision seems to be reminiscent of the old system of expert groups which met under the Preparatory Commission.

The present facilitators will continue with the issues delegated to them, and others can be appointed by the Chairman of the Committee of the Whole. These unresolved issues will be addressed again by the third session of the CSP in November 1998.

Access to CSP documents During the CSP it became clear that the Organization still has to formalise its policy as regards the release of official documents outside of the Organization. Documents of the Executive Council appear to be available only to those states parties which are members of the Council, while documents from the CSP, at least from its open plenary sessions, appear to be more widely available. In fact, many documents from the first session of the CSP are available on the OPCW website at www.opcw.nl. During the second session there appeared to be no agreement on a formal policy, but it would seem likely that the same approach as adopted for the first session will be used, and documents will eventually appear on the website. In addition, some of the documents issued by the Secretariat which give general information on the implementation of the Convention are also posted on the website. Clearly, a formal procedure for the release of official documents is required in the interests of consistency and transparency.

Actions by Member States

Ratifications Since the last quarterly review six states have ratified, or acceded to, the Convention: Pakistan on 28 October; Jordan on 29 October; Iran on 3 November; the Russian Federation on 5 November, Nepal on 18 November and Venezuela on 3 December. Many of these ratifications are significant in themselves; Pakistan's in the light of India's earlier declaration of a chemical weapons capability, Jordan's as one of the few ratifications from the Middle East, Iran's as a key state in its region and Russia's as the world's largest possessor of chemical weapons, with a large chemical industry and a permanent seat on the UN Security Council. The point was raised during the second session of the CSP that ratifications such as Jordan's and Pakistan's demonstrate that even states with serious security concerns see benefits in being members of the OPCW. It is also apparent that the economic disadvantages of remaining outside the Convention's regime are becoming more evident but, in his address to the second session of the CSP, the Di-

rector-General promised that he would take further action to ensure that non-states parties were aware of the trade restrictions which would apply if they remained outside of the Convention.

Article X Declarations Under Article X.7 of the Convention states parties are required to provide information on the type of assistance which they are able to provide to the Organization. To date 26 states parties have submitted information on assistance in accordance with Article X of the Convention, including three states parties (Canada, the Netherlands and New Zealand) which have made contributions to the Voluntary Fund for Assistance. So far no bilateral agreements on the procurement of assistance have been signed between the Secretariat and states parties.

The Secretariat is arranging a meeting to coordinate the provision of assistance under Article X. The meeting will provide an overview of the offers made so far, identify types of assistance for which no offers have yet been made, and identify the advantages to be gained from coordinating the provision of assistance from member states. The meeting is due to take place on 26 January 1998 in The Hague.

Actions by the Technical Secretariat

Declaration processing The Secretariat has been occupied with the ongoing task of processing and verifying the initial declarations submitted by states parties. However, many initial declarations have either still not been received, or have been submitted and are incomplete. This "technical non-compliance" with the Convention is viewed with increasing concern and the Director-General has used every possible opportunity, including his address to the second session of the CSP, to urge states parties to submit their declarations as soon as possible. The delay in the submission of declarations has not yet affected the Secretariat's ability to implement the Convention. Many states parties complained at the second session of the CSP, that "technical non-compliance" is leading to the unbalanced implementation of the Convention.

Some amount of non-compliance is also apparent in other declarations and notifications which states parties should provide to the Organization. The Secretariat drew up a table containing information on the submission of declarations and notifications by states parties as of 28 October. Out of a total of 100 states parties listed, 59 had provided notification of their National Authority, 20 had provided information on their implementing legislation (including 9 which had submitted such information prior to entry into force), 17 had provided information on assistance, 45 had provided point of entry information and 27 (out of 99 — the Netherlands need not supply this) had provided standing diplomatic clearance numbers for non-scheduled aircraft. Such examples of non-compliance could cause operational problems, for example, if a challenge inspection is requested against a state party which has not notified the Secretariat of its point of entry or its standing diplomatic clearance numbers for non-scheduled aircraft.

Those declarations which are received by the Secretariat are still being processed manually rather than electronically

as the Electronic Data Management System (EDMS) has not yet been certified to handle declaration-related information. Numerous meetings have been held since the last quarterly review in which delegations, the Secretariat and the company involved have discussed the progress of the EDMS.

An updated version of the *Security Study on the OPCW Security Critical Network* was submitted to the sixth session of the Council. Interested parties met again on 11 November and the conclusions of their meeting are to be presented to the first meeting of the Executive Council in 1998.

At the time of writing 70 initial declarations have been submitted to the Secretariat by states parties, meaning that roughly a third of states parties have still not complied with this essential requirement of the Convention. Of those declarations submitted, many are incomplete and therefore do not fulfil all the requirements of the Convention either. To date, eight states parties (including China, France, India, Japan, the UK and the USA) have declared existing or past chemical weapons programmes under the relevant articles of the Convention, and this figure will soon increase to at least nine when the Russian Federation submits its initial declaration, due in early January.

Inspections Over the past few months the Secretariat has concentrated its efforts on the initial inspection of all chemical weapons-related and Schedule 1 facilities. According to Part III, paragraph 4 of the Verification Annex facility agreements for all CWPFs, CWSFs and Schedule 1 facilities should have been concluded by EIF + 180 days (28 October 1997). This meant that initial inspections at such facilities would have to be completed sometime before then. Further, each CWPF had to receive an initial inspection between 90 and 120 days after EIF, in accordance with Part V, paragraph 43 of the Verification Annex.

Initial inspections of all 34 declared CWPFs were conducted within the prescribed timeline. However, by that time it had become clear it would be impossible for all the related facility agreements to be concluded by the end of October. This situation came about for a number of reasons, including a shortfall in the number of inspectors, differences between the budgetary assumptions and the actual situation after entry into force, the declaration of significantly more CWPFs and CWSFs than envisaged, financial restrictions and the increased workload resulting from the Secretariat's inability to process declaration information electronically. These reasons are in addition to the fact that facility agreements are bilateral arrangements which therefore require detailed, and time-consuming negotiation between the state party concerned and the Secretariat.

By 1 December, 115 initial inspections had been conducted or were ongoing in 21 states parties.

The breakdown of these inspections is as follows: 35 to CWPFs, 26 to CWSFs, eight to old chemical weapons facilities, one to an abandoned chemical weapons facility, 19 to CWDFs, 24 to Schedule 1 facilities and two to Schedule 2 facilities. Over 75 per cent of all OPCW inspection activities have been conducted in the USA. By the end of 1997 the Secretariat expects to have completed around 120 inspections. It is planned that in 1998 the Organization will

conduct around 326 inspections of chemical weapons related and industrial facilities.

Official visits The main thrust of visits by staff of the Secretariat has continued to be directed towards the twin goals of encouraging the universality of the Convention and supporting the effective implementation of the Convention by states parties.

In addition to his visits in September to the Russian Federation and Ukraine, the Director-General addressed Committees of the North Atlantic Assembly in Romania on 10 October and the First Committee of the UN General Assembly in New York on 16 October. He devoted a large portion of his speech to addressing concerns expressed by the Russian Duma, and encouraged other signatory states to ratify the Convention. He also met with representatives of over 30 signatory and non signatory states. The Director-General also visited India during 22–25 November, meeting with senior government officials and personnel of the National Authority.

In early 1998 the Director-General plans to travel to Finland and the UK, and also to visit Bulgaria.

Outreach activities With the financial crisis now past, the Organization can focus once again on the range of activities designed to support the effective implementation of the Convention.

Between September and December two Regional Seminars on the National Implementation of the Chemical Weapons Convention were held. The first, in Libreville, Gabon on 22–23 October was attended by officials from the host country's government and industry and officials from seven other states. The second seminar, in Bratislava, Slovakia on 11–12 December was attended by Slovak officials, representatives of 14 states and two NGOs. Each seminar was preceded by a one-day training course for personnel of the national authorities.

The Secretariat also arranged a workshop on the national implementation of the Convention at the European Parliament in Brussels on 14–15 October. This workshop was attended by members of 41 delegations which are permanently based in Brussels, in addition to representatives of various Brussels based international organizations. On other dates representatives of the Secretariat briefed the participants on events within the Organization and decisions taken by the Executive Council.

The Secretariat has also organised two National Authority training courses; in Harare, Zimbabwe during 6–14 October and during 3–11 November in Ypenburg in the Netherlands. The courses were attended by personnel engaged in the day-to-day implementation of the Convention within their country's National Authorities. Two parallel courses are planned for 30 March–7 April 1998, again taking place in Ypenburg. One will deal with national implementation from the political and diplomatic point of view, while the other covers the administrative aspects of national implementation for the staff of National Authorities. The Secretariat is able to sponsor the travel and participation costs of a limited number of participants from states parties.

Planning for seminars, workshops and training courses in 1998 is already well underway. The intention is to focus

the seminars on encouraging the universality of the Convention and on sharing initial experiences since the entry into force of the Convention. The 1998 budget provides funding for at least three regional seminars, sponsored or co-sponsored by the Organization.

Staffing The financial problems experienced by the Organization between May and August meant that all recruitment activities ceased for a while. With the easing of these financial problems intensive efforts have been made to fill vacant posts. Recent senior appointments include, Mr Anil Wadhwa (India) as Head of Government Relations and Political Affairs Branch, Mr Deep Chand (India) as Head of the Confidentiality Branch, Mr Kim Il-Hyun (South Korea) as Head of the Technical Support Branch, Mr Gonzalo Casas (Uruguay) as Head of the Protocol Branch and Mr Donato Kiniger-Passigli (Italy) as Head of the Media and Public Affairs Branch.

According to the most recent information, of 270 authorised posts in the professional and higher categories, almost all have been filled by staff representing around 50 member states. The regional breakdown of these posts is as follows: Africa 9 per cent; Asia 23 per cent; Eastern Europe 15 per cent; Latin America and Caribbean 12 per cent and WEOG 41 per cent. The number of women staff in the professional and higher categories is only 34, or 16 per cent. During the second session of the CSP many states parties pointed out the disparities in the geographical distribution of staff and urged the Director-General to do more to create a balanced Organization.

With the recent ratifications of the Convention by Pakistan, Iran and Russia 15 more inspector trainees who had successfully completed Training Group A have been given contracts by the Organization to begin work in late 1997. It is therefore expected that at the beginning of 1998 the Secretariat will employ a total of 126 inspectors.

Training Group B is to be scheduled to begin on 12 January 1998 and to conclude on 5 June 1998. The group consists of 80 candidates from 36 states parties and includes chemical weapons specialists, chemical production technologists, chemical production logisticians and paramedics. The 21-week training scheme will comprise four modules: Module A basic course; Module B specialist application course; Module C practical inspection skills; and Module D on-site inspection training.

Following a four-week relocation period the newly recruited inspectors will report for duty on 6 July 1998.

New OPCW building The new OPCW headquarters is scheduled for completion in January 1998 and the Organization is due to move in around 12–23 February. At the second session of the CSP the Director-General announced that the Executive Council chamber in the building is to be named the Ypres Room. The authorities in Ypres have also offered to provide works of art for the new building.

The OPCW's new address will be Johan de Wittlaan 32, 2517 JR, The Hague.

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

CWC Ratifications and Accessions

deposited since CWC entry into force

Cuba — 29 April 1997
Turkey — 12 May 1997
Singapore — 21 May 1997
Kuwait — 28 May 1997
Guinea — 9 June 1997
Slovenia — 11 June 1997
FYR of Macedonia — 20 June 1997
Trinidad and Tobago — 24 June 1997
Burkina Faso — 8 July 1997
Ghana — 9 July 1997
Brunei Darussalam — 28 July 1997
Qatar — 3 September 1997
Guyana — 12 September 1997
Pakistan — 28 October 1997
Jordan — 29 October 1997
Iran, Islamic Republic of — 3 November 1997
Russian Federation — 5 November 1997
Nepal — 18 November 1997
Venezuela — 3 December 1997

Previous deposits (in date order):

Fiji, Mauritius, Seychelles, Sweden, Norway, Australia, Albania, Maldives, Cook Islands, Spain, Bulgaria, Germany, Sri Lanka, Mexico, Turkmenistan, Uruguay, Paraguay, Lesotho, Greece, Tajikistan, Mongolia, Armenia, Finland, Oman, Romania, France, Switzerland, Croatia, Monaco, Netherlands, Denmark, Peru, Algeria, Austria, Poland, Ecuador, South Africa, Japan, Canada, Argentina, Slovak Republic, El Salvador, Georgia, Namibia, Italy, Côte d'Ivoire, Morocco, Czech Republic, Brazil, Papua New Guinea, United Kingdom, Ethiopia, Costa Rica, Ireland, Republic of Moldova, Belarus, Chile, New Zealand, Latvia, Uzbekistan, Saudi Arabia, India, Portugal, Cameroon, Hungary, Swaziland, Philippines, Belgium, Bosnia and Herzegovina, Lao People's Democratic Republic, Niger, Saint Lucia, Luxembourg, Tunisia, Togo, Bangladesh, China, Equatorial Guinea, Kenya, United States of America, Zimbabwe, Bahrain, Iceland, Mali, Malta, Republic of Korea, Suriname

As of 3 December, 106 states had deposited instruments of ratification or accession.

Strengthening the Biological and Toxin Weapons Convention

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

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

The mandate also required that :

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

and:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The current rolling text is liberally sprinkled with square brackets indicating a divergence of views between delegations as to the language that should be used. Such diver-

gence can, on occasion, be very significant whilst other cases are relatively slight. The key point to appreciate is that nothing is agreed until everything is agreed. In order to keep this review as readable as possible, square brackets are kept to a minimum in the following paragraphs.

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

Activities:

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

Facilities:

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

Transfers:

- all transfers of listed agents and equipment.

Appearance of outbreaks of disease:

- any relevant information on certain outbreaks of disease.

Implementation of BWC Article X:

- measures taken to implement Article X of the BWC.

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

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

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

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

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

Visits are described as falling into several categories:

- random visits to declared facilities to confirm the accuracy of declarations;
- ambiguity related visits to resolve declaration ambiguities;
- clarification visits to resolve any uncertainty in declarations;
- request visits made for the BWC organization to help compile declarations; and
- voluntary visits.

Investigations fall into two categories:

- field investigation where there is a release of, or exposure of humans, animals or plants to biological agents or toxins that cause concern about non-compliance; and
- facility investigation where there is concern that a particular facility is engaged in prohibited activities.

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

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

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

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

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

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

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

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

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

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

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

(i) Any request for procurement of a specific agent/toxin shall be accompanied by information on the purpose, quantity required, site or facility for proposed use, quantity to be produced, place where intended to be stored and end-use certificate.

(ii) Any request for transfer or procurement of equipment envisaged to be declared under CBMs, for use by a state participating in the compliance regime in a BL-4 facility, including details of its proposed application and the site/facility for intended use, shall be notified to the BWC Organization.

(iii) Any transfer of technology related to delivery systems, aerosol dispersion of toxins and pathogens, stabilization of agents/toxins to environmental stress shall be notified to the BWC Organization.

(iv) Transfer of agents, equipment and material shall not be allowed to non-states parties of the compliance regime under the Convention without prior approval of the BWC Organization.

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

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

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

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

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

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

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

Other language closely related to definitions and arising from the same element of the AHG mandate is that concerning lists and criteria, lists of equipment and threshold quantities. Although Article III Compliance Measures has

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

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

Confidentiality Language for confidentiality provisions first appeared in the rolling text produced at the July AHG meeting and was further developed at the September AHG meeting. Article IV Confidentiality Provisions comprises two pages. The language is closely similar to that in the CWC with requirements that the Organization conduct its activities in the least intrusive manner consistent with the timely and efficient accomplishment of their objectives, that each state party shall treat as confidential any information and data that it receives in confidence from the organization, that each state party shall have the right to take measures to protect confidential information provided that it fulfils its obligations to demonstrate compliance and that the Director-General shall have the prime responsibility for the protection of confidential information which comes into the possession of the Organization. Other language relates to the Confidentiality Annex and to liabilities arising from unauthorised disclosure of confidential information including the proposed establishment of a Commission to settle disputes relating to confidentiality. *Annex E Confidentiality* (3 pages) has sections addressing the need-to-know princi-

ple, the confidentiality regime, the establishment of a classification system, criteria for confidentiality, obligations for handling classified information, obligations for intended release of confidential information and handling of sensitive information on the premises of states parties. The language in the draft Confidentiality Annex is broadly similar to that in the corresponding Annex of the CWC although the obligations in respect of intended release appear more restrictive as there is no analogy to the CWC provision (Confidentiality Annex, para 2 (c)(i)) allowing the release of general information on the implementation of the Convention which may be compiled and publicly released in accordance with the decisions of the Conference of States Parties or the Executive Council.

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

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

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

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

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

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

News Chronology

May through August 1997

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

1 August In South Korea the government establishes a task force of 80 people to “probe into North Korea’s war provocations and formulate a defence strategy”, so Yonhap news agency reports. The task force is to begin its work by the end of the year, and is to assess the threat posed by, among other things, the CW capability of North Korea. It is to be headed by Lt-Gen Choe Ton-kol of the Joint Chiefs of Staff, and is to include 48 field-rank army, navy and air force officers and 32 national and provincial government officials. Commentary from Pyongyang characterizes the announcement as provocation: “If they persistently seek a war against the North, they will be held fully responsible for all its consequences and will have to pay dearly for them” {KCNA 3 Aug}.

2 August The European Commission’s Moscow office has announced an ECU 2 million project, within the framework of the TACIS programme [see 21 May], for conversion of former chemical-weapons plants in Russia, pending decision by the Russian State Duma to ratify the Chemical Weapons Convention. The Russian side of the project is to be handled by the Metallkhim association, which will be assisted by a foreign corporation that is to be selected next month on the basis of a tender announced in the Spring for companies in member-countries of the European Union. {*Segodnya* 2 Aug}

3 August In Russia, at the Stroitel sanatorium in Vladimir Oblast, a summer camp opens for groups of 20-30 children coming from the chemical weapons stockpile locations in Udmurtiya and in Bryansk, Kirov, Penza, Saratov and Kurgan oblasts. The camp is organized by Green Cross Russia [see 8-10 Jul]. {*Nezavisimaya Gazeta* and *Krasnaya Zvezda* 31 Jul}

5 August In China, an outbreak of plague in the Beijing suburb of Yanshan is attributed by residents to a recently unearthed Japanese bomb {UPI 5 Aug}.

5 August In Connecticut, Startech Environmental Corporation of Wilton announces that it is teaming with Burns and Roe Enterprises Inc to bid for chemdemil business in response to the US Army’s recent request for proposals for demonstration of an Assembled Chemical Weapons Disposal System using a technology alternative to incineration [see 28 Jul]. The team will be proposing the Startech Plasma Waste Converter (PWC) system. {PR Newswire 5 Aug}

5–9 August In the UK, OPCW initial inspections take place at four former chemical weapons production facilities — the sites of the old chemical-munition filling stations at Lords Bridge, Barnham Heath, Norton Disney and West Cottingworth. {*Trust & Verify* Aug}

6 August In India, Prime Minister Gujral is questioned in the Lok Sabha about the safeguards that India should take, now that it has abandoned its chemical weapons [see 26 Jun], in the face of the failure of Pakistan to ratify the Chemical Weapons Convention. He says that India still has capability in chemical weapons: “We can manufacture them and this by itself is a deterrent. Moreover, the destruction of the chemical weapons under the Convention would be gradual and we can have a second look at it.” He also says that Indian manufacture of the weapons had begun before he became prime minister. He adds: “But I stand by the policies the successive governments have followed”. {*The Hindu* 7 Aug}

6–8 August In Chicago, there is a second Illinois Institute of Technology Research Institute *International Workshop on Chemical and Biological Agents* [see 10-12 Dec 96]. The workshop is again chaired by Prof Krishna Rajan. It brings together 10 specialists from the Czech Republic, India, Iran, Kuwait, Singapore and the United States. {*ASA Newsletter* 23 Aug}

7 August In Syria, army brigades have been using CW agents during exercises in the desert near the Golan Heights in the course of which, several days previously, three soldiers had died, according to the military correspondent of the Israeli newspaper *Hatzofe*.

8 August In India, an OPCW initial inspection is taking place at the Defence Research and Development Organization establishment at Ozra, near the western town of Nashik, where chemical weapons [see 6 Aug] are reported to have been made. In July, a smaller OPCW team had inspected the DRDO establishment at Gwalior. {*South China Morning Post* 8 Aug}

8 August In the US House of Representatives, an Intelligence Committee report refers to an internal investigation by the Central Intelligence Agency which had concluded that the posting of intelligence documents on the GulfLink internet website [see 31 Oct 96] did “serious damage to intelligence sources and methods”. {*New York Times* 8 Aug}

8–15 August In Iraq, there is a further UNSCOM biological mission, BW 53 (UNSCOM 193). The 12-person team is headed by Richard Spertzel of the United States and conducts interviews with Iraqi officials who had been involved in the BW programme. {S/1997/774, AFP 10 and 17 Aug, Reuter 16 Aug}

11 August In Tokyo district court, a group of 108 Chinese file suit against the Japanese government seeking compensation for biological warfare waged against China by Japan during the war of 1937-45. This action has been in preparation for some while [see 1 Jul 96]. The plaintiffs are three men who had contracted cholera when the Japanese Imperial Army withdrew from Jiangshan, Zhenjiang Province, in August 1942, plus 105 people from families of nonsurvivors. They seek a total of Yen 1.08 billion (US \$9.3 million) in damages. After the suit is filed, representatives of the plaintiffs deliver a letter to the office of Prime Minister Ryutaro Hashimoto calling upon him to clarify Japanese use of biological warfare, to make apology and to provide compensation. {Kyodo, AFP and Reuter 11 Aug} A similar compensation suit in regard to chemical warfare [see 9 Dec 96] is still before the court. So is another suit concerning BW-related experimentation on human beings by Unit 731 [see 3 Dec 96]. {*Mainichi Daily News* 14 Aug}

11–16 August In the UK, OPCW initial inspections take place at four more former chemical weapons production facilities [see 5-9 Aug] — the sites of the old CW-agent pilot-plants and factories at Sutton Oak, Nancekuke, Rhydymwyn and Randle {*Trust & Verify* Aug}.

12 August In Amman, the Council of Ministers decides that Jordan should join the Chemical Weapons Convention {*Petra-JNA* 12 Aug}.

12 August The US Defense Department issues a report concluding that it is unlikely that members of the 24th Naval Reserve Construction Battalion had in fact been exposed to CW agents near Al Jubayl in Saudi Arabia in January 1991 as they believed [see 20 Sep 96] {*Birmingham News* 14 Aug}. The report is the latest of the case narratives being produced by the Office of the Special Assistant for Gulf War Illnesses. It is released together with another case narrative, this one relating to a fragment said to have originated in a Scud missile that had been hit by a Patriot antimissile missile over Saudi Arabia on 19 January 1991, an incident which some have claimed resulted in exposure to CW agent. The report concludes from analysis of the fragment that it is unlikely that CW agents were present.

12–13 August In Arlington, Virginia, the Potomac Institute for Policy Studies, which is conducting a wide-ranging study of biological terrorism and ways to counter it, hosts a conference on the subject, *Strategic Firepower in the Hands of Many?*, with the participation of both governmental and non-governmental specialists. Project leader David Siegrist argues that the United States is failing to employ the power of its biotechnology and pharmaceutical industries to counter the growing threat of biological terrorism: “The US advantage in biotechnology needs to be leveraged, so that it outpaces the threat”. In particular, there needs to be increased funding for biomedical research into advanced countermeasures, an area in which there are as yet few investment incentives for private industry. Dr Stephen Morse, who is in charge of anti-BW work at the US Defense Advanced Research Projects Agency, notes that DARPA has increased its funding of research into the countering of biological weapons to a level of \$50-60 million; he describes some of the work, including tiny new biosensors [see also 19 Jun]. Dr Gordon Oehler, director of the CIA Counter Proliferation Center, differentiates

the new “small-country threat” in biological warfare from the more familiar “Soviet problem” which had hitherto dominated pre paredness. {*Nature* 21 Aug}

13 August US Defense Secretary William Cohen has once again [see 28 Apr] laid stress on the threat of biological weapons, in an interview published by *Jane's Defence Weekly*. He is quoted as saying that, during the 1990-91 Gulf War, there were serious concerns in the United States that the ventilation systems of buildings might be attacked by terrorists using BW agents. He has also said that scientists are “very close” to being able to produce “genetically engineered pathogens that could be ethnically specific”. Here he seems to be alluding to a new Defense Department study currently in draft which, among other things, addresses possibilities for “novel biological agents”. These include, in the words of *Jane's*, “Benign agents altered to produce a toxin, venom or bioregulator; Immunologically-altered agents to defeat standard identification, detection and diagnostic methods; Pathogens resistant to antibiotics, standard vaccines and therapeutics; Pathogens increasingly stable in the environment and in aerosol dispersion”. *Jane's* quotes the draft report as saying: “Each of these techniques seeks to capitalize on the extreme lethality, virulence, or infectivity of BW agents and exploit this potential by developing methods to deliver more efficiently and to control these agents on the battlefield.”

15 August The US Arms Control and Disarmament Agency releases the administration's latest annual report to Congress on arms control treaty compliance [see 7 Aug 96], covering the 13 calendar-month period ending 31 December 1996 {*Washington Times* 16 Aug, *Defense News* 25 Aug}. On the private bilateral US-Russian exchanges of data on chemical weapons agreed under the Wyoming memorandum of understanding [see 5 Sep 96], the report says that, after completion of the Phase II inspections in December 1994, “the two sides agreed, in order to contribute to CWC implementation negotiations, to issue a Joint Report on the results of the Wyoming MOU. Draft Joint Reports on implementation of the Wyoming MOU have been exchanged on several occasions. However, as of the date of this report, agreement has not been reached on the final text for the Joint Report to closeout the Wyoming MOU.”

In regard to the Biological Weapons Convention, the unclassified version of the report says, just as its predecessor did, that China, Egypt, Iran, Iraq, Russia and Syria either retain or are trying to acquire the capability to produce BW weapons. The wording on Russia is as follows: “Previous assessments of Russian compliance have highlighted the dichotomy between what appears to be the commitment from President Yeltsin and other members of the Russian leadership in attempting to resolve BWC issues and the continued involvement of ‘old hands’ in trilateral BW discussions [see 29 Mar 96], BWC negotiations and in what Russia describes as its defensive BW program. With regard to former Soviet biological weapon-related facilities, some research and production facilities are being deactivated and many have taken severe personnel and funding cuts. However, some facilities, in addition to being engaged in legitimate activity, may be maintaining the capability to produce BW agents. The Russian Federation's 1993-1996 BWC data declarations contained no new information and its 1992 declaration was incomplete and misleading in certain areas. With regard to the trilateral process that began in 1992, while there has been progress toward achieving the openness intended in the Joint Statement (which calls for a series of confidence-building visits and information exchanges), the progress has not resolved all U.S. concerns.”

Suspicious are levelled at Taiwan: "The United States believes that Taiwan has been upgrading its biotechnology capabilities by purchasing sophisticated biotechnology equipment from the United States, Switzerland, and other countries. The evidence indicating a BW program is not sufficient to determine if Taiwan is engaged in activities prohibited by the BWC." In Taipei, a spokesman for the Ministry of National Defense insists that there is no Taiwanese biological-weapons development programme, and never has been. {*Lien-Ho Pao* 17 Aug}

Denials are also made by Egyptian and Russian officials {*Defense News* 25 Aug}.

17 August South Korea has declared possession of chemical weapons to the OPCW, according to the *New York Times*. Later, a US National Public Radio correspondent reports that, as now required under the Chemical Weapons Convention, South Korea has "admitted to acquiring chemical weapons". His report continues: "In addition, France, Italy and Spain already destroyed their small stockpiles of poison gas before the treaty went into force in April". {NPR 25 Aug} Neither report identifies its source of information. Both also list China as having declared a chemical-weapons programme — a reference, presumably, to its Article V declaration [see 28 Jul].

18 August In Iraq, a ministerial committee has been established to investigate rumours of strange diseases linked to "chemical and biological explosions which occurred during the Gulf War" that have been affecting people, plants and animals, so the London newspaper *Al-Sharq al-Awsat* reports, attributing "informed Iraqi sources in Amman". The committee is to report to the presidency.

18–29 August In South Korea, *Ulchi Focus Lens '97* takes place: a large-scale annual ROK-US Combined Forces Command and civil-defence command-post exercise. This year it includes testing the country's preparedness against North Korean chemical-warfare attack. {*Korea Times* 15 Aug, *Pacific Stars and Stripes* 20 Aug}

Immediately prior to the exercise, publicity is given in the press to the menace of North Korean CW, with reports of a recent classified study, *Coral Breeze*, by the RAND Corporation. This study had reportedly concluded that North Korean chemical weapons posed a very serious threat against the South and against US forces based there. A report by the South Korean Joint Chiefs of Staff, said to draw from the study, has estimated that North Korea is capable of producing chemical weapons, in eight factories, at a total rate of 15.2 tons per day, increaseable to nearly 40 tons per day in wartime. The current stockpile is estimated at 1000 tons, perhaps more, of which 70 tons could be used immediately [see also 6 May]. A JCS official says: "We believe that the North has no qualms about using chemical weapons and they will use long range field pieces, missiles and all means available to deliver massive amounts of poisonous gas to our population centers and military positions. The South Korean government is mapping out an anti-chemical weapons strategy which will include bunkers and an early-warning system to protect civilians." {*Korea Times* and *Korea Herald* 18 Aug, *London Daily Telegraph* 19 Aug}

19 August Moscow television carries a special report on how the health of people living in the Penza Region is threatened by secret burials and lake-dumpings of discarded chemical weapons that had taken place during 1968-85.

25 August Israel is building "an advanced chemical weapons plant" in the Negev desert at Adon, near a phosphate-processing plant, according to the Cairo weekly *Rose al-Yusuf*, quoting

an unidentified source in the Egyptian Atomic Energy Agency. The plant is said to be Israel's fourth, the others being at the Technion Institute in Haifa, at Ramad Hof 17 km from Beer-sheba, and at the Weizmann Institute.

25–27 August In Geneva, the Cuban biological-warfare allegation against the United States [see 30 Jun] is the subject of a formal consultative meeting of states parties to the Biological Weapons Convention, 74 of which participate, as well as 3 states signatories. The meeting, closed to the public, is chaired by Ambassador Ian Soutar, who has today succeeded Ambassador Michael Weston as head of the UK delegation to the Conference on Disarmament, assisted by six vice-chairs, from Brazil, Canada, Iran, the Netherlands, Nigeria and the Russian Federation. The principal documents — long since distributed as UN General Assembly papers: A/52/158 and A/52/213 — are those of Cuba, setting out the circumstances of the thrips infestation and relating that to the movement of a US aircraft over the affected region. Cuba, with a delegation headed by Deputy Foreign Minister Maria de los Angeles Flores, introduces the case. The US delegation, headed by Donald A Mahley, responds. Both delegations make further presentations later in the day and provide additional materials. The participants ultimately agree that states parties should submit written views on what had been presented during the consultative meeting, including comments from technical experts if they so choose, by 27 September; these would be reviewed for a chairman's report which Ambassador Soutar, in consultation with the six vice-chairs, would prepare and deliver by 31 December. These arrangements are set out in the agreed report of the meeting, BWC/CONS/1, which is issued on 29 August.

Ambassador Soutar tells reporters that, so far, two facts have been verified: "It became clear that there had been a flight on the date alleged, and at the time alleged. There was also, regrettably, a considerable infestation in the territory of Cuba." He says that the meeting had not found it possible to draw "a direct causal link" between the two. Minister Maria de los Angeles Flores says that her government was "satisfied" with the manner in which its complaint had been handled and would now be examined further. {*Los Angeles Times* 26 Aug, UPI 27 Aug, *Prensa Latina* 28 Aug}

Interviewed live on Radio Havana after the first day of proceedings Minister Flores says: "Since there is no verification mechanism approved, there is no precedent. ... What most delegates support is the convenience to take measures to clarify this situation. If a group of experts was named to investigate, these experts would have to inform member states later of their conclusions. But there is nothing final on this. ... The important thing is that the meeting is being held, that Cuba's report is being examined, that we have had the chance to present all our arguments, all the elements we have to support what we denounced. The United States has affirmed in its defense that the plague may have entered the country naturally, because there are other Caribbean nations — such as Haiti and the Dominican Republic — which have this plague. But that can be refuted easily because ...the plague would have appeared in the eastern provinces, not 600 km away from that area, which, by the way, is the area over which this US aircraft flew." {Radio Havana 26 Aug}

26 August The Japanese government decides to establish a new group in the Cabinet Secretariat to oversee and expedite the disposal of the Japanese abandoned chemical weapons in China, so Chief Cabinet Secretary Seiroku Kajiyama later informs reporters. The new liaison conference will be chaired by Deputy Chief Cabinet Secretary Teijiro Furukawa and will in-

clude bureau chiefs from the Foreign Ministry, the Defence Agency and other government bodies. {Kyodo 18 and 26 Aug}

27 August North Korea is continuing to transfer chemical and biological weapons to Iran, according to the Israeli Ambassador to South Korea, Arik Arazi, speaking to reporters in Seoul {Voice of Israel 27 Aug}.

28 August In Russia, the Chairman of the Duma International Affairs Committee, Vladimir Lukin, has spoken of the prospects for Russian ratification of the Chemical Weapons Convention in an interview now published in *Krasnaya Zvezda*. He says that ratification, which he regards as "quite possible", will confront the executive with a heavy funding problem. He continues: "Other financial problems involved in the ratification include the reception of international inspection teams, the destruction or, still better, conversion of the factories making chemical weapons to civilian production, &c. There are also environmental and ecological problems. That is why I believe that the ratification, if it indeed takes place, will be accompanied by certain reservations linked primarily with our domestic problems. However, I think that the Convention will eventually be ratified because otherwise the outside world would think that Russia is against chemical disarmament."

28 August In France, the Ministry of the Interior announces that it is going to build the country's only disposal site for chemical weapons. This follows a number of accidents at locations where unearthed munitions, including World War I chemical munitions, are kept, often poorly guarded. {*Guardian* 29 Aug}

28 August The US Defense Department issues a report about a US soldier, Private David Fisher, who had suffered skin burns in Iraq after searching an abandoned Iraqi bunker near the Kuwait border on 1 March 1991. The report recounts available evidence and concludes it likely that Private Fisher had been exposed to mustard gas. The report is the latest in the series of case narratives [see 12 Aug] being produced by the Office of the Special Assistant for Gulf War Illnesses. {*Richmond Times Dispatch* 29 Aug}

28 August In the United States, Sandia National Laboratory opens a new ultrasecure Center for National Security and Arms Control. This will be used for the development of verification technology, of security systems for nuclear materials, and of satellite systems capable of detecting and characterizing emissions associated with the manufacture of nuclear or CBW weapons. The new Center will also be used for collaborative projects with scientists from the former Soviet Union. {*BMD Monitor* 5 Sep}

28–29 August In Moscow, the member of the European Commission who is responsible for contacts between the European Union and countries of eastern and central Europe and the Commonwealth of Independent States is on an official visit. The commissioner, Hans van den Broek, who is in charge of the TACIS programme [see 2 Aug], tells a news conference that the EU is seeking to increase the effectiveness of this programme in key directions and has now earmarked more than 1.2 bn ECU (about \$1300 million) for TACIS projects. He says that a new TACIS project having to do with the Russian chemical-weapons industry is being planned, but adds that its implementation will depend on whether Russia ratifies the CWC. {*ITAR-TASS* 29 Aug and 2 Sep}

29 August In Japan, the Supreme Court rules that it was unlawful of the Ministry of Education to have ordered the deletion of references to the 1935-45 Army BW organization, Unit 731

[see 3 Dec 96 and 21 Jun], from a history textbook submitted to the Ministry's Textbook Authorization Research Council in 1983. The deletion had been ordered on the grounds that it was premature to mention Unit 731 in a school textbook because of a lack of "credible scholarly research". This contention is now expressly rejected in the 3-1 decision by the Court, which rules: "While Unit 731 has not been revealed in its entirety, the existence of such a unit within the Japanese Imperial Army with the purpose of conducting germ warfare, and that the unit conducted live experiments on many Chinese and others, was accepted by the academia at the time". {Kyodo and Xinhua 29 Aug, *Seattle Times* 29 Aug, *International Herald Tribune* 30-31 Aug} A press report from Tokyo states that these "experiments were documented, translated into English and are on file in the United States Army's archives" {London *Daily Telegraph* 30 Aug}. The lawsuit had originally been filed in 1984 by the historian concerned, Professor Saburo Ienaga, who had been fighting Ministry deletions from his textbooks since 1965. The Supreme Court does not, however, support his appeals against seven other revisions ordered by the Ministry, nor does it rule in favour of his primary contention, that government screening of school textbooks prior to publication is unlawful. {*International Herald Tribune* 29 Aug and 3 Sep, London *Guardian* 30 Aug}

29 August The Biological Weapons Convention now has 140 states parties and 18 other states signatories, according to a paper prepared by the secretariat of the Ad Hoc Group of states parties {BWC/AD HOC GROUP/INF.11}.

1 September Within NATO, a decision is taken to convene a group of national experts to formulate political guidelines for the deployment and use of nonlethal weapons [see 6 May] during peacekeeping and war operations. According to *Defense News* {28 Sep}, the group will work during the first half of 1998.

1 September From Washington, a systematic account of the present state of chemical-weapons proliferation is published in *Bulletin of the Atomic Scientists* {Sep/Oct} by E J Hogendoorn of Human Rights Watch, who quotes from hitherto classified US sources obtained, often heavily 'sanitized', through the Freedom of Information Act. Hogendoorn argues that secrecy in this field is misguided "because it keeps the public ignorant of the true extent of the proliferation problem and allows states that have or are developing chemical weapons to continue to manufacture and stockpile them". His study addresses reports of chemical weapons programmes in Egypt, Israel, Syria, Iran, Iraq, Libya, Saudi Arabia, North Korea, South Korea, India, Pakistan, China, Taiwan, Burma, Vietnam, the former Yugoslavia, Romania, the former Czechoslovakia, France, Bulgaria and South Africa. Among the sources of information cited is a 1990 DIA study, *Offensive Chemical Warfare Programs in the Middle East*, which refers to a production facility in Egypt and a testing facility in Israel; which states that Syria received chemical weapons from Egypt in the 1970s and began indigenous production in the 1980s, its storage depots for the weapons being located at Furqlus and Khan Abu Shamat; and which describes the Iranian programme as a response to Iraqi use of chemical weapons during the Iraq-Iran War, by the end of which it says that Iran had fielded phosgene and mustard gas. Other DIA documents used are *Chemical Warfare Assessment Romania* (1995), which identifies chemical-weapons research, production and storage facilities in Romania [see also 22-26 Aug 94 and 22 Sep 94], and *Chemical Agent Threat Current and Projected* (1995), which states that Bulgaria has a stockpile of chemical munitions of Soviet origin. Hogendoorn also cites a 1978 report, *Chemical and Biological Capabilities NATO Countries (France, Italy & West Germany)*, which concluded that

France had produced a number of chemical agents and munitions, including aerosol bombs.

1–4 September In The Hague, the OPCW Executive Council [see 28 Jul–1 Aug] convenes for its fourth session. Council papers continue to be excluded from public distribution, but the subsequent Secretariat press-release (9 Sep) notes what the Director General reports on the status of implementation of the CWC [see also 28 Jul]. Approximately 30 percent of initial declarations by states parties are still outstanding, while some of those that have been received are incomplete. A total of 66 inspections has now been launched, including ongoing and permanent monitoring at 2 chemical-weapons destruction facilities.

Another matter discussed by the Council at length is the lateness of “a significant number” of states parties in paying their assessed contributions to the costs of the Organization. The Council reaches a provisional agreement to set a ceiling-rate of 25 percent and a floor-rate of 0.01 percent on individual contributions to the 1997 budget of NLG 89 million (about US \$43 million). The underlying fact of the matter, not expressly referred to in the Secretariat press-release, is that the United States, which is currently assessed at 27.4 percent, is in arrears, and that unless it pays its dues forthwith the Technical Secretariat will be obliged to halt inspections later in the month. The US has reportedly been withholding all of its assessment, even though the necessary funds have been duly authorized and appropriated, on the grounds that the US Congress is now insisting that the US pays no more than 25 percent of the costs of any international organization to which it belongs. {*Jane's Defence Weekly* 3 Sep, *US News & World Report* 22 Sep}

3 September Syria is “within months” of starting production of chemical submunitions for warheads of Scud-C missiles, according to unidentified officials of the US Ballistic Missile Defense Organization quoted in *Jane's Defence Weekly*. An unidentified Israeli security expert quoted by *Ha'aretz* says that the new warheads represent an “extremely dangerous” threat to Israel, adding: “Syria has started on an insane arms race” (AFP 4 Sep).

Israeli Defence Minister Yitzhaq Mordekhay subsequently says, during a special Jewish New Year interview: “I regret these reports because there is nothing new in the reports that Syria possesses long-range missiles nor in the reports that various types of threat emanate from Syria. At the same time, Syria and all those who support it or abut it know very well that Israel and its security forces are extremely powerful. Syria today has no allies to start confrontations, and to the best of my understanding, Syria's preferred option is to reach a dialogue rather than a confrontation. All this leads me to the conclusion that tensions are declining rather than increasing.” (IDF Radio 30 Sep)

3 September Qatar deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thus become the 99th state party to the treaty.

4 September In Beijing, Chinese foreign affairs spokesman Shen Guofang categorically denies a report that China is the most active supplier of materials and technology to the nuclear and CBW weapons programmes of Iran (AFP 4 Sep). The report, in the *Washington Times* (2 Sep), is attributed to a recently released study of worldwide maritime challenges by the US Office of Naval Intelligence.

4 September Israel, through the Director-General of its Ministry of Foreign Affairs, Ambassador Eitan Bentsur, informs the Conference on Disarmament in Geneva that it will not now be

ratifying its signature of the Chemical Weapons Convention. The day previously, Israel Defence Forces Radio had reported that Bentsur would, to the contrary, be announcing Israeli ratification. Prime Minister Netanyahu's special committee on the question [see 23 Jul] thus seems to have completed its work. There is reported to have been a perception that the US Congress would be sympathetic to Israeli hesitancy about ratifying the CWC. {*Jerusalem Post* 15 Aug}

In his statement, Ambassador Bentsur welcomes the entry into force of the treaty and says: “Our signature of the Convention and the subsequently active role we took in the joint endeavour to craft it into workable mechanisms reflect in general Israel's vision of the world in which it wishes to exist and prosper — in particular its continuing interest, which is shared by many other countries, to preserve the Convention's core balance between a State's duty to demonstrate compliance and its right to protect itself from intrusive and abusive encroachment on its security and its commercial and proprietary interests. By signing the Convention, Israel signalled its hope that others in its region will soon follow suit.” Later he says: “Israel is aware of, indeed it welcomes, the fact that certain Arab states have signed, and that some have even ratified the Convention. However, it is unfortunately also a well-known reality that none of the CW-capable or suspected CW-armed Arab states have signed, let alone ratified, the Chemical Weapons Convention. Indeed, key non-signatory Arab states have indicated collectively that they would not change their position even if Israel ratifies the Convention. Among them are countries which in the past have resorted to actual use of chemical weapons and which are believed to be developing capabilities in this field, even as the world is pledging to forsake and eradicate for ever all chemical weapons. From Israel's perspective, not only have CW threats against it not receded in recent years, but they have even gained in saliency and acuteness.” He then repeats what Israel told the First Session of the Conference of the States Parties [see 7 May]: “What I have described, therefore, must not necessarily be construed as prejudging the outcome of a future Israeli decision on the matter of the ratification, or of the continued Israeli support for the Convention. Favourable changes in the security climate will, of course, favourably affect Israel's attitude on the ratification issue.” {CD/PV.777}

4 September In Moscow, *Rossiyskaya Gazeta* publishes a long article arguing that the United States is pushing UNSCOM into minute scrutiny of Iraq's BW capabilities so as to be able “to remove all materials confirming the US involvement in the establishment in Iraq [during the early 1980s] of dual-use industrial biotechnologies”. The article makes no mention of Soviet or Russian biological weapons, yet it adds: “Incidentally, the Americans are showing a similar desire to conduct Iraqi-style familiarization visits and inspections in respect of Russia's biological facilities too. Clearly one can agree with the experts who believe that the United States is making deliberate efforts to destroy Russia's national biotechnology sector above all.”

4–5 September In Alexandria, near Washington, the US Presidential Advisory Committee on Gulf War Veterans' Illnesses convenes for its final meeting. Among the testimony it hears is a preliminary estimate from the Central Intelligence Agency that the plume of mustard gas released during the bombing of an Iraqi ammunition depot at Ukhaydir in February 1991 [see 29 Jul] “did not reach Saudi Arabia, much less any of our troops”. {*Richmond Times-Dispatch* 5 Sep}

The committee is now working on its final report, the draft of which reportedly recommends that oversight of the administration's investigation of Gulf War illnesses now be

taken away from the Defense Department and assigned instead to a "permanent statutory program", perhaps run by the US Institute of Medicine. The committee is said to have been particularly dismayed by the initially dismissive, and then dilatory, behaviour of the Defense Department in assessing evidence regarding exposure to CW agents. {*Chemical & Engineering News* 15 Sep} Defense Secretary William Cohen takes issue with this still-impending criticism: "If you look at what has happened in the past year, you will see an extraordinary effort" {*New York Times* 26 Sep}.

4-7 September In China, Japanese Prime Minister Ryutaro Hashimoto is on an official visit. Japanese officials say that he pledges to Chinese Prime Minister Li Peng that Japan will expedite the disposal of Japanese chemical weapons abandoned in China [see 26 Aug] at the end of World War II. {*Kyodo* 4 Sep} Press commentary preceding the visit had expected that final agreement would have been reached by now, including agreement on how to involve foreign expertise and on a deadline for completion {*London Times* 23 Aug} One Japanese authority, Professor Keiichi Tsuneishi, has been quoted thus: "The total amount of poison gas involved should be around 2,000 tons at most. It is not impossible to dismantle all the poison-gas shells within the 10-year time limit set by the Chemical Weapons Convention." {*Kyodo* 15 Aug} He has also been quoted as saying, presumably in reference to different assumptions about available technology: "The whole operation could take 100 years or more" {*London Times* 23 Aug}.

5 September In Prague, US microbiologist and Nobel laureate Joshua Lederberg, addressing *Forum 2000*, states that new kinds of bacteria and, especially, biological weapons represent the greatest threat to humankind in the next century. He calls on conference participants to reject, in an efficient way, the development of biological weapons and to support branches of science that deal with biology. {CTK 5 Sep}

5-9 September UNSCOM Executive Chairman Richard Butler is in Iraq for another round of high-level talks [see 21-25 Jul]. He is accompanied by a team of seven experts including his deputy Charles Duelfer and ballistic-missile expert Nikita Smidovich. {*Reuter* 7 Sep} At the closing press conference he describes the talks as "vigorous ... very direct, and very frank", continuing: "We focused in particular on the results of the work programme [agreed in July] and we are very satisfied with some of the results that we have obtained, in particular in the missiles and chemical weapons areas". A new full, final and complete declaration on biological weapons will be furnished by the Iraqi government "within the next 48 hours". He also says that the talks had addressed "special warheads that were produced in the past, possibly filled with chemical and/or biological agents". He adds: "We had a well-focused discussion on how many warheads were there, what did they contain and where are they now? And we made good progress in that area." {*AFP* 9 Sep}

UNSCOM later reports that, during the talks, Ambassador Butler had proposed that the impending biological-weapons FFCD, and the FFCDs on other weapons programmes that had already been submitted to UNSCOM, should now be regarded as final — in other words that UNSCOM would offer no further assistance on their content. UNSCOM would now proceed to seek to verify the FFCDs, as its mandate required. Iraqi Deputy Prime Minister Tariq Aziz had accepted this approach. {S/1997/774}

6-14 September In Zimbabwe, a course for personnel of CWC National Authorities is given in Harare by the OPCW Technical Secretariat {*ASA Newsletter* 17 Oct}.

8 September In Switzerland, UN Secretary-General Kofi Annan pays an official visit to AC-Laboratorium Spiez, the nuclear and CBW defence laboratory of the Federal Department of Defence.

8 September From the US Defense Department, a team lead by the Special Assistant for Gulf War Illnesses, Dr Bernard Rostker, departs on a 12-day fact-finding trip to France, the Czech Republic and the UK. A draft OSAGWI case narrative [see 28 Aug] on the Czech-French CW-agent detections during the Gulf War that is currently in internal review will be finished after the trip. {*GulfLink Backgrounder* 9 Sep} In Britain, the primary interest will be the local research into possible links between Gulf illnesses and exposure to organophosphate pesticides [see 20 Mar] {*AFP* 5 Sep}. Also planned are visits to Israel, Kuwait and Saudi Arabia to investigate impacts of Scud missiles during the war {*Jane's Defence Weekly* 13 Aug}.

8-9 September At Cheboksary, in the Chuvash Republic of the Russian Federation, a conference on chemical weapons, *Medical and Ecological Consequences of Chemical War Preparation, and the Protection of the People during CW Disposal*, is convened by the Union for Chemical Safety {*TASS* 8 Sep}.

8-11 September In Latvia, at the Adazi Training Centre near Riga, the NATO Partnership for Peace exercise *Cooperative Best Effort 97* takes place {*Reuter* 8 Sep} and, at one of the situational training exercise stations, chloropicrin is used to simulate chemical contamination and to force the use of gas masks. Chloropicrin is a CWC Schedule 3 chemical that was used during World War I as a lachrymatory and asphyxiating CW agent. A release from the Public Affairs Office of US Army V Corps {CIB10-97-01} says: "Once NATO officials at the site learned this riot-control [*sic*] compound was being used on the initiative of one station monitor, the practice was immediately halted. Notifications to all countries were made and no soldiers at the ADAZI Training Site have identified any health problems to date."

9 September In Seoul, *Choson Ilbo* publishes figures from an unidentified South Korean military analysis of the possible effects of CW attack on the city: "[I]n the event that North Korea launches a surprise attack on about 10 places in densely populated areas in Seoul, including Seoul Railway Station and Kangnam Bus Terminal, with a bomb-carrying aircraft with chemical warheads or with about 10 rounds (two tonnes) of FROG rocket, approximately 200,000 citizens will be either killed or injured, if they do not wear gas masks. ... [O]ut of all casualties, deaths will account for 50 percent, the seriously wounded for 30 percent, and the slightly injured for 20 percent. The damaged areas will extend to 300 hectares." In the event of heavier attacks, which could cause much heavier casualties, an official is quoted as stating that "in case the citizens wear gas masks, damages will be reduced to one-tenth or one-twentieth". Government guidance to citizens on the acquisition of gas masks is currently being prepared, and may be issued in the coming year. {*Korea Times* 12 Sep}

9 September The US National Research Council publishes a study requested by the Army, *Risk Assessment and Management at Deseret Chemical Compound and the Tooele Chemical Agent Disposal Facility*. Done by the NRC Committee on Review and Evaluation of the Army Chemical Stockpile Disposal Program, the study concludes that incinerating chemical weapons in TOCDF over the next 10 years would be less risky to human health and the environment than continued storage. It thus concurs with earlier risk assessments that had been dis-

puted by opponents of chemdemil incineration, notably the Chemical Weapons Working Group coalition. {*Salt Lake Tribune* 10 Sep} CWWG spokesperson Craig Williams comments: "It's like giving citizens the choice of leaping off a 200-foot cliff or jumping in front of an oncoming truck: neither choice is acceptable, but when forced to choose, one may seem more reasonable, even safer" {*Hazardous Waste News* 15 Sep}.

10 September From the Russian State Duma, a delegation visits The Hague for talks with OPCW Director-General José Bustani and to visit the premises of the Technical Secretariat, including the inspectorate. The delegation is led by International Affairs Committee chairman Vladimir Lukin. {OPCW press release 16 Sep}

10 September A US Defense Science Board panel has just been drafting preliminary findings from the only DSB summer study this year, *DoD's Response to Transnational Threats*. The panellists are reportedly saying that the Defense Department is ill-prepared to counter many of the asymmetric threats [see 19 May US] which military planners believe pose some of the greatest dangers to US security. Nevertheless, they say, with the right approach and sufficient political will, the threats could be greatly reduced. A tentative proposal is the development of a new architecture in which Special Operations Forces are assigned more of the defence, in view of their existing critical role against adversary weapons of mass destruction. Such a broadening of Defense Department involvement in civil emergencies would require substantial new legislation. The DSB study is due for completion later this year or early next. {*Jane's Defence Weekly* 10 Sep, *Defense Daily* 8 Oct}

10–20 September In Iraq, UNSCOM conducts a further non-resident CW inspection, CW 42 (UNSCOM 203). It is linked to BW 55 (UNSCOM 199) to form a joint CBW mission inspecting a number of military sites suspected of having involvement in proscribed activities, but does not proceed smoothly. UNSCOM later reports {S/1997/774} that, on "three different occasions at three different sites, inspection team members recorded evidence of the removal or movement of documents and records and the destruction of documents. These events occurred inside so-called sensitive sites while the team was waiting to be allowed to enter." Further, UNSCOM reports that one of the joint team members "was manhandled on board the Commission's helicopter while he was attempting to take photographs of the unauthorized movement of Iraqi vehicles inside a site that was designated for inspection. Iraq again violated the modalities for the inspection of sites declared sensitive by Iraq [see 11 Apr] in that it did not freeze movement inside the site following the arrival of the inspection team and the declaration of the site as sensitive. The limited-entry team of four inspectors further reported evidence that documents had been moved in or removed from the inspection site, also in violation of the modalities." This episode took place on 13 September at Tikrit military barracks {*London Guardian* 11 Nov}. The third episode is on 17 September, when the combined team sought to inspect a location in central Baghdad: "Iraq declared the site sensitive and the team was delayed from entering the facility for 50 minutes while awaiting the arrival of a high-level Iraqi representative. During this delay inspectors witnessed and videotaped the movement of files, the burning of documents and dumping of ash-filled waste cans into a nearby river." This episode takes place the day after UNSCOM Executive Chairman Richard Butler addresses to Iraqi Deputy Prime Minister Tariq Aziz a letter of protest concerning the two earlier episodes. {S/1997/774}

11 September In Baghdad, the Iraqi government furnishes UNSCOM with the new full, final and complete disclosure of its past biological-weapons programme [see 5-9 Sep] {S/1997/774}. The new FFCD comprises 629 pages according to an official of the UNSCOM Ongoing Monitoring and Verification Centre (Reuter 11 Sep).

12 September In Sudan, a chemical-weapons factory is under construction near Abu Doum, south of Khartoum [see also 28 Jun], according to *The Indian Ocean Newsletter* published in Paris. Soon afterwards, Colonel John Garang, leader of the Sudanese People's Liberation Army, is quoted as saying that when the SPLA captured the town of Rumbek on 1 May it had found 250 gas masks. He also says: "We have pictures of our wounded soldiers after the battle in Yirol in June which [show] that chemical bombs were used against us". These allegations of chemical warfare are dismissed by Ali Sadaq, counsellor at the Sudanese embassy in Nairobi. {*Africa News* 21 Sep}

12 September Guyana deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thus become the 100th state party to the treaty.

12 September From Wilmington, Delaware, the DuPont Company and the Russian firm AO Khimprom of Novocheboksarsk announce their intention of forming a joint venture company, DuPont Khimprom, to produce and market crop-protection chemicals, initially sulphonylurea herbicides. The new operation is to be developed in a number of phases with an initial investment of around \$10 million. None of the Khimprom buildings or equipment at Novocheboksarsk which are to be involved in the joint venture are among those that had, in earlier times, been used for chemical-weapons production [see 27 May 96 and 4 Feb]; DuPont announces that it had engaged Science Applications International Corporation to ascertain, through detailed inspection, that this was indeed so. {*Wall Street Journal* 12 Sep}

14 September In the United States, on CNN television, Major General John Singlaub (US Army, retired) states that incapacitating chemical weapons had, at his request, been supplied to the secret forces — SOG (for Studies and Observations Group) teams — operating under his command during the Vietnam War. The weapons included gas canisters and paralyzing darts. He says that the effects of the chemicals were sometimes lethal. CNN reports the Defense Department as confirming that SOG teams had ready access to agent BZ.

15 September In Jordan, the Council of Ministers approves Jordanian accession to the Chemical Weapons Convention [see 12 Aug] {*Amman Al-Ra'y* 15 Sep}.

15 September–3 October In Geneva, the Ad Hoc Group of states parties to the Biological Weapons Convention reconvenes [see 14 Jul–1 Aug] for its eighth session. Participating are 58 states parties, of which all but Bolivia, Ghana, Iraq, Malta, Panama, Sri Lanka and Viet Nam had participated in the seventh session, and three signatory states (Burma, Egypt and Morocco). Seventh-session participants not participating in the eighth are Armenia, Costa Rica and Senegal. Ambassador Tibor Tóth of Hungary continues to chair the group, assisted now by seven Friends of Chair — the two new ones being Ambassador Günther Seibert of Germany (confidentiality issues) and Mr Ajit Kumar of India (national implementation and assistance). On measures to promote compliance, Richard Tauwhare of the UK takes over from Ambassador Weston, who

has now retired. From the UN Centre for Disarmament Affairs, Dr Oguniola Ogunbanwo continues as Secretary, with Vladimir Bogomolov and Iris Hunger continuing to assist the Friends of the Chair. National delegations submit some 27 working papers. The Group also has before it the August version of the Rolling Text for the projected legally binding instrument. At the conclusion of the session, the Group agrees a report {BWC/AD HOC GROUP/38} to which a new version of the Rolling Text is attached as Annex I. The report also records agreement that there should be three three-week sessions and one two-week session during 1998, possibly followed by further meetings in 1999. [For further details see *Progress in Geneva*, above.]

17 September In Moscow, the Chernomyrdin-Gore Commission working group on chemical weapons [see 25 Feb] completes a new session, and will be submitting a joint report to the Commission. As before, the Russian team is led by Russian Defence Council Secretary Yuriy Baturin, who chairs the Inter-departmental Commission for Chemical Disarmament, with USACDA Director John Holum leading the US team. Interfax, which has interviewed the leaders of both teams, reports that they are pleased with the progress achieved. However, it quotes Secretary Baturin as saying that on some issues, including that of former chemical weapons production facilities, the two sides “somewhat differed”. Director Holum is quoted as saying that Russia will get more money from the United States and other countries to carry out concrete projects to destroy chemical weapons, once Russia ratifies the CWC. {Russia TV 16 Sep, Interfax 17 Sep}

17 September The UN Security Council is briefed by UNSCOM Executive Chairman Richard Butler and then, through its president, expresses “grave concern” over recent incidents in which Iraqi officials had hindered an UNSCOM joint CBW inspection [see 10-20 Sep]. The Iraqi representative, Ambassador Nizar Hamdoon, describes the incidents as “a small logistical problem”. The President of the Council, Ambassador Bill Richardson of the United States, says that the Council will await the full UNSCOM report due next month before deciding on any further response. This is the regular six-monthly report which will, however, also include the special report on Iraqi coöperation with UNSCOM required under the resolution — SCR 1115 (1997) — which the Council had adopted after the incidents of blocked site-access during the summer [see 21-24 Jun]. {AP 17 Sep}

The following week, another UNSCOM inspection — the 8th Concealment Investigation Mission (UNSCOM 207) — is denied access to three sites {S/1997/774}. The sites are described by Iraqi authorities as “presidential/residential” {AFP 5 Oct}.

17 September The US House of Representatives adopts FY 1998 appropriations legislation for the Departments of Labor and Health and Human Services which, in contrast to the Senate version of the legislation, includes express provision for new funding of research into Gulf War illnesses. During passage of the bill, the sponsor of the amendment which resulted in this provision, Rep Bernard Sanders, described at length dissatisfactions voiced against the Defense and Veterans Affairs Departments’ investigations. {*Congressional Record* 10 Sep E1711} The bill would provide \$1.1 million in FY 1998 funding, and \$7 million over five years, for research by the National Institutes of Environmental Health Sciences and the Centers for Disease Control and Prevention {*Congressional Record* 17 Sep H7484-5}.

17–18 September OPCW Director-General José Bustani is in Moscow for talks with Russian Foreign Minister Primakov and

with other officials of the government and the State Duma. TASS {18 Sep} quotes him as telling a news conference that the purpose of his meetings had been to discuss terms of ratification of the CWC by the Russian State Duma. TASS also reports the Director-General as having expressed confidence to Deputy Foreign Minister Georgiy Mamedov that, after a successful ratification of the Convention, Russia would receive large-scale international economic aid for its implementation. On the day following, the Director-General is in Kyiv for similar meetings with Ukrainian officials. {OPCW press release 22 Sep}

18 September In Moscow, the Institute of World Economy and International Relations (IMEMO), the Carnegie Moscow Center, and a Swiss organization, the Forum Ost-West [see 17-18 Feb], jointly host an invitation-only conference, primarily for people from the administrative and legislative branches of the Russian government, *Russia on the Road to Ratification of the CWC*. The conference is co-chaired by the Deputy Chairman of the Duma Defence Committee, Dr Alexei Arbatov, and Dr Alexander Piskunov, department head in the Office of the Russian Government. The keynote speakers are OPCW Director-General José Bustani and Duma International Affairs Committee Chairman Vladimir Lukin. Other speakers include the US Deputy Assistant to the Secretary of Defense for Cooperative Threat Reduction, Maj-Gen (ret) Roland Lajoie, and Duma Ecology Committee Chair Tamara Zlotnikova. {*Nezavisimiya Gazeta* 17 Sep}

18 September Russian officials, in private bilateral talks with US counterparts, confirm some but not all of the latest allegations that Russian companies are directly assisting Iranian state entities by providing commodities and skills needed to advance the Iranian long-range (up to 2000 km) missile programmes beyond their North Korean *No Dong* beginnings [see 8 Apr 93 and 13 Jan 94]. They agree to try to shut off the transactions which they have thus acknowledged. {*International Herald Tribune* 3 Oct} A week previously, the *Washington Times* {10 Sep} had reported these allegations in some detail, noting that the two *Shihab* missile systems in question would be capable of delivering CBW weapons, and attributing the information to an Israeli intelligence report on which Washington had been briefed in February. The *Shihab-3* missile is said to be modelled on the old Russian SS-4 Sandal (NATO designation) missile {*Jane’s Defence Weekly* 5 Nov}. Iran has rejected the allegations altogether {London *Guardian* 16 Sep}.

18 September The US Navy has awarded a contract to Mace Security International (which acquired Federal Laboratories Inc in 1994) for a series of 40-mm less-lethal cartridges. The contract will generate \$2.645 million in revenue if all options are exercised over its 5-year term. {PR Newswire 22 Sep}

19 September The Georgian Parliament ratifies a bilateral military coöperation agreement with the United States which would, among other things, ban any unauthorized transportation of nuclear or CBW weapons through Georgia {AFP 17 Sep, RFE/RL 19 Sep}.

20–21 September In Geneva, the Pugwash Study Group on Implementation of the CBW Conventions holds its eighth workshop [see 6-8 Jun], on *Strengthening the Biological Weapons Convention*. Participating are 47 people from 20 countries, including several participants in the work of the BWC Ad Hoc Group [see 15 Sep–3 Oct].

22 September In Geneva, the Quaker United Nations Office, in conjunction with the University of Bradford Department of Peace Studies, hosts a meeting within the UN building for representatives of states parties to the Biological Weapons Convention at which two further Bradford briefing papers [see 23 Jul] are presented, one on *The Necessity for Non-Challenge Visits*, the other on *Discriminating Triggers for Mandatory Declarations*. The series is edited by Dr Graham Pearson and Professor Malcolm Dando. The meeting is attended by 55 people from 37 delegations.

22–24 September In Moscow, the Intergovernmental Russian-US Commission for Economic and Technological Cooperation co-chaired by Russian Prime Minister Viktor Chernomyrdin and US Vice-President Albert Gore reconvenes [see 5-7 Feb] for another of its twice-yearly sessions. The lengthy agenda for this ninth session includes the questions associated with Russian ratification of the CWC [see 17 Sep]. {*New York Times* 22 Sep}

22–26 September In Iraq, there is a further UNSCOM chemical mission, CW 41 (UNSCOM 202) {S/1997/774}. An official of the Iraqi National Monitoring Department later states that the purpose of the mission had been “a final assessment of what was already reached in Iraq regarding the production of VX ... Seven sessions were held, during which a full understanding was reached on the actual situation regarding this activity since it first began until the war broke out on 16th January 1991.” {Iraqi TV 3 Nov in BBC-SWB 5 Nov}

23 September The US Defense Department has just issued two further case narratives [see 28 Aug] on specific events during the Gulf War possibly associated with chemical weapons. One addresses the several supposed detections of CW agents during the 24-26 February 1991 Marine Corps operations to retake Al Jaber air base in Kuwait. Most of the detections were by the MM-1 instrument mounted on Fox NBC reconnaissance vehicles, an instrument which can give false positives for a variety of different chemicals, including “friendly artillery smoke”. None of the detections were confirmed when M256 kits were used. The tentative assessment is that the presence of CW agents was unlikely. {www.gulflink.osd.mil/aljaber} The other case narrative concerns reported detections of CW agents at an Iraqi ammunition supply point in an orchard southwest of Kuwait City. These, too, are assessed as “unlikely”. {www.gulflink.osd.mil/asporchard}

23–25 September In the United Kingdom, the Defence Evaluation and Research Agency conducts a roadshow in three southwestern towns to explain to the local populace the BW defence trials that had secretly been conducted over Dorset in the 1960s and 1970s, and of which there had recently been press accounts. DERA states that some of these trials involved open-air releases of nonpathogenic bacterial simulants of BW agents, namely the MRE 162 strain of *Escherichia coli*, *Bacillus globigii*, and two species killed before use — *Bacterium aerogenes* and *Serratia marcescens*. These releases were from Lyme Bay by aerosol generator mounted on a specially adapted experimental trial vessel, the *Icewhale*, during the period 1963-1977 for a variety of purposes, initially to establish how clouds of dispersed bacteria would survive and travel in the open air. {*Dorset Evening Echo* 24 Sep, *Western Morning News* 1 Oct} These trials were in addition to aircraft releases of BW-agent simulants over parts of the UK between 1959 and the late 1960s {London *Sunday Telegraph* 16 Nov}.

25 September In Amman, agents of the Israeli secret service Mossad are captured by Jordanian police after using a chemical weapon to attack Khalid Mish'al, head of the political bureau of the Islamic militant group Hamas. Subsequently the Mossad agents involved in this failed assassination are released after a deal between the Jordanian and Israeli governments in which Israel provides a full accounting of how the attack had been conducted and also releases Sheik Ahmed Yassin, described as the founder and spiritual leader of the Hamas movement, from Israeli captivity, undertaking to release numerous other captives as well. {London *Independent* 2 Oct} On 5 October the Israeli government publicly admits responsibility for the attack, and launches an inquiry. Officials of the US State Department reportedly say that Israel is apparently not taking its signature of the Chemical Weapons Convention seriously {Tel Aviv *Yedi'ot Aharonot* 7 Oct}.

Particulars of the chemical weapon involved remain largely secret. The UK weekly *Foreign Report* {9 Oct} states: “Well-placed sources claim that the poison is meant to induce respiratory failure and cause death in a few days. The sources say that the poison was developed by the same Israeli scientists who are in charge of producing Israel’s publicly-denied stockpile of biological and chemical weapons.” Israel is said to have told Jordan that a previously unknown high-tech delivery system had been used to deliver a lethal dose of the opiate Fentanyl through the victim’s skin. The *New York Times* {15 Oct} later reports the following eye-witness account: “[A] man advanced towards Meshal and then lunged toward the area around his left ear. The Mossad agent’s hand ... was wrapped in a white bandage, with a small lead-coloured protuberance in the palm.” The newspaper then reports Mish'al himself: “I felt a loud noise in my ear. It was like a boom, like an electric shock. Then I had shivering sensation in my body like an electric shock.” The *Times* report continues: “Within two hours he had begun to vomit and was heading for respiratory collapse”. The report also states that one of the Mossad agents was “a doctor carrying an antidote known as Narcan or Naloxone, in case the attack misfired”.

Mish'al had begun to feel ill about an hour after his bodyguard had driven off his assailants. He checks into a hospital, where his condition worsens. Reportedly, King Hussein insists that Israel provide an antidote. An American doctor from the Mayo Clinic in Rochester, Minnesota, is summoned to provide treatment, and, a week after his admission, Mish'al is released from hospital. {*Time Magazine* 13 Oct}

26 September The US Customs Service, in conjunction with Pacific Northwest National Laboratory, completes the training of its first class of 25 foreign border security enforcement officials — from Hungary and Slovakia — under the INTER-DICT/RADACAD (Radiation Academy) Training Project, which is part of the joint Counterproliferation Program of the Customs Service and the Defense Department. The training has included the detection, identification, interdiction and investigation of the smuggling of nuclear and CBW weapons. It has been conducted at the Department of Energy HAMMER (for Hazardous Materials Management and Emergency Response) Training Center located at the Hanford nuclear site in Richland, Washington, a facility which allows for a broad range of hands-on training. The project is expected to continue for three years, training people from 25 countries of eastern Europe and the former Soviet Union. {PR Newswire 25 Sep}

26–28 September In London, an international conference on *Non-nuclear Prerequisites for Nuclear Disarmament* is convened jointly by the Norwegian Institute of International Affairs

and the Toda Institute for Global Peace and Policy Research. The presentations include ones on CBW topics by Serguei Batsanov, Graham Pearson and Lawrence Sheinman. {*NOD and Conversion Oct*}

28 September In Japan, the Association of Japanese Returnees from China has now published, in an edition of 7000 copies, the first issue of a new quarterly periodical, *Chukiren*, which, through personal testimonies of Japanese veterans, draws attention to Japanese wartime atrocities in China. The periodical also seeks to refute the accusations levelled against members of the Association that, while in Chinese prison camps, they had come under Chinese "mind control". {Singapore *Straits Times* 28 Sep} A member of the *Chukiren* board, 83-year old Yutaka Mio, later testifies in a Tokyo courtroom to his own wartime atrocities in support of one of the several civil suits being brought by Chinese individuals claiming to have been victims of Japanese aggression [see 11 Aug]. Commentators see actions such as these and the recent outpouring of confessional books and public lectures on topics such as Unit 731 as an unburdening of "war guilt" on the part of Japanese veterans [see also 29 Aug]. The behaviour of these veterans is fiercely criticised by right-wing elements in Japanese society, including scholars of history. {*International Herald Tribune* 8 Oct, Inter Press Service 15 Oct}

28 September South Korea is included by the *Washington Post* in a list of seven countries that are said to have declared active or dormant chemical weapons production facilities in accordance with the Chemical Weapons Convention [see also 17 Aug]. South Korea, however, is one of the small number of countries requiring that "information pertaining to their implementation of the Convention" not be disclosed by the OPCW [see 28 Jul]. In addition to the five countries which the OPCW has publicly identified as declared possessors of chemical weapons production facilities (in the special sense of the CWC), namely China, France, Japan, the UK and the USA [see 28 Jul], the *Post* also lists Italy. [Note: presumably by "Italy" the newspaper actually meant India; see 28 Jul.]

28 September In Turkey, militant Kurdish separatists in the Kurdistan Workers Party (the PKK) are preparing a new offensive in which tourists will be targeted with CBW weapons, so the London *Observer* reports, quoting the testimony of a former PKK bomb-maker, Seydo Hazar, from a hiding-place in Greece. During the previous week, Hazar had described various of the plans to the newspaper, saying that the most lethal weapon in preparation was a device containing a half-litre of sarin nerve gas. Disgusted by what was in preparation, he had decided to denounce the splinter-group of the PKK which was responsible, and to abandon the workshop and warehouse in Drosia, near Athens, where his supplies of explosives, timers, mustard gas, cyanide, rat poison, sarin and the means to cultivate biological agents were held.

European PKK spokesman Kani Yilmaz characterizes the story as Turkish black propaganda, disinformation. He says: "We are absolutely opposed to the use of chemical weapons. If we had dispensed with the use of legitimate means in our struggle and used weapons of mass destruction, we would have succeeded long ago. We are a principled movement, and it is unthinkable for such a movement to use inhumane methods." {London *Observer* 28 Sep}

29 September China, which is one of the remaining countries of the world that retain use of the death penalty, has recently started to employ lethal injection as the method of killing {*International Herald Tribune* 30 Sep}.

29 September OPCW inspectors have now conducted initial inspections at 72 declared chemical-weapons sites, of which 15 were for storage of chemical weapons, 5 for storage of old chemical weapons, 34 for production, and 18 for Schedule 1 chemicals. At 5 sites, all of them in the United States, there has been continuous monitoring. This work has been conducted on the territory of 15 states parties plus one or both of the two that had requested that information pertaining to their implementation of the Convention not be publicly disclosed, namely India and South Korea.

29 September In the United States, the Chairman of the Joint Chiefs of Staff releases his 1997 *National Military Strategy* document. It defines the strategic direction of US armed forces, implementing guidance contained in the President's 1997 *National Security Strategy* and the Defense Secretary's *Quadrennial Defense Review*. It includes the following section on weapons of mass destruction (WMD): "The continued proliferation of WMD, particularly chemical and biological weapons, has made their employment by an adversary increasingly likely in both major theater war and smaller-scale contingencies. US forces must have a counterproliferation capability balanced among the requirements to prevent the spread of WMD through engagement activities; detect an adversary's possession and intention to use WMD; destroy WMD before they can be used; deter or counter WMD; protect the force from the effects of WMD through training, detection, equipment, and immunization; and restore areas affected by the employment of WMD through containment, neutralization, and decontamination. Since many operations will be conducted as part of an alliance or coalition, we must encourage our friends and allies to train and equip their forces for effective operations in environments where WMD usage is likely."

29 September–1 October In The Hague, the OPCW Executive Council [see 1-4 Sep] convenes for its fifth session. Council papers continue to be excluded from public distribution, but a Secretariat press-release {3 Oct} notes what the Director-General reports on the status of implementation of the CWC [see also 28 Jul]. More than one third of initial declarations by states parties are still outstanding, while a significant number of those that have been received are still incomplete. As of 19 September, only 55 states had notified the OPCW of their National Authority. [For further details, see *Progress in The Hague*, above.]

29 September–3 October In New York, UNSCOM convenes a panel of 15 experts from 13 UN member states to review the full, final and complete disclosure by Iraq of its biological-weapons programme [see 11 Sep]. The panel agrees unanimously that the FFCD is incomplete and significantly inaccurate: "[The FFCD] is in no way a full account of the scale and the scope of the BW programme that started about 1974. The only noticeable improvement [over the June 1996 version] is in presentation. It is clearer than its predecessors. The outstanding problems are numerous and grave. They cover all aspects of proscribed activity: planning, defining the requirement, concepts of use, military participation, procurement, research and development, production, trials, weapon filling, deployment, destruction and subsequent concealment and deception. In short, this FFCD does not, in the opinion of the panel, reveal the full extent of Iraq's engagement in BW. This failure to address many key areas of Iraq's past BW programme arises despite very specific repeated requests by the Commission to do so. Iraq continues to ignore those requests. It is the view of the panel that Iraq has not complied with Security Council resolution 687 (1991) as regards BW." {S/1997/774}

The panel notes attempts in the FFCD “to underplay and trivialize” the past BW programme: “In reality the programme commenced in the very early 1970s and continued through five phases of development culminating in the commissioning of the 3 x 6 kilometre Al-Hakam plant with its research and development laboratories and production and storage facilities. A secret self-contained indigenous BW programme, it suffered only minor hiccoughs over its 20-year life.” {S/1997/774}

1 October In the US House of Representatives, the Committee on International Relations conducts a hearing on organized crime and global terrorism. Among those testifying is FBI Director Louis Freeh. He warns that Russian organized-crime networks menace US national security. He also states his view that there is now more likelihood of the United States suffering nuclear attack as a “criminal or terrorist or rogue operation” than there had been of Soviet nuclear attack at the height of the cold war. {*International Herald Tribune* 3 Oct}

2 October A Russian Federal Security Service official states that his organization “had detected separate cases of cooperation with Iran as a result of which Russian deliveries could have conflicted with international treaties on missile technology transfers [see 18 Sep]. But they were all revealed and prevented.” {*International Herald Tribune* 3 Oct} An unidentified Israeli intelligence official states that, nevertheless, the technology had still been getting through {*London Independent* 3 Oct}.

3–11 October In the Netherlands, another course [see 6-14 Sep] for personnel of CWC National Authorities is given by the OPCW Technical Secretariat {*ASA Newsletter* 17 Oct}. People from 25 countries participate. The course is in 22 parts, of which the final one is devoted to course evaluation and critique. {*ASA Newsletter* 4 Dec}

4 October The UK Defence Evaluation and Research Agency includes the following in recruitment literature for its Chemical and Biological Defence Sector at Porton Down: “As part of an ongoing strategy to establish mutually beneficial partnerships with the private sector and academia, we are developing a market-facing science park at the site. The objective is to facilitate technology transfer to industry and academia, as well as improving access to our intellectual property, scientific capabilities and unique technical facilities. It is envisaged that the park will accommodate established businesses, a business incubation facility for start-up operations, and a presence from the UK bioscience base. There may in due course be an opportunity to establish a graduate school within the science park, centred around work in the neuro-sciences.” {*London Guardian* 4 Oct}

6 October The UN Security Council receives its fourth six-monthly consolidated report [see 11 Apr] on the work of UNSCOM in Iraq under its directing resolutions, namely resolutions 687 (1991), 707 (1991), 715 (1991), 1051 (1996), 1060 (1996) and 1115 (1997) {S/1997/774}. The report covers the period 11 April to 11 October. Its content and presentation differ from earlier reports, reflecting what it describes as the two elemental parts of the UNSCOM mandate, namely “to deal with the past through disarmament and the future through monitoring and verification”. Crucial to achieving this, it says, is the first step: full disclosure by Iraq of its past now-proscribed weapons programmes. The report reviews the substance and quality of these disclosures, in doing so presenting much hitherto unpublished information (such as the material balance set out in the report for the chemical weapons programme during 1981-90, a balance which suggests that, of the 3850 tons of CW agents

which appear to have been produced, 2870 tons were consumed in the period 1981-88).

As regards disclosure of past missile and chemical programmes, the overall impression conveyed by the report is that the remaining issues can readily be surmounted, given more coöperation from Iraq. For missiles, these issues are principally accounting for propellant and, especially, warheads; for chemicals, mainly VX questions [see 22-26 Sep]. But in the biological area, the report presents an altogether harsher message: “The September 1997 FFCD [see 29 Sep–3 Oct] fails to give a remotely credible account of Iraq’s biological warfare programme. ... This is an area that is unredeemed by progress or any approximation of the known facts of Iraq’s programme. ... There is incomprehension of why Iraq is persisting so strongly with both refusing to make the facts known about its biological weapons programme and why it is so insistent on blocking the Commission’s own efforts to reach those facts.” The report, in its two final conclusions, presses the Council to take strong measures:

“The Commission is convinced of the need for the Council to insist that Iraq meet its obligation to disclose fully all of its prohibited weapons and associated programmes. There is no substitute for this whole truth, both as such and as the mainstay of the effective discharge by the Commission of its mandate. This is a crucial requirement.

“The Commission is also convinced that it is essential that the Security Council reaffirm and demand Iraq’s complete coöperation with the exercise by the Commission of its rights to full access to sites and persons at which and through which the Commission may be able to verify Iraq’s compliance with the relevant decisions of the Council and report accordingly under paragraph 22 of resolution 687 (1991).”

Interviewed soon afterwards for the London newspaper *Al-Sharq al-Awsat* {9 Oct}, Ambassador Butler is asked what he will focus on during his next visit to Baghdad, scheduled for November. He says: “I hope to achieve real progress in the search for warheads, a clearer view of the VX program, and real progress in the biological weapons area. I told Tariq Aziz that we can make huge progress and that this must be in the biological weapons area. The fourth point concerns a better agreement with regard to the sites that we can inspect unhindered [see 17 Sep]. I hope that, next week, the Security Council will allow me to continue my work in this way.”

6–9 October In Paris, the Australia Group of 30 states meets for its annual plenary session [see 14-17 Oct 96]. According to a subsequent release by the US Arms Control and Disarmament Agency {28 Oct}, the principal results are as follows: “Members welcomed the entry into force of the CWC on 29 April 1997, and encouraged all countries to sign and ratify the convention. Members also restated strong support for strengthening the BWC. Members agreed that continued informal export control cooperation remains relevant and reinforces the aims of the CWC and BWC, and benefits the whole international community. Members also continued to discuss relevant aspects of terrorist interest in CBW.” President Clinton provides further detail in a later report to Congress on the Enhanced Proliferation Control Initiative: “At the 1997 plenary, the AG accepted a US proposal to survey all AG members on efforts each has taken to counter this [CBW terrorism] threat. ... AG participants continue to seek to ensure that all relevant national measures promote the object and purposes of the BWC and CWC. The AG nations reaffirmed their belief that existing national export licensing policies on chemical weapons-related items fulfil the obligation established under Article I of the CWC that States Parties never assist, in any way, the acquisition of chemical

weapons. Given this understanding, the AG members also reaffirmed their commitment to continuing the Group's activities now that the CWC has entered into force." {White House press release 12 Nov}

7 October In Germany the trial begins in Mönchengladbach of Detlev Crusius and Udo Buczkowski, who have been in custody for more than a year accused of illegally exporting computerized control equipment for nerve-gas production to Libya during 1990-93 [see 8 Aug 96] {*Frankfurter Rundschau* 8 Oct, *Süddeutsche Zeitung* 8 and 9 Oct}. They subsequently offer confessions and, on 30 October, are sentenced to imprisonment. Crusius, accused of "a huge appetite for gain", receives a sentence of four years and three months; Buczkowski, who had sought principally to save an ailing company and had himself gained relatively little, is jailed for three years and six months. {*Süddeutsche Zeitung* 29 Oct, AFP 30 Oct, London *Financial Times* 31 Oct}

7 October In Sierra Leone, troops loyal to the regime of Major Johnny Paul Koromah are using poisonous gas against the West African peacekeeping force ECOMOG, according to Nigerian Defence Headquarters, so the Director of Defence Information, Colonel Godwin Ugbo, tells journalists in Lagos. He adds that the poisonous gas is known in military circles as "nerve gas", and that ECOMOG soldiers would be using gas masks to counter its effects. Unidentified "observers" have reportedly accused "the Ukrainians" of importing the poisonous gas into Freetown. {Lagos *Post Express* 9 Oct}

Shortly afterwards, ECOMOG headquarters issues a denial of reports that it is itself using poisonous gas to combat the aggression of the military regime. The ECOMOG statement calls upon the regime to reconsider its decision to use CBW weapons. {Liberia Communications Network radio 13 Oct in BBC-SWB 15 Oct}

7-19 October In China, a Japanese government investigative team led by Shosuke Ito is in Shenyang, Liaoning Province, investigating environmental hazards posed by abandoned Japanese chemical weapons and seeking a location for the projected construction of a chemdemil facility [see 23 Jul Tokyo]. Within Chinese military facilities, the team also examines the condition of recovered samples of the weapons, including 75-mm and 105-mm shell. It is the ninth such Japanese mission to China [see 26 May]. {Kyodo 20 Oct}

9 October In Romania, OPCW Director-General José Bustani is received by Deputy Prime Minister Adrian Severin to discuss issues related to national implementation of the Chemical Weapons Convention. His visit to the country also includes meetings with senior military and scientific figures and members of the Romanian CWC National Authority, as well as a tour of a large petrochemical facility in which a Schedule 3 chemical, triethanolamine, is produced. {Rompres 9 Oct, OPCW press release 15 Oct}

9 October US Defense Secretary William Cohen, interviewed in Europe by the *International Herald Tribune* {9 Oct}, has responded as follows to a question about the threat posed by Iran: "Tehran used chemical weapons in the Iran-Iraq War and is trying to develop more sophisticated ones, along with biological and possibly nuclear warheads. On missiles, they would threaten Gulf countries ..." [Note: Iranian, as opposed to Iraqi, use of chemical weapons during that war is poorly documented (but see 3 May 90 and 8 Nov 90). Reports of Iranian retaliatory use were published at the time, but attracted little credence. Iraq certainly alleged Iranian use — see, for example, 3 Jul 88.]

9 October In the US Defense Department, the Program Manager for the Assembled Chemical Weapons Assessment announces that 7 teams have been selected from the 13 that responded to a Request for Proposal to demonstrate an Assembled Chemical Weapons Disposal System not employing incineration [see 28 Jul]. Each of the selected teams is now to receive a \$50,000 task order to address data-gaps identified in its initial proposal. The next phase in the ACWA process will involve demonstrations of alternative chemdemil technologies during summer 1998. The seven selected teams and their processes are: AEA Technology (the Silver II electrochemical oxidation process [see 26 Apr]), ARCTECH Inc (hydrolysis with a strong base and humic acids at 90°C, Burns and Roe Enterprises (plasma arc under argon [see 5 Aug]), General Atomics (caustic hydrolysis and supercritical water oxidation), Lockheed Martin (the Eco Logic process [see 13 Nov 95] and hydrolysis with supercritical water oxidation at 90°C), Parsons (hydrolysis with caustic biotreatment) and Teledyne-Commodore (solvated electron technology for chemical oxidation [see 5 Feb]). {Business Wire 9 Oct, *Hazardous Waste News* 20 Oct}

10 October In Romania, where the North Atlantic Assembly is convening, OPCW Director-General José Bustani addresses both the Science and Technology Committee and the Defence and Security Committee {OPCW press release 15 Oct}.

10 October The OPCW receives a formal retrospective request from the United Kingdom for conversion of one of the eight chemical weapons production facilities which the UK had declared in accordance with the Chemical Weapons Convention [see 27 May]. Seven of the facilities have long since been destroyed, but ownership of the site of the eighth, the former Chemical Defence Establishment Nancekuke [see 11-16 Aug], reverted in 1980 to the Royal Air Force, and some of the Nancekuke buildings are now being used as part of an RAF radar station, in other words for purposes not prohibited by the Convention.

The United States is also seeking OPCW approval for conversion of one of its declared chemical weapons production facilities, namely the plant in Van Nuys, California, in which an Army contractor, Marquardt Co, had been assembling Bigeye VX2 binary spraybombs. Specialized equipment had long since been removed, and from 1992 Marquardt had been leasing the building to firms for purposes not prohibited under the Convention, in fact the manufacture of aircraft parts and the production of films and television programmes.

And Japan is seeking an OPCW stay of destruction for its declared chemical weapons production facility, the Aum Shinrikyo sarin plant [see 29 Jul], which is evidence in the trials of the cultists. {*Chemical & Engineering News* 22 Sep}

12 October Iraq has established a chemical weapons production facility in the Yusufiyah region 55 km northwest of Baghdad, according to an opposition radio station monitored in Iran, the Voice of National Solidarity. The facility is said to be staffed by some 300 experts of the Iraqi Military Industries Organization, and its products hidden in different depots throughout the country. {IRNA 13 Oct}

13 October In Beijing, the Chinese party newspaper *Renmin Ribao* marks the 25th anniversary of the establishment of Sino-German diplomatic relations by publishing an article jointly authored by Chinese Foreign Minister Qian Qichen and German Foreign Minister Klaus Kinkel. The article includes the following: "China and Germany share identical or similar views on many important international issues. On major global issues such as the prevention of the proliferation of nuclear and biolog-

ical weapons, disarmament, banning drugs and environmental protection, the two sides have maintained close negotiations and good cooperation. China supports the integration of Europe and the progress in the unification of the European Union and hopes to see a greater role played by Germany in international affairs.” {Xinhua 13 Oct}

13 October In the UK, Trade Minister Lord Clinton-Davis announces the appointment of members of the CWC National Authority Advisory Committee [see 11 Mar], which is today meeting for its inaugural session. {DTI press notice 13 Oct}

14–15 October At the European Parliament in Brussels, the OPCW Technical Secretariat, with the assistance of the Harvard Sussex Program, organizes a workshop on *National Implementation of the Chemical Weapons Convention*. The workshop is attended by representatives of 40 states, including ones that have not yet signed the Convention, as well as officials from the European Commission, the General Secretariat of the Council of the European Union, the European Parliament, NATO and the Organization of African Unity. There is also participation from non-governmental organizations, including CEFIC and the International Security Information Service (ISIS). {OPCW press release 16 Oct}

15 October In Moscow, *Izvestiya* carries a long article based on an interview with Igor Valeryanovich Domaradskiy, an academician who had established an early reputation through work on plague and who had been offered one of the key positions “when at the beginning of the 1970s USSR leaders took a decision to set up a new system of scientific institutions to develop bacteriological warfare means” [see 19 Sep 92]. He had accepted the offer, and the article is mostly about his experiences in the new system, and about his current predicament as a man in his seventies denied a passport because of past access to state secrets of the most highly guarded type. At his own expense he has just published his memoirs, *Perevertysch* (Turn-coat), in an edition of 100 copies.

The article includes this: “Was germ warfare expensive to develop? It was insanely expensive with respect to equipment, experimental methods, and training of top specialists, who were not numerous in Russia. And naturally, they were civilian scientists. The latter circumstance compelled the ‘directive organs’ to decide to create a system of scientific institutions that would be parallel to the military system and would solve all the problems of ‘military strains’ on a qualitatively new level. And such was the birth of a system that included dozens of institutes and test ranges, institutions with the most diverse names and completely anonymous institutions, and scientific cities which denied access to outsiders. Domaradskiy was appointed Deputy Chair of the Interdepartmental Scientific-Technical Council on Molecular Biology and Genetics (chaired by the renowned virologist V M Zhdanov), which was to become the system’s ‘brain centre’. Implementation of the programmes approved by the Council required creation of an additional entity, Organization PO Box A-1063, always headed by an individual whose rank was no lower than Lieutenant General. All employees of this PO Box were military personnel, but they came to work in civilian clothes.” The article goes on to describe the difficult relationship that obtained between the military and the civilian components of the system: “For the one group, everything was a matter of order and execute. For the other, it was a matter of the objective that had been set and searching for the optimum way of achieving it.” Extraordinary degrees of secrecy compounded the problems. There were, nevertheless some successes, which the article notes.

Academician Domaradskiy states that, according to his information, a significant portion of the secret materials stored in a special fireproof room of the A-1053 organization has been destroyed, apparently for fear of international inspection. He regrets this wasting of knowledge, which he says took place after the departure to the United States of one of the deputy directors of the organization, K Alibekov.

15 October In the US Congress, the General Accounting Office publishes a new study, *Gulf War Illnesses: Public and Private Efforts Relating to Exposures of US Personnel to Chemical Agents* {GAO/NSIAD-98-27}.

16 October In the United Kingdom, Home Secretary Jack Straw rejects the recommendation of a coroner that police use of the new CS-spray weapon [see 11 Mar] be reviewed. The recommendation had followed the verdict of unlawful killing returned by a jury on 2 October following a four-week inquest into the death of an asylum-seeker from Gambia, Ibrahima Sey, who had been squirted in the face with CS Incapacitant Spray while his hands were shackled behind his back. {London *Guardian*, *Daily Telegraph* and *Independent* 3 Oct} In a speech to the Association of Chief Police Officers, Secretary Straw says: “The coroner’s recommendations might lead one to think that the inquest had seen evidence which cast doubts on the acceptability of CS spray, but I am satisfied this is not the case. There is nothing in the evidence to suggest that CS and the solvent MIBK, separately or in combination, present any significant threat to human health.” He continues: “Police officers deserve the best protection that we can provide. That is why I believe CS spray should be available to the police service as an effective tool for self-defence.” He says police forces have been told there is no reason to suspend the use of the weapon. {London *Guardian*, *Daily Telegraph* and *Independent* 17 Oct} [Note: The main recommendation of the coroner, Dr Harold Price, had in fact been that the guidelines for use of the weapon should now be explored. No doubt it is inevitable that a device initially introduced and authorized as a self-protection weapon should also come to be used as an offensive weapon. Numerous press reports from around Britain suggest that that is exactly what is now happening. Home Office belief in the safety of CS Spray seems to be rooted in Ulster-related studies of CS Smoke, even though spray has few of the physical properties of smoke and can impose enormously higher dosages of the active agent, CS, upon exposed individuals.]

16 October At the UN General Assembly, OPCW Director-General José Bustani addresses the First Committee. Speaking of the progress of implementation of the Chemical Weapons Convention, he says that, as of 30 September, the OPCW Technical Secretariat had received initial declarations from 63 states parties, and 80 initial inspections had been conducted on the territory of 17 states [see also 29 Sep and 29 Sep–1 Oct]. He states that his foremost priority now is to facilitate Russian ratification of the Convention: “The presence of the Russian Federation is essential if the Convention is to fulfil its aim of eliminating chemical weapons in a comprehensive manner”. He continues: “As the Russian Parliament is finalizing its debate on CWC ratification, the next few days will become the litmus test of whether Russia intends to live up to its leadership role on international security and disarmament issues, or whether it will choose what is, in my view, the dangerous path of isolationism.” On the problems facing Russia in financing the destruction of its chemical weapons within the Convention’s timeframe, he notes that many states had announced offers of help. He also states that, if Russia implemented its obligations under the Convention in good faith, and was still prevented from

completing the destruction of its stockpile due to reasons beyond its control, such *force majeure* circumstances [see also 25 Apr Russia] would be taken into account. He says that Russia must deposit its instrument of ratification no later than 31 October if it is to be able to take advantage of the training opportunities that the OPCW is providing, obtain Secretariat posts, and vote on issues during the December session of the Conference of the States Parties. {UN press release 16 Oct, OPCW press release 17 Oct}

On other matters, the Director-General says that one of the main challenges facing the OPCW will be to “develop a culture of transparency that balances the need for confidentiality for the chemical industry with the need to be as open and transparent as possible about military activities: “Our mandate is to protect confidential information, not to perpetuate secrecy. ... If we are to have any credibility as a body capable of overseeing the elimination of chemical weapons, we must be able to provide information on the organization’s activities, and the progress being made in identifying and destroying chemical weapons stockpiles and programmes.” {USIA 17 Oct}

16 October The UN Security Council begins its postponed regular review of the sanctions imposed on Iraq [see 21-24 Jun], having now received the latest 6-monthly report from UNSCOM [see 6 Oct], including the report required under resolution 1115 (1997) on Iraqi cooperation with UNSCOM and provision of access to sites designated for inspection [see 17 Sep]. This latter report, like the main one, is critical of Iraq, drawing particular attention to Iraq’s assertion that “Presidential/residential” sites are out of bounds to UNSCOM inspectors. Both UNSCOM Executive Chairman Richard Butler and IAEA Director-General Hans Blix are heard by the Council {USIA 16 Oct}, whose members have received a 14-page letter from Iraqi Deputy Prime Minister Tariq Aziz commenting on the UNSCOM report and criticizing UNSCOM for being under American influence {Reuter 15 Oct}. Ambassador Butler informs the Council that Iraqi UN Representative Nizar Hamdoun has stated to him that Iraq will stop cooperating with UNSCOM if the Council imposes additional sanctions {AFP 16 Oct}. Speaking to reporters, Ambassador Hamdoun renews this threat four days later, while the Council is still deliberating {AFP 20 Oct}.

23 October In Paris, the Foreign Ministry confirms that the initial declaration submitted by France to the OPCW in accordance with the Chemical Weapons Convention has included information about the chemical-weapons proving ground which France had maintained in Algeria until 1978, when the facility was decontaminated and closed down {AFP 24 Oct}. Defence Minister Alain Richard confirms the decontamination and says that Algerian officials had had access to the facility as observers while it was in use, but adds that Paris has no knowledge of Algeria subsequently using the site for CW purposes {Reuter 23 Oct}.

These disclosures are in reaction to the current issue of *Le Nouvel Observateur*, which reports an interview in which General de Gaulle’s Armed Forces Minister, Pierre Messmer, confirms that provision for continued French access to the B2-Namous facility at Beni Ounif had been contained in a secret annex to the Evian Accord of 1962 whereby Algeria gained independence. The fact of the Evian provision had been common knowledge for a long time, at least since *SIPRI Yearbook 1982*, but it had not previously been publicly confirmed by cognizant French officials. The French weekly has added new detail. The CW weapons tested at Beni Ounif included mines, artillery shell and missiles, among them — it suggests — the first binary chemical munitions ever field-tested. In 1967, and

again in 1972, French access had been extended by new agreement. The 1967 extension allowed hundreds of French military personnel to work at the site under the cover of a civilian employer, SODETEG, a subsidiary of the Thomson group. {*Le Nouvel Observateur* 23-29 Oct} On television two days previously, Pierre Messmer offered this comment on the weapons tested at Beni Ounif: “All countries that have reached a certain level of industrial and scientific development have tried to produce weapons of a certain kind, particularly incapacitating weapons that somehow paralyse those who inhale or get on their skin the chemical product in question”. {France 2 TV 21 Oct}

In Algiers the day previously, Algerian Foreign Minister Ahmed Attaf had spoken at a news conference about the *Nouvel Observateur* article, confirming that the Evian Accord had indeed included specific provision for French CW activities (and nuclear, space and maritime activities as well) in Algeria. Yet, referring to the 1982 SIPRI publication, he expressed surprise at the resurfacing of the matter, “questioning the objectives of the campaign launched at this very moment”. He made mention of a communication received from the French government in May 1997 in which “it assured us that it had not carried out chemical activities other than the ones on decontamination after 1967”. And he said: “We are still in permanent contact with the French government on this issue and we will continue our contacts”. {Algerian Radio 22 Oct in BBC-SWB 24 Oct}

The Paris newspaper *Le Monde* {23 Oct} states that France was believed to be holding about 2000 agent-tons of chemical weapons at the time when the Chemical Weapons Convention was concluded.

23 October The UN Security Council condemns Iraq’s continued obstruction of UNSCOM [see 16 Oct] and expresses its “firm intention” of imposing an international travel ban on senior Iraqi military and intelligence officials unless Iraq ceases the obstruction. The Council will impose this additional sanction after receiving its next 6-monthly report from UNSCOM, in April 1998, if UNSCOM then again reports inadequate cooperation. At that time the Council will also review the existing sanctions, which will therefore continue. Resolution 1134 (1997) setting out these decisions is carried by 10 votes, but with China, France and Russia among the 5 abstentions. Britain and the United States had been pressing for the immediate imposition of new sanctions. {*International Herald Tribune* 24 Oct, *Al-Ahram Weekly* 30 Oct}

23 October The US Defense Department releases a Gulf-War-illnesses-related report by its Inspector General, Eleanor Hill, *Report of Investigation Concerning the Missing U.S. Central Command Nuclear, Biological and Chemical Desk Logs* [see 27 Feb]. This IG report determines that CENTCOM had disobeyed regulations by failing to look after its records properly, but finds no evidence of conspiracy to destroy records. It concludes that the logs were probably destroyed in or after October 1994, not through some computer virus as had previously been suggested, but “as part of an internal office relocation, personnel changes and movement of the NBC records”. The IG investigation had discovered, in the home of an Army officer, an illicit set of excerpts from the missing log specifically on BW matters. None of these excerpts mentioned the Khamisiyah episodes. {*New York Times* 24 Oct}

23–24 October In Libreville, the government of Gabon in cooperation with the OPCW Technical Secretariat hosts a regional seminar on National Implementation of the Chemical Weapons Convention. The seminar is attended by representatives of 7 regional states plus France, as well as the Harvard

Sussex Program. It is preceded by a one-day training course for Gabonese CWC National Authority personnel, attended by 40 people from 10 government ministries. {OPCW press release 31 Oct}

24 October In the US Senate, *The Persian Gulf War Veterans Act of 1997* is introduced by Senators Jay Rockefeller and Tom Daschle. This bill would, among other things, require the Veterans Administration to contract with the National Academy of Sciences for a review of the existing literature on Gulf War illnesses and for recommendations on directions for new research and potential forms of treatment. The bill is modelled on Agent Orange legislation initiated by Senator Daschle and passed by the Congress some seven years previously [see 30 Jan 91].

27 October In Iraq, following UN Security Council resolution 1134 (1997 [see 23 Oct]), the official news agency reports that the National Assembly has recommended, after a two-day debate, that Iraq should freeze relations with UNSCOM until a timetable is set for the lifting of sanctions {AFP 27 Oct}. Both France and Russia issue statements strongly counselling Iraq against such action, and the US State Department warns of "serious consequences" {*International Herald Tribune* 28 and 29 Oct, AFP 28 Oct}. Next day, President Saddam Hussein reportedly chairs a meeting of the Revolution Command Council to consider the parliamentary recommendation {AFP 28 Oct}. On the day following, Deputy Prime Minister Tariq Aziz writes to the President of the Security Council requiring the withdrawal of all US personnel from UNSCOM operations in Iraq within 7 days and the cessation of aerial reconnaissance overflights by US U2 aircraft {*New York Times* 30 Oct}.

There is press speculation later that Iraq has taken this action because UNSCOM inspectors are on the verge of locating concealed stocks of VX weapons {London *Observer* 2 Nov}. This is denied by an Iraqi official speaking on Baghdad television {3 Nov}, who says that the VX situation had been the subject of a recent UNSCOM inspection [see 22-26 Sep] and who characterizes the report as "part of the campaign of deception aimed at misleading world public opinion on certain issues that have been fully clarified".

27 October The UK Defence Ministry responds as follows to a question in Parliament about past work on PFIB, a candidate canister-penetrating CW agent: "Since 1967 some research into perfluoroisobutene has been undertaken at ... Porton Down to assess whether its use as a chemical weapon would pose a potential hazard ... The bulk of this research was conducted during the 1980s with some research on protective measures [and] medical treatment still ongoing. It has been concluded that this material does have potential as a possible [CW] agent and that it does pose a potential hazard to UK Armed Forces. As a consequence of this research certain equipment modifications have been introduced." {*Hansard (Commons)* 27 Oct}

28 October Pakistan deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thus become the 101st state party to the treaty. Announcing the ratification at a press conference next day in Islamabad, Foreign Secretary Shamshad Ahmed states that possession or development of chemical weapons have never been part of Pakistan's defence strategy. {Radio Pakistan 29 Oct}

28 October In Russia the Deputy Minister for Emergency Situations, Mikhail Falayev, announces that ocean-burial sites for World War II chemical weapons have been located in the Black Sea, off Novorossiysk and Anapa {ITAR-TASS 28 Oct}.

28 October In South Africa, Pretoria Regional Court rules in the bail application of Dr Wouter Basson [see 6 Mar and 7 May] that all evidence on Project Coast — the secret CBW programme that ran in South Africa from 1981 to 1992 — should be withheld from public disclosure "in the interest of state security". The magistrate was granting an application by the Department of Foreign Affairs and the South Africa National Defence Force for evidence to be heard *in camera*. {SAPA 29 Oct} South African newspapers have long been seeking access to secret military papers said to contain details of Project Coast that were found in two steel trunks in the home of Dr Basson after his arrest earlier in the year on charges of illegal drug trafficking [see 29 Jan] {Johannesburg *Sunday Times* 3 Aug, AFP 3 Aug}. Dr Basson had the week previously again been arrested, this time on charges of fraud and theft following the investigation by the Office for Serious Economic Offences into possible embezzlement of Project Coast funds [see 21 Aug 96] {SAPA 29 Oct and 12 Nov}. Some £14 million of Project Coast funds were apparently illegally transferred from South Africa to Europe during the final years of the apartheid regime. The transfers had been authorized by project-leader Basson, who has now testified, in a sworn affidavit, that his actions had the endorsement of the state: "Because of the sanctions against South Africa, all purchases had to be done with the utmost secrecy and payment had to be made in such a manner that it would never be traced to South Africa". {London *Financial Times* 29-30 Nov}

28 October UK Armed Forces Minister John Reid issues two papers relating to the unexplained illnesses afflicting many UK veterans of the Gulf War. One paper gives details of all the medical countermeasures used to protect UK troops in the Gulf, including those against nerve gases and against the BW agents anthrax and plague. It describes warnings received in December 1990 by the Ministry of Defence on the safety of the medical countermeasures against anthrax [see 29 Jul]. These used a whooping-cough vaccine as an adjuvant to the anthrax vaccine so that the latter took effect after seven instead of 32 weeks. But the combination was still experimental, and the National Institute for Biological Standards and Control had faxed the Ministry to say that, in animal studies, the combination caused "severe loss of condition and weight". The 27-page paper now released by Dr Reid indicates that the fax had somehow been disregarded. A Ministry spokesman states that it is not now possible to know how many people had been dosed with the combination. The second paper describes how Parliament had been misled over the extent of the use in the Gulf of organophosphate pesticides [see 20 Mar]. {AP 28 Oct, London *Independent* 29 Oct, *Nature* 6 Nov}

Hilary Meredith of the Manchester law firm, Donns, that is acting for more than 1300 sick Gulf veterans describes the new disclosures as indicating "not only negligence but gross negligence, verging on recklessness" within the Ministry of Defence {London *Daily Telegraph* and *Financial Times* 29 Oct}. The firm has devised a system unique in British legal practice whereby the veterans are insured against losing if they agree to sue the Ministry for negligence in a mass action, the firm undertaking to waive its fee if the action fails {London *Guardian* 1 Sep}.

28 October In the US Congress, the conference report on the FY 1998 Intelligence Authorization legislation, S.858, includes a provision requiring the Inspector General of the Central Intelligence Agency to review all federal government studies regarding the presence, use or destruction of chemical weapons in the Gulf War theatre of operations, and to report on the review by 31 May 1998.

28–31 October In The Hague, the OPCW Executive Council [see 29 Sep–1 Oct] convenes for its sixth session. Up for approval on a crowded agenda is the draft OPCW programme and budget for 1998, but the Council does not complete its work on the draft and decides to schedule a further session in a month's time. {OPCW press release 21 Nov} [For further details, see *Progress in The Hague*, above.]

29 October In China, the military science journal *Zhongguo Junshi Kexue* has recently carried a long article by Major-General Wu Jianguo of the Engineering Institute of the Antichemical Warfare Command discussing the nature of the “chemical threat” since entry into force of the Chemical Weapons Convention. A prominent theme in the article is a complementarity that exists between effectiveness of the treaty and of antichemical defence. General Wu observes that the control provisions of the Convention do not yet expressly include certain weapons under development by (unidentified) foreign militaries, including “small molecular peptides ... 100 times more toxic than existing nerve agents”. In another quantitative comment General Wu observes: “Strategists note that 10,000 tons of poison gas are needed to fight a large-scale chemical war, with 1000 tons being needed for a medium-scale one, and 100 tons needed for a small-scale one”.

In a section on regional issues, General Wu says: “The Taiwan military has an undeniable chemical attack capability, with a chemical weapons research organ, a factory that produces chemical ammunition exclusively, its Army's more than 105-mm artillery and 80-mm mortars all capable of firing chemical shells, its troop units above the battalion level all equipped with rocket launchers that launch poison smoke, and its Air Force also having two kinds of chemical bombs. The Taiwan military has always stressed chemical warfare preparations, with its chemical troop units being quite up to strength, its units outfitted with quite complete antichemical equipment, and always having stressed chemical warfare training. In March 1995, an antiland- ing exercise by two Taiwan military brigades on its west coast included chemical warfare.”

29 October Jordan deposits its instrument of accession to the Chemical Weapons Convention [see 15 Sep]. In 30 days time, it will thus become the 102nd state party to the treaty.

29 October In Moscow, President Yeltsin submits to the State Duma a new draft law on Russian ratification of the Chemical Weapons Convention [see 17 Mar] {ITAR-TASS 29 Oct}. The draft has been under negotiation since June in an interagency commission composed of representatives of key Duma committees and also officials of the government. Prime Minister Viktor Chernomyrdin, in a letter to the Duma, states that the strained federal budget “so far has not allowed proper financing of the process of chemical weapons disposal”, but promises that “this situation will be corrected in 1998” R 500 billion (about US \$82 million) are allocated to it in the draft 1998 budget {ITAR-TASS 30 Oct, Reuter 31 Oct}. Next day, the Duma leadership decides to consider ratification on the day following {Interfax 30 Oct}.

29 October At UN headquarters in New York, UNSCOM Executive Chairman Richard Butler responds to Iraq's demand for withdrawal of US inspectors from Iraq [see 27 Oct] by suspending all UNSCOM operations in Iraq. Asked at a press briefing what the conditions would be for lifting the suspension, which he has stressed is to be a temporary one, he replies that he is not sure, but that the Security Council would be deliberating later in the day. He continues: “The only thing I'm sure about is what cannot happen: what cannot happen is that the United Nations be told by one member state which of its personnel is or

isn't acceptable”. He says that staff at the Baghdad Ongoing Monitoring and Verification Centre would catch up with office work and would continue to be rotated in and out of Iraq in the normal way. {UNSCOM press briefing 29 Oct} Next day Iraq turns back two US inspectors arriving in Baghdad from Bahrain {*International Herald Tribune* 31 Oct}, and a major crisis in Iraq-UN relations is under way. There is talk in Britain and the United States of the use of force. The Security Council continues its deliberations. {London *Guardian* 1 Nov}

29 October In Washington, President Jiang Zemin of China meets with President Clinton. The joint statement issued at the close of this Sino-US summit includes a section on Nonproliferation which, although mostly concerned with nuclear matters, contains the following: “As original parties to the Chemical Weapons Convention, China and the United States agree to cooperate in implementing the Convention within a multilateral framework. Both countries agree on the importance of government oversight of chemical-related exports.” President Jiang is on an 8-day official visit to the United States that ends on 3 November. {Xinhua 30 Oct}

30 October The Chinese corporation Nanjing Chemical and Industrial Group finished construction in June of a factory in Iran for making glass-lined chemical-production equipment, according to a “top-secret US intelligence report” quoted in the *Washington Times* {30 Oct}. The glass-lined equipment is of the kind that is controlled by the Australia Group because it can facilitate production of certain CW agents [see 7-10 Jun 93]. In May, the corporation had been subjected to sanctions by the US government, as required under US anti-proliferation legislation [see 21 May]. According to the leaked report, the Chinese corporation had still to supply certain “raw materials” needed for operating the factory, this having been held up because of problems with export-control documents. The report noted other Iranian orders on which deliveries were still outstanding, including ones placed in 1995 for such potential CW-agent precursors as sodium sulphide (also controlled by the Australia Group). As with the factory too, these orders were brokered by Industrial International Movallad Andishe Company of Iran and the Northern Chemical Industries Corporation (NOCINCO) of China, and the report speculates that the export delays “may represent Chinese government pressure brought to bear on NOCINCO to stop its dealings with Iran”.

Asked about the *Washington Times* story, US State Department spokesman James Rubin speaks to reporters as follows: “Since acceding to the Chemical Weapons Convention [see 25 April China], China has made some improvements to its chemical export controls, but we still believe it needs to do more. We have urged China to make such improvements and will continue to do so.” {*Washington Times* 31 Oct}

31 October In Russia, the State Duma votes 288-75 to approve the draft law on ratification of the Chemical Weapons Convention [see 29 Oct] {ITAR-TASS 31 Oct}. This outcome had not been obvious. On the day previously, the largest party in the Duma, the Communist Party, switched from a stated intention to vote for ratification to declaring a free vote, while only a matter of hours before the vote did Zhirinovskiy become persuaded to speak in favour of ratification — thereby delivering the 50 or so votes of his party, plus maybe 20-30 others. The legislation now passes to the Federation Council.

31 October In the US House of Representatives, the Government Reform and Oversight Committee approves and endorses the recommendations on Gulf War illnesses presented by its Subcommittee on Human Resources in the report on a 20-

month investigation [see 26 Jun]. The subcommittee has concluded that the Defense Department and the Veterans' Affairs Department have so mishandled the investigation of Gulf War illnesses that the task should now be given to an independent agency created or designated by Congress. In his introduction to the report, Subcommittee Chairman Christopher Shays describes the departmental investigations as "irreparably flawed" and "plagued by arrogant incuriosity and a pervasive myopia that sees a lack of evidence as proof". The report states that its investigation had shown that "a variety of toxic agents" was probably responsible for veterans' health problems. It does not single out any one particular agent, instead offering a list: "Chemical and biological warfare agents, organophosphates found in pesticides and insect repellents, leaded diesel fuel, depleted uranium, oil-well fire smoke, leaded vehicle exhaust, contaminated drinking water, shower water and clothing, parasites, and pyridostigmine bromide and other drugs to protect against chemical warfare agents." {*New York Times* 26 Oct, *Baltimore Sun* 30 Oct, *Philadelphia Inquirer* 1 Nov}

The Presidential Advisory Committee on Gulf War Veterans' Illnesses is today scheduled to present its final report [see 4-5 Sep] to President Clinton {*New York Times* 31 Oct}.

3 November Iran deposits its instrument of ratification of the CWC [see 27 Jul]. In 30 days time, it will thus become the 103rd state party to the treaty. A 7-article declaration has accompanied the instrument of ratification. It includes the following: "[Iran] reserves the right to withdraw from the Convention under the following circumstances: — non-compliance with the principle of equal treatment of all States Parties in implementation of all relevant provisions of the Convention; — disclosure of its confidential information contrary to the provisions of the Convention; — imposition of restrictions incompatible with the obligations under the Convention."

3 November In Israel an army spokesman says that the number of gas masks supplied to the public has been increasing sharply, to a level of around 6000 per day. A special service has been set up to relieve congestion in distribution centres. {*Washington Times* 4 Nov}

4 November In Germany, at Darmstadt, the trial begins of four former managers at Havert Industrie-Handelsgesellschaft charged with illegal exports to Iraq during 1988-90. The goods exported are said to have included chemical-weapons production equipment. {*Frankfurter Rundschau* and *Times* 5 Nov}

4 November In the US House of Representatives, there is a hearing on progress in the Nunn-Lugar-Domenici programme for increasing national preparedness against terrorism involving weapons of mass destruction. Appearing before the Military Research and Development Subcommittee of the National Security Committee, which is chaired by Representative Curt Weldon, are witnesses from the FBI, FEMA, the Defense Department, the Energy Department and the Army. Among the matters explored in detail is the degree of coördination that exists between the 43 different agencies and departments that have counterterrorism responsibilities, and also the question of whether there should be a national training centre for emergency response teams. {*Federal News Service* 4 Nov}

5 November Russia deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thus become the 104th state party to the treaty. Earlier in the day, the upper house of the Federal Assembly had unanimously approved the law on ratification of the CWC passed by the Duma five days previously [see 31 Oct]. The law, which includes sev-

eral substantial provisions on implementation of the Convention, was signed shortly thereafter by President Yeltsin. (Interfax 5 and 6 Nov, Reuter 5 Nov, Interfax 6 Nov) Its full text is published in *Rossiyskaya Gazeta* on 11 November. In the United States, President Clinton issues a statement welcoming the Russian action, and saying: "Russia's ratification makes it possible for Russia to join the United States in playing a leadership role in ensuring that all of the Convention's benefits are realized" {White House press release 5 Nov}.

5-9 November In Budapest, a NATO Advanced Research Workshop on *Conversion of Former Biological Weapons Facilities* takes place at the Frederic Joliot-Curie Institute for Radiobiology and Radiohygiene under the co-direction of Dr Lajos Gazso and Professor Erhard Geissler of Germany. Some 40 people participate, coming from Germany, Hungary, Poland, Russia, Ukraine, the UK and the USA. The presentations include ones on conversion at Porton Down (UK), Fort Detrick (USA) and Stepnogorsk (Kazakhstan). {*ASA Newsletter* 4 Dec} A paper by Colonel Gabor Faludi of the Hungarian Defence Forces Medical Corps gives particulars of a biological-weapons programme conducted in Hungary during 1936-44.

ca 7 November A US National Academy of Sciences panel proposes that Russian and US scientists should collaborate in a 5-year \$38.5 million programme of research on pathogens of BW significance, funded by the US Defense Department. The programme would comprise about 70 joint projects on anthrax or plague bacteria, for example, or viral haemorrhagic fevers; major benefits in disease-prevention and treatment could be anticipated from the projects. The NAS committee, chaired by Joshua Lederberg, had been tasked in 1995 by the Department to make recommendations on ways of engaging former Soviet BW scientists who might otherwise be lured into foreign BW-weapons programmes [see 6 Feb], and this proposal, called the Pathogens Initiative, is the result. The Academy has already become involved in six pilot projects at two former Soviet facilities within the Biopreparat organization [see 22 Nov 96 and 15 Oct] — the State Research Centre for Virology and Biotechnology 'Vector', near Novosibirsk, and the State Research Centre for Applied Microbiology, near Moscow — to which the Department has committed \$0.5 million. The Russian Defence Ministry, which is estimated still to have some 150-200 scientists doing BW defence work at four institutions, has thus far remained aloof from this venture of collaboration *cum* conversion. {*Nature* 13 Nov, *Science* 14 Nov}

8 November President Clinton announces actions in response to the recommendations of his Advisory Committee on Gulf War Veterans' Illnesses [see 31 Oct]. A special federal oversight board led by former Senator Warren Rudman [see 30 Apr] is "to ensure that the Defense Department's ongoing investigations into events in The Gulf meet the highest standards". An extra \$13.2 million is to be dedicated for "new research on low-level exposure to chemical agents and other possible causes of illness". A new benefits system is to be established "to better care for and compensate our veterans". Ongoing scientific research into the illnesses is to be reviewed by the National Academy of Sciences. And the Departments of Defense and Veterans Affairs are to create a Force Health Protection Program to keep detailed health records on individual service personnel. {White House press release 8 Nov, *Washington Post* 9 Nov, *Chemical & Engineering News* 17 Nov}

10 November The US Defense Department announces its funding, at \$12 million, of 12 new research projects on Gulf War

illnesses. It now has more than 35 active extramural projects on its books. {Department of Defense news release 10 Nov}

11 November In Tokyo, during talks between Chinese Premier Li Peng and Japanese Prime Minister Ryutaro Hashimoto, the latter reportedly promises that Japan will speed up efforts to dispose of chemical weapons abandoned in northeastern China by the Japanese Imperial Army {Kyodo 11 Nov}.

12 November The UN Security Council unanimously adopts resolution 1137 condemning Iraq's continued violations of its obligations under earlier resolutions and imposing additional sanctions in the form of restrictions on the travel of all Iraqi officials and armed-forces personnel responsible for the noncompliance, or participating in it {*International Herald Tribune* 13 Nov}. This follows an unsuccessful attempt at mediation in the Iraq crisis [see 29 Oct UN] during the previous week by UN Secretary-General Kofi Annan {*International Herald Tribune* 8-9 Nov}. The US deploys additional naval and air forces to the Gulf region. Iraq expels the six US nationals currently serving in-country with UNSCOM, whereupon UNSCOM withdraws all of its 68 non-US experts, leaving only a skeleton staff at its Baghdad Centre. {*Guardian* 14 Nov, *Daily Telegraph* 15 Nov}

12 November The US House of Representatives passes by voice vote a bill, HR 2709, which would place sanctions on businesses or countries suspected of transferring missile technology to Iran. Attached to the bill as a device for shielding it against presidential veto is a separate measure, S.610, which is the implementing legislation for the Chemical Weapons Convention already passed by the Senate [see 4 Jul]. {AP 4 Nov} In the Senate next day, moments before the Congress adjourns for the year, floor consideration of the composite bill is blocked by Senate democrats {*CQ Congressional Alert* 15 Nov}. So, without implementing legislation, the United States remains in violation of the Chemical Weapons Convention.

12 November The US Defense Department announces the award of a \$322 million multiyear contract for development and production of vaccines to protect US forces against BW agents [see 13 Oct 94]. The award is to a DynPort LLC, a joint venture of DynCorp and the London-based Porton International Inc.

13 November In the US Defense Department, the Office of the Special Assistant for Gulf War Illnesses releases a further case narrative [see 23 Sep] on specific events during the Gulf War possibly associated with chemical weapons. This one concludes it unlikely that, as had been tentatively reported at the time, there were chemical weapons at Tallil air base in Iraq at the time of its occupation by US forces in 1991. Also released are three information papers, one on MOPP procedures, another on medical surveillance during Desert Shield and Desert Storm, and the third on the M8A1 Automatic Chemical Agent Alarm. {DoD News Briefing 13 Nov}

14 November In South Africa, the Truth and Reconciliation Commission is continuing its investigation of Project Coast, the secret CBW programme of 1981-92 [see 7 May and 28 Oct]. The Commission has now received an independent report on the Project Coast prepared for it by the Netherlands Institute for Southern Africa. This report has not yet been released, but, according to the Johannesburg *Mail and Guardian*, it identifies a particular former colleague of the leader of Project Coast, Dr Basson, as someone who should now be called to testify before the Commission. {*Africa News* 14 Nov} Another newspaper, *The Sowetan*, states that the report suggests that the allegation of chemical warfare in Mozambique early in 1992 [see 28 Jan

92] in fact related to a test of the Project Coast chemical weapons that were being readied for possible use in South African black townships {AFP 14 Nov}.

16 November In Iraq, scores of soldiers are reportedly receiving hospital treatment for injuries received earlier in the month while moving secret stockpiles of chemical weapons out of Baghdad, so the London *Sunday Telegraph* reports. The only source quoted for details contained in the report is an unidentified "doctor", but the newspaper states that, the day previously, an unidentified British official had said: "We are satisfied that the incident took place".

16 November In Sudan, mustard gas is being made at a factory in Wau [see also 12 Sep], in the far southwest of the country, where production began in Autumn 1995 in accordance with a secret agreement between Khartoum and Baghdad to circumvent UNSCOM [see also 6 May]. The factory is controlled by the Sudanese military and has Iraqi technicians to provide expertise. This information, published in the London *Sunday Times* {16 Nov}, is attributed to "military intelligence and diplomatic sources in Kampala".

The newspaper also reports these sources as saying that Sudanese government forces have used mustard gas at least twice against the Sudanese People's Liberation Army near Juba, the southern capital, once in late 1995 at Nimule, and later at Kuya. The mustard was used in canisters rolled out of transport aircraft, but is said to have missed its targets because of poor coordination between the aircraft and Sudanese ground forces. The newspaper says there may also have been earlier attacks, possibly using a consignment of mustard gas shipped in from Iraq before the Wau factory was producing.

17 November The US Defense Department releases a report by the Army Inspector General on the demolition of Iraqi ammunition at Khamisiyah in 1991 during which CW agents may have been released. The investigation had been ordered a year previously [see 25 Sep 96]. A Department statement says: "The inquiry team developed a detailed timeline of the Khamisiyah demolitions and concluded that no chemical weapons were ever detected during the operation. It found that force protection measures were generally adequate, although not all soldiers performed to standard when an M8 alarm sounded on March 4, 1991. The investigation found 'no certainty' that the munitions demolition operation at Khamisiyah would have proceeded differently had the units been aware that chemical weapons may have been present. Neither did it find any credible evidence that an event similar to Khamisiyah occurred anywhere else in the Kuwaiti Theater of Operations."

18 November Nepal deposits its instrument of ratification of the Chemical Weapons Convention. In 30 days time, it will thus become the 105th state party to the treaty.

18-20 November In The Hague, the OPCW Executive Council [see 18-31 Oct] convenes for its seventh session. [For further details, see *Progress in The Hague*, above.]

19 November At the UN General Assembly, the Sixth Committee (legal) approves without vote a draft resolution deciding "that the United Nations Conference of Plenipotentiaries on the Establishment of an International Criminal Court, open to all States Members of the United Nations or members of specialized agencies or of the International Atomic Energy Agency, shall be held in Rome from 15 June to 17 July 1998, with a view to finalizing and adopting a convention on the establishment of such a court". {UN press release 19 Nov}

19 November In Washington, a conference on *Countering Chemical and Biological Weapons* is convened by Jane's Information Group, the current issue of one of whose defence-industry trade journals, *Jane's Defence Weekly*, is largely given over to CBW matters. Some 200 people participate, hearing presentations from six senior US defence and other officials. There is also a presentation by Senator Lugar on the theme that the United States remains ill-prepared to manage the threat against American cities posed by terrorist or other CBW weapons. {PR Newswire 20 Nov}

19–29 November In China, a Japanese government investigative team of 15 people is scheduled to visit the north-eastern city of Qiqihar to prepare for the disposal of some 250 abandoned chemical munitions identified by an earlier team [see 17-28 Sep 96]. The team is also scheduled to visit Nanjing for consultations with Chinese officials on what to do with some 3000 smoke devices believed to have been buried there by Japanese forces. This is the tenth such Japanese mission to China [see 7-19 Oct]. {Kyodo 13 Nov}

20 November Iraq, in a joint statement with Russia issued in Moscow and Baghdad, announces that it will re-admit UNSCOM inspectors who are US citizens. The statement follows an emergency ministerial-level meeting, in Geneva, of the five permanent members of the UN Security Council, which reiterated calls for "unconditional and complete fulfilment by Iraq of all the relevant resolutions of the UN Security Council". The statement also "supported the intention of the Special Commission of the UN Security Council to meet on [the following day] in New York to discuss and advise, among other important issues, ways to make UNSCOM's work more effective on the basis of the resolutions of the UN Security Council. The recommendations from that meeting will be subject to the approval of the Security Council." This emergency session of the P5 had itself followed talks in Moscow between President Yeltsin, Russian Foreign Minister Yevgeny Primakov and Iraqi Deputy Prime Minister Tariq Aziz, after which the Iraq News Agency announced that "Iraq and Russia have reached an agreement" including a Russian commitment to work for the lifting of the sanctions on Iraq. {*Washington Post* 20 Nov, London *Independent* and *International Herald Tribune* 21 Nov} UNSCOM inspectors return to Baghdad next day {*New York Times* 23 Nov}, and U-2 flights resume on 24 November, having been curtailed six days previously {AFP 24 Nov}

President Clinton gives Congress the following account of events prior to this development: "For 3 weeks, the Government of Iraq refused to allow American UNSCOM personnel to enter the country or to participate in site inspections, expelled UNSCOM personnel who are US citizens, threatened the safety of the US Air Force U-2 aircraft that flies missions for UNSCOM, tampered with UNSCOM monitoring equipment, removed UNSCOM cameras, moved and concealed significant pieces of dual-use equipment, and imposed additional unacceptable conditions on continued operations of UNSCOM. Two confrontational actions were undertaken in an atmosphere of strident, threatening Iraqi rhetoric". {White House press release 1 Dec}

20–22 November In Indianapolis, Global Green USA hosts its fourth annual Legacy Forum on military toxic cleanup and base conversion, *Finding the Silver Lining: Tools and Strategies for Revitalizing Communities*. There are presentations on chemdemil activities in Russia and the United States by involved scientists and officials from both countries, and also by developers of alternative chemdemil technologies. Global Green USA is the American affiliate of Green Cross International.

21 November In Hanoi, the US Embassy receives from Vietnamese officials, as promised [see 26-28 Jun], the papers containing scientific data on effects of Agent Orange and other herbicides used by US forces during the Vietnam War that had been seized more than two years previously from a visiting team of US scientists [see 20 Jun 95]. Not returned, however, are the soil and blood samples collected by Dr Arnold Schecter and others on the team. {AFP 25 Nov} In August, a US Congressional delegation had been on a 6-day tour of the country, and its leader, Representative Lane Evans, had told reporters that joint US-Vietnamese research into the effects of the chemicals was "long overdue" {AFP 14 Aug}. In October there had been a conference in Hanoi on the aftermath of the chemicals attended by ministry officials, war invalids, numerous scientists and others {VNA 8 Oct in BBC-SWB 10 Oct}. A finding recently reported from the Vietnamese investigations organized through Committee 10-80 is that 84 percent of 149 samples of adipose tissue collected by the Committee in south Viet Nam tested positive for dioxin {*Giai Phong* 17 Oct in FBIS-TEN 4 Nov}.

21 November In New York, members of the UN Special Commission on Iraq (UNSCOM) convene as had been proposed by Russia with the endorsement of all five permanent members of the Security Council [see 20 Nov], and next day transmit a report, with recommendations, to a special session of the Security Council {AFP 20 Nov, Reuter 22 Nov, *Independent* 24 Nov}.

25 November In London, a half-day seminar on *The Biological Weapons Convention and the Pharmaceutical Industry* is sponsored jointly by the Foreign & Commonwealth Office, the Department of Trade and Industry, and the Association of the British Pharmaceutical Industry. Some 60 people, mainly from the industry, participate, hearing and discussing presentations from BWC specialists in the sponsoring organizations and also CBD Porton Down.

25 November In Washington, US Defense Secretary William Cohen releases his department's second annual report on *Proliferation: Threat and Response* [see 11 Apr 96]. According to the report, more than 25 countries have developed nuclear or CBW weapons, or may be developing them. Secretary Cohen tells reporters: "The threat is neither far-fetched nor far off, and the threat will only grow." He also says that Defense Department planners assume that CBW attacks are likely in wars to come. He warns, once again, that federal, state and local authorities must be prepared for the possibility of CBW weapons being used on US soil: "The front lines are no longer overseas — it can be in any American city". {*New York Times*, London *Financial Times* and *International Herald Tribune* 26 Nov}

26 November Iraqi Deputy Prime Minister Tariq Aziz invites the UN to send diplomats to stay as guests in presidential buildings and palaces to which UNSCOM has been denied access [see 16 Oct] in order "that they may learn the truth as it is". UNSCOM inspectors are excluded from the invitation. There are said to be 78 such presidential places. {Iraqi TV 26 Nov in BBC-SWB 28 Nov, London *Financial Times* 27 Nov, *International Herald Tribune* 28 Nov, London *Independent* 29 Nov} Around 48 of them have been built during the period of UNSCOM operations, some very large, exciting suspicions that they conceal proscribed weapons or documentation about past weapons programmes for which UNSCOM has been searching. US Defense Secretary William Cohen had said on television three days previously that the sanctions on Iraq would never be lifted if Iraq continued to declare sites out of bounds to UNSCOM inspectors. {*International Herald Tribune* 24 Nov}

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The CBW Conventions Bulletin (formerly the *Chemical Weapons Convention Bulletin*) (ISSN 1060-8095) is edited and published quarterly by the Harvard Sussex Program on CBW Armament and Arms Limitation. The goal is to provide information and analysis towards an effective multilateral treaty regime which will eliminate chemical and biological weapons and help prevent the exploitation of biomedical technologies for hostile purposes. The Harvard Sussex Program is supported by American and British charitable foundations, including the John D and Catherine T MacArthur Foundation and the Joseph Rowntree Charitable Trust.

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Subscription enquiries should be addressed to Barbara Ring at the Department of Molecular and Cellular Biology, Harvard University, 7 Divinity Avenue, Cambridge, Massachusetts, 02138, USA. The annual subscription price is \$50 (individuals and non-profit organizations) or \$125 (corporate bodies). Payment may be made by cheque (in US\$) payable to 'Chemical Weapons Convention Bulletin'.