

# THE CBW CONVENTIONS BULLETIN

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## CHRYSALIS — HOW THE CWC PRODUCED THE OPCW: THE WORK OF THE OPCW PREPARATORY COMMISSION

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*Executive Secretary (1993–97)*

From 13 to 15 January 1993 the Representatives (mostly the Foreign Ministers) of some 150 states met in the UNESCO building in Paris, at the invitation of the French Government, to sign the 1993 Treaty of Paris, better known as the Chemical Weapons Convention. One hundred and thirty of them duly signed the treaty. At this stage, by signing the text and depositing the signed copy with the United Nations Secretary-General — ‘the Depositary’ — they individually indicated their acceptance of the content of the Convention and their intention to become parties to it through their national constitutional processes. At the same time they collectively, through the adoption of a resolution to set up a Preparatory Commission, started the process of creating the organization which was to operate the Convention from its entry into force. Article XXI.1 specified that this was to occur “180 days after the date of the deposit of the 65th instrument of ratification, but in no case earlier than two years after its opening for signature”.

A little over four years later the representatives of 80 out of the 87 states parties met in The Hague, on 6 May 1997, for the opening of the First Conference of the States Parties of the Organization for the Prohibition of Chemical Weapons. They found waiting for their formal acceptance a Technical Secretariat with sufficient of the necessary infrastructure in place to enable the new organization to ‘hit the ground running’ and to meet all the (very tight) deadlines laid down in the Convention for processing of initial declarations and conduct of first inspections.

How was this done? How were the staff recruited? Who decided how they should be trained? How was the content of the inspection equipment store decided or the layout of the laboratory planned? What did the preparations cost and who paid? What was involved in building a large new office block on a prime site and why was this not the site originally offered by the city? What were the respective roles of the Provisional Technical Secretariat and the government representatives in the Working Groups and Expert Groups. How effective were their joint efforts to solve the many issues left open by the Conventions’s negotiators in the Conference on Disarmament in Geneva? How much was left unfinished and what effect did this have on the first years

of operation of the Organization? What lessons can be learned?

Now that six years have passed and the Organization has reached the stage of the first formal review mandated by the Convention it seems appropriate to address these and other questions by collecting as much information as possible from those who were involved and both writing the history of those four and a half years and starting the process of analysis. The Harvard Sussex Program is sponsoring a project with this objective. The exercise will be based at SPRU — Science and Technology Policy Research, University of Sussex in the United Kingdom and the team will be led by Professor Julian Perry Robinson. Daniel Feakes, who spent three years in The Hague as HSP Researcher at OPCW has agreed to provide the main research effort and I shall also assist. We shall be seeking financial support from government sources and from charitable foundations. More importantly still we shall be seeking the cooperation of everybody who participated in the work of the Commission either from a government delegation or the PTS. We shall be seeking out those of you for whom we have contact details but we would welcome any offers to share recollections and opinions. If you are ready to assist please send your contact details, together with a reminder of what role you played, by post or by e-mail to:

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

The period under review, from mid-December 2002 to the end of March 2003, was dominated by three matters: the establishment by the Executive Council of an effective starting date for the OPCW tenure policy; the progress in destruction of Russian Category 1 chemical weapons at the Gornj destruction facility and the setting of a revised one per cent destruction deadline; and preparations for the First Review Conference, due to be held in The Hague during 28 April–9 May.

Since December 2002, the OPCW has seen its membership grow with the Convention having entered into force for the new member states of Palau, Guatemala and Andorra. In another significant development, the number of declared chemical weapons possessor states has increased to five with the addition of Albania, which in November notified discovery of chemical weapons.

### **Executive Council**

The Executive Council met for the first time in 2003 at its thirty-second regular session during 18–21 March. It also met for a specially-scheduled twenty-second meeting on 28 March in order to take a decision on the tenure issue.

At its thirty-second session, the Council received reports from the Vice-Chairmen and co-ordinators for clusters of issues on informal consultations during the intersessional period on: chemical weapons issues; chemical industry and other Article VI issues; administrative and financial issues; and legal, organisational and other issues. It also received a briefing by the chairman of the working group for the preparation of the First Review Conference.

The Director-General's statement to the Council at its thirty-second regular session described the ongoing activities by the Technical Secretariat in regard to external relations, implementing legislation, efforts to combat chemical terrorism, international co-operation and implementation support programmes, assistance and protection requests, and the budget of the OPCW. Mr Pfirter's statement welcomed the reinvigorated pace of accession to the Convention but noted that a relatively small number of states parties had implemented a complete set of legal mechanisms necessary to make the Convention fully operational. In terms of international co-operation, the Director-General observed that the Secretariat was working to make the most of the increased funding provided by the seventh session of the Conference of the States Parties, noting, for example, that the Associate Programme for 2003 had doubled in size. Reflecting current world events, Iran, Kuwait, Qatar and one other state party were reported to have approached the Secretariat in the last few weeks with requests for the provision of expert advice and assistance for the development and improvement of national protective capacities.

On chemical weapons and verification issues, as well as reporting on progress at the Gornj destruction facility and progress on destruction in other possessor states parties, the

Director-General stated that Albania had submitted a declaration on the discovery of chemical weapons on its territory, bringing the number of declared possessor states parties to five. Albania is expected to submit plans for the destruction of chemical weapons in due course.

The 'thorny but unavoidable issue' of tenure was also briefly addressed by the Director-General, who stated that a decision was required to provide a 'minimum of predictability and a clear idea of what shape Member States wish to give the principle of a non-career organization adopted some years ago'. Finally, the forthcoming First Review Conference was described as a watershed for the Convention and the OPCW, the Director-General expressing the hope that 'we will ... begin the Conference determined to see at its end a strengthened Convention and a reinvigorated ban on chemical weapons'.

Issues touched upon by the thirteen states making statements during the General Debate included the need for a decision to be taken on the starting date for the tenure policy of the Organization, the forthcoming Review Conference, destruction of chemical weapons in Russia, an update on the arrests in London relating to the production of ricin, and progress in relation to abandoned chemical weapons in China, amongst other things.

During the period between the thirty-first and thirty-second sessions of the Council, consultations or informal meetings took place on: sampling procedures; the Declaration Handbook; clarification of declarations; captive use; schedule 2A and 2A\* low concentration limits; progress in destruction of chemical weapons and destruction or conversion of chemical weapons production facilities (CWPFs); the financial rules of the OPCW; and the tenure policy of the OPCW.

**Election of Chairman** The Council elected by acclamation Ambassador Petr Kubernát of the Czech Republic as its new Chairman for the period 12 May 2003–11 May 2004. Four Vice-Chairpersons were also elected: the permanent representatives of South Africa for the African group; Iran for the Asian group; Peru for the Latin American and Caribbean group; and Germany for the Western European and other group. The Vice-Chairpersons will hold office for the same period as the new Chairman.

**Status of Implementation of the Convention** A report on the *Status of Requests for Clarification of Declaration-Related Information* during the period 1 January 2002–31 December 2002, was noted by the Council. The Secretariat issued 171 requests for clarification of declaration-related submissions to 92 states parties in 2002. Of these, 68 (40 per cent) were fully clarified, and another 31 (18 per cent) were partially clarified. In what was stated to be a significant improvement in the clarification process since the Secretariat began in 2000 to request systematically such clarifications, only 41 requests (24 per cent) were unanswered for more than 60 days. The greatest number of clarification requests each

year were reported to relate to the non-submission of declaration information on transfers of scheduled chemicals or discrepancies between the information provided on transfers of scheduled chemicals between exporting and importing states parties.

The Council deferred consideration of the *Report on the Optimisation and Efficiency of Verification Activities*, provided by the Director-General in accordance with the request of the seventh session of the Conference of the States Parties. The report outlines options and conclusions in relation to the optimization of verification activities at chemical weapons storage facilities (CWSFs), production facilities (CWPFs), destruction facilities (CWDFs), and sites for old and abandoned chemical weapons (OACWs), as well as addressing Article VI inspections and the cost savings which might be achieved through the implementation of various options. It will be considered at the next regular session of the Council in June.

Also deferred to the next session of the Council was consideration of a report on the *Status of Implementation of Articles X and XI of the Convention*, outlining the activities carried out by the Secretariat and states parties under Articles X and XI during 1 August–31 December 2002.

The report stated that, by the end of 2002, 19 states parties had provided the required annual information on their national programmes related to protective purposes. Since entry into force, 35 states parties have made these declarations, as required under Article X, paragraph 4, of which three states parties have declared that they have no programmes for protection against chemical weapons.

As at 31 December, total contributions by 31 states parties to the Voluntary Fund for Assistance amounted to EUR988,592.72, or EUR1,086,614.84 including accumulated income. No contributions were made during the period under review.

Under the Article X heading, no offers of assistance under subparagraphs 7(b) or 7(c) of Article X were made between 1 August and 31 December 2002. A total of 57 states parties have made a submission regarding assistance measures under Article X, paragraph 7 since entry into force.

Finally, a report on *National Implementation Measures* (discussed below in the section on Legal Issues) was also received by the Council, with the Council deciding to consider it further at its next session.

**Destruction issues** As a result of the Conference's decision on the matter, the Council considered updates on the situation at the CWDF at Gorny provided by the Russian Federation and the Secretariat. At its previous session, the Council had expressed the desire to establish a specific date for the extended one per cent destruction deadline as soon as possible.

According to the report by the Director-General on progress made by Russia, the Gorny CWDF started destruction of Category 1 chemical weapons on 19 December 2002, beginning with the destruction of sulphur mustard in Unit 2. The report outlined the Secretariat's assessment of the capacity of the Gorny facility, which between 19 December and 15 March had maintained an average daily destruction rate of 2.8 metric tons (MTs) of sulphur mustard. The report showed an increasing destruction capacity, rising from an average of 1.2 MTs per day in December to 3.7 MTs per day

in the first half of March. Assuming that the anticipated capacity of Gorny to destroy lewisite is correct, the Secretariat estimated that Russia would have destroyed one per cent of its declared Category 1 chemical weapons by mid-May 2003. However, it stated that this date could be brought forward to the end of April if the facility maintained the same destruction capacity as in the first half of March.

The report also outlined the on-site verification activities at Gorny, an inspection team of eight inspectors having been dispatched by the Secretariat on 17 December. According to the report, the number of inspectors will not be able to be reduced until further steps are taken by Russia, including the installation of additional cameras.

The Russian Federation reported that, by 18 March, 255 MTs of sulphur mustard had been destroyed at Gorny since 19 December. Russia proposes to temporarily stop the mustard destruction process line for two months (probably May and June) to conduct scheduled precautionary maintenance work, once 400 MTs of mustard has been destroyed. Russia also reported that the destruction of lewisite is scheduled to begin in May 2003, when the other process line at Gorny becomes operational. Russia expects that the destruction output will initially be 750 kg per month, rising to the maximum productivity of 8.8 MTs per month after three months. In total, by the end of 2003, Russia expects the Gorny facility to have destroyed approximately 600 MTs of chemical agents.

Having received these reports, the Council set a revised intermediate deadline for the destruction of one per cent of the Russian Category 1 chemical weapons stockpiles by 31 May 2003. The decision welcomed the progress at Gorny, and noted that there is a possibility of one per cent destruction being achieved prior to 29 April 2003. While encouraging Russia to meet that date, the Council also recognised the need for flexibility in order to avoid risks to health and safety.

On other matters relating to the extension of destruction deadlines, the Council noted the Director-General's report on the destruction of 20 per cent of Category 1 chemical weapons stockpiles by a state party of withheld identity. The report, required by the seventh session of the Conference following the granting of an extension of the intermediate phase 2 deadline, stated that at the end of the destruction campaign (12 March 2002–18 November 2002, with a short break for maintenance), the state party had concluded destruction of 20.78 per cent of its total declared Category 1 chemical weapons stockpile. The state party thus achieved the Phase 2 requirement ahead of the revised deadline set by the Conference of the States Parties in October.

The Council considered and deferred until the thirty-third Council session two draft decisions on agreed detailed plans for verification of destruction of chemical weapons at the Umatilla and Aberdeen chemical agent disposal facilities in the United States.

#### *Conversion and Verification of Chemical Weapons*

**Production Facilities** The Council had before it a number of matters relating to combined plans for conversion and verification of CWPFs. The Council noted that no objections were raised by any member state within 30 days of receipt of notification on changes at former CWPFs at Open Joint Stock Company (OJSC) Khimprom in Volgograd (DF production) and OJSC Novocheboksarsk (chloroether production). A

new notification on changes at the Khimprom Volgograd facility will be circulated to the Council soon, together with the Secretariat's evaluation.

The Council adopted decisions on two combined plans for conversion and verification of CWPFs (chloroether production and aminomercaptan production) in the Russian Federation at the OJSC Khimprom facility in Novocheboksarsk.

Consideration of four combined plans and draft decisions for conversion and verification of CWPFs at the OJSC facility in Dzerzhinsk and at OJSC Khimprom Volgograd were deferred until the thirty-third session of the Council. The Council also deferred until that session the combined plan and draft decision relating to destruction and verification of a CWPF in Bosnia and Herzegovina.

**Facility Agreements** Consideration of a facility agreement relating to a Schedule 1 protective purposes facility in Belgium, which had been deferred by the Council in December, was again deferred by the Council until its thirty-third session.

The same also occurred in respect of two new draft decisions on facility agreements with the United States regarding on-site inspections at the Aberdeen Chemical Agent Disposal Facility in Maryland and the Umatilla Chemical Depot in Oregon, the Council deciding to return to those facility agreements at its next session.

The Council took note of the Director-General's note informing the Council of agreed modifications to one attachment of a facility arrangement with an unnamed state party for a CWDF.

**Chemical Industry issues** An item relating to chemical industry issues, and, in particular, consideration of the Secretariat's second report on the project to assist states parties in meeting their declaration-related obligations under Article VI, was removed from the provisional agenda of this session of the Council. It is understood that it will be included on the agenda for the thirty-third session.

**Technical issues** The Council adopted a decision on a list of new validated data for inclusion in the OPCW Central Analytical Database (OCAD).

A summary of the fourteenth meeting of the Validation Group for the updating of the OCAD, which met during 17–18 December, was issued in February. Some new examples of naming rules were added for class 2.B.4 compounds. The review of the evaluation criteria was finalised and it was recommended that the Secretariat republish the revised version of the criteria to replace its predecessor. The Validation Group also discussed two cases noticed by the Secretariat regarding relatively large differences in GC data and offered advice. Three mass spectra were re-evaluated, as a result of which it was recommended that they be removed from the database in order to be replaced by new approved higher-quality data. A new release of OCAD is due in April 2003, and the fifteenth meeting of the Validation Group is scheduled for 20–21 May.

**Confidentiality** A report on the *Implementation of the Confidentiality Regime in 2002* was noted by the Council. The report outlined the reorganization of the Office of Confidentiality and Security (OCS) in 2002 and the appointment of a

new head of the office in December. At 31 December, it was reported that only 44 of the (then) 147 states parties had provided the Secretariat with details on the handling of confidential information provided to it by the OPCW. The report stated that, during 2002, OCS received only three reports of minor incidents involving breaches of confidentiality procedures, none of which resulted in the disclosure of confidential information, either within or outside the Secretariat. The report also outlined the classification of confidential pages and documents received from states parties — in 2002, almost 76 per cent of pages received were classified by states parties as being either 'highly protected' or 'protected'. 2002 marked an exception to the overall decrease since entry into force in the number of highly protected or protected documents or pages received from states parties. The handling and protection of such documents was stated to consume considerable resources — the Director-General requested that states parties review their classification of documents and try to reduce the classification level or declassify documents.

Work was reported to be continuing on the project to centralize the registration and tracking of all confidential information held by the OPCW. Finally, the report stated that almost all the recommendations of the Office of Internal Oversight regarding confidential information were implemented during 2002.

**Financial issues** The Council noted reports on the income and expenditure situation of the OPCW covering the period November 2002–February 2003.

The December report on the OPCW's financial situation reflected that 94 states parties had paid their assessed contribution by the end of 2002, resulting in 97.9 per cent of the contributions having been paid and leaving approximately EUR1.2 million outstanding. Eight member states had partly paid, and 45 had not paid, as of 31 December. In terms of the total regular budget for 2002 (EUR61,932,600), the expenditure as of 31 December was EUR58,802,898, leaving a balance of just over EUR3 million.

The situation in respect of reimbursement of verification costs under Articles IV or V, in terms of the total invoiced between 1997 and 2002, was that EUR980,686 remained outstanding at the close of 2002. Of this, the majority related to 2002 invoices. The total sum for reimbursements budgeted for the year 2002 was EUR3 million, compared with the actual amount invoiced by the OPCW during 2002 of just over EUR2 million. Of that EUR2 million, EUR872,307 remained outstanding as of 31 December.

The February financial report stated that 33.4 per cent of the assessed contributions for 2003 had been paid as at 28 February, with 53 member states having fully paid, ten having partly paid and 85 still to pay. Almost EUR43 million remains outstanding. Thirty-two states have been in arrears in the payment of their financial contributions to the OPCW for the preceding two full years.

The Council noted the Director-General's note on proposed amendments to one of the draft Financial Rules of the OPCW, regarding limits on investments with one institution. The Advisory Body on Administrative and Financial Matters was requested to address the issue with a view to making a recommendation to the Council at its next regular session.

*Advisory Body on Administrative and Financial Matters*  
The Council noted the resignation of Keiko Yanai from the ABAF, and approved her replacement, as of 27 February, by Chiho Komuro of Japan.

*Tenure* At its December session, the Executive Council had decided to consider the issue of the OPCW's tenure policy urgently during the intersessional period, with a view to taking a decision on the effective starting date for the seven-year service period at its thirty-second session in March. A decision on this issue had been outstanding since 1999. Three hundred and thirteen staff members at the Secretariat are currently subject to the tenure policy.

Following a request during intersessional consultations, the Council had before it at its thirty-second session, to aid its deliberations, a legal opinion by an external legal adviser on the implications of the main options which the Council might decide to adopt as the effective starting date for the seven-year tenure period. The three starting date options explored were: 29 April 1997 (the date the OPCW came into existence); 2 July 1999 (the date of adoption of a tenure policy by the Conference of the States Parties); and March 2003 (the date at which the Council might set an effective starting date).

At its thirty-second session, the Council considered a draft decision on the seven-year period of tenure which had 2 July 1999 as the effective start date and contained a number of proposals regarding the modalities for its implementation. The concerns of the Council in attempting to reach a decision were to ensure the continuing operational effectiveness of the OPCW and its financial stability, and that any decision be legally sound. The Council decided to discuss the draft decision at a special (twenty-second) meeting of the Council to be convened on the morning of 28 March.

Consultations continued during the period leading up to this meeting, as a result of which a decision was adopted by the Council. The Council adopted 2 July 1999 as the effective starting date for the seven-year total length of service for Secretariat staff. The Council requested that a special session of the Conference of the States Parties be convened as early as practicable, but not later than 1 May (a date falling within the period of the Review Conference), to consider a number of recommendations made by the Council. The recommendations relate to the modalities for the implementation of the tenure decision. They include that the average rate of turnover, beginning this year, shall be one-seventh per year. As an exceptional measure, so as not to compromise the finances or operational effectiveness of the OPCW, the Director-General shall, until 1 January 2009, be authorised to grant contract extensions beyond the seven-year total length of service. However, by 31 December 2009, the Council recommended that no member of staff subject to the tenure policy (there being exceptions for locally recruited General Service staff and linguists) who has served more than seven years shall remain on staff at the Secretariat. The Council has also asked the Conference to reaffirm the Director-General's authority to not extend or renew contracts for staff who have served less than seven years, in order to implement its decision on tenure.

In the event that costs for the staff turnover in 2003 exceed the regular budget, the Council has recommended to the Conference that it authorise the Director-General to use the

2001 cash surplus. The Council has also requested that the Director-General, in implementing the decisions regarding tenure, continue to seek to optimize the work of the Secretariat, by, amongst other things, 'eliminating and avoiding duplication and overlapping of functions and posts'. The Director-General is required to report at least annually on the implementation of the tenure decisions, and to submit to the Council for its information the criteria he will take into consideration in implementing staff turnover, one of which is the principle of 'first in, first out'. The Director-General informed the Council of such criteria and subsequently briefed the staff on the decision taken by the Council and on his approach to its implementation.

*Review Conference* The Chairman of the open-ended working group on preparations for the review conference, Ambassador Davèrède of Argentina, reported to the Council on work carried out by the group. Between November 2001 and 14 March 2003, the group has held 30 meetings. During that time, the group has reviewed a range of background material prepared by the Secretariat and has received ten written submissions from NGOs. In addition, 23 unofficial, and one official, national papers have been submitted to the group. At the twenty-seventh meeting, in early February, the Chairman began to issue elements of a Chairman's text based on the draft provisional agenda of the First Review Conference which had been submitted to the Council in December. By 14 March, the working group had discussed the Chairman's initial draft political declaration and text on the role of the Convention in enhancing international peace and security, measures to ensure the universality of the Convention, general provisions on verification, activities not prohibited under the Convention, and national implementation measures. Texts on general obligations, definitions, related declarations and on chemical weapons and CWPFs have also been issued for future consideration by the group, and other texts will follow soon. Those texts are, however, the responsibility of the Chairman, are without prejudice to the work of the First Review Conference and do not constitute a final agreement.

The thirty-second session of the Council agreed to the working group's request that it be authorised to continue its informal discussions up until the First Review Conference, with the Chairman then to report to the Review Conference on the results of those discussions.

The Council once again considered the draft provisional agenda for the First Review Conference, a version of which had been produced by the Chairman of the working group and presented to the Council in December. A slightly reworked version has now been drawn up and accepted by the Council. It should be noted that the First Review Conference has the ultimate decision on what is, and is not, included in the agenda that will be adopted by the First Review Conference. Substantive items on the provisional agenda include: the role of the Convention in enhancing international peace and security; measures to ensure the universality of the Convention; implementation of the provisions of the Convention relating to: (i) general obligations and declarations related thereto, (ii) general provisions on verification, (iii) chemical weapons and chemical weapons production facilities, (iv) activities not prohibited under the Convention, (v) national implementation measures, (vi) consultation, co-op-

eration and fact-finding, (vii) assistance and protection against chemical weapons, (viii) economic and technological development, (ix) final clauses: Articles XII to XXIV, and (x) the protection of confidential information; and the functioning of the OPCW.

On 7 March, the Secretariat hosted an informal meeting with representatives of chemical industry associations. This was to give industry an opportunity to discuss issues related to the First Review Conference. Issues on the provisional agenda for discussion included: cluster consultation issues; declarations; the conduct of inspections; resource allocation; selection of DOC/PSF sites for inspection; and transfers of Schedule 3 chemicals to states not party.

**Anti-Terrorism** The open-ended working group on terrorism, established by the Executive Council at its twenty-seventh session in December 2001, met again on 20 February. It is expected that the next meeting of the working group on terrorism will be held after the thirty-second session of the Council, which will be followed by meetings at the level of the regional groups. A representative of the Secretariat and the co-ordinator of the ad hoc working group on terrorism, Robert Blum of the United States, attended the first session of the Counter-Terrorism Committee (UN CTC) in New York with international and regional organisations. At a briefing after the return of the OPCW delegation from New York, delegations in The Hague were informed that the UN CTC planned to invite international organisations that deal with the control of nuclear, chemical, biological and other deadly materials, and in particular the IAEA and the OPCW, to a follow-up briefing to enhance co-ordination of these agencies with the UN CTC.

### **Member States**

There have been three new additions to the member states of the OPCW since the beginning of the year, with Palau acceding to the Convention on 3 February, Guatemala ratifying on 12 February and Andorra acceding on 27 February. Entry into force having occurred for Palau on 5 March, for Guatemala on 14 March and Andorra on 29 March, the number of states parties to the Convention is now 151. The number of signatory states to the Convention stands at 25, leaving (according to the OPCW website) 18 states not party.

### **Secretariat**

**Declaration Processing** A report to the Executive Council on the status of implementation of Articles X and XI as of 31 December 2002 reflected that 19 states had made declarations of national protection programmes under Article X, paragraph 4 in 2002. No new assistance measures had been elected during the period under review by member states under Article X, paragraph 7.

Samoa and Uganda provided their initial declarations under Articles III and VI in January 2003, leaving those of Mozambique, Nauru, Saint Vincent and the Grenadines and Thailand overdue as at 28 February. Palau, Guatemala and Andorra will all be required to submit their initial declarations within 30 days of the Convention entering into force in respect of them. As reported in the last issue of the *Bulletin*, ten states continue to have incomplete initial declarations.

As at 28 February, 67 states had submitted annual declarations of past activities (ADPAs) for 2001, with 41 states having submitted annual declarations of anticipated activities for 2003 (ADAAs).

As outlined above, the Secretariat has now received a declaration under Article III from Albania, which in November notified discovery of chemical weapons. This brings the number of declared possessor states parties to five, and has also resulted in an increase in the total quantity of declared CW agent.

In terms of declared facilities and sites, as of 28 February, the current count of Schedule 1 facilities was 27, which includes one additional facility declared in an annual declaration for 2003 by a state party. There are 411 declared Schedule 2 facilities, 462 Schedule 3 facilities and 4,117 OCPFs.

The US annual destruction plan for 2003 (as well as its previous notifications) indicates that one of the CWDFs in the United States previously planned to come into operation now will not do so. Thus, the total number of CWDFs now stands at 39, with 61 declared CWPfFs and 33 declared CWSFs. Japan has transferred its declared old chemical weapons (OCW) from one of its declared storage sites to another, reducing the number of inspectable OCW storage sites to 28 (the number of declared OCW sites standing at 41). There are also 14 declared abandoned chemical weapons (ACW) sites.

**Inspections and Verification** By 28 March, 1,407 inspections had been completed, or were ongoing, at 602 sites in 52 states parties (the first inspection in Georgia having now been conducted) and one non-state party since entry into force in 1997. The breakdown of inspections was as follows: 325 to CWDFs, 274 to CWPfFs, 199 to CWSFs, 20 to ACW sites, 43 to OCW sites, 5 to destruction of hazardous chemicals sites, 1 to an emergency destruction of chemical weapons site, 115 to Schedule 1 facilities, 208 to Schedule 2 facilities, 101 to Schedule 3 facilities, 115 to DOC sites and 1 other. OPCW inspectors had spent a total of 79,244 days on mission. During 2003, 79 inspections at 64 sites have been, or are being, carried out.

On other inspection-related activities, the OPCW Inspectorate will conduct an Investigation of Alleged Use of Chemical Weapons exercise during 31 March–2 April, to be hosted by the Czech Republic.

**Destruction/Conversion** As outlined above, destruction activities at Russia's Gorny facility started with sulphur mustard destruction on 19 December and, by 18 March, 255 MTs of sulphur mustard had been destroyed there. The Director-General's statement to the thirty-second session of the Council reported that India completed its fourth destruction campaign on 22 February, and has now destroyed 40 per cent of its declared Category 1 stockpile. As reported in the December *Bulletin*, a state party of withheld identity has to date destroyed almost 21 per cent of its declared chemical weapons stockpiles. Meanwhile, activities at the Newport and Aberdeen chemical agent disposal facilities in the United States are expected to begin in the near future.

The figures released in March 2003 reflect that, as at 28 February, the OPCW had overseen the destruction of 7,305, out of a declared total of 69,885, MTs of chemical agents. In

terms of the destruction of munitions or containers, the OPCW reported destruction of 1,871,681 items out of a declared total of 8,625,377 munitions or containers. In February 2003, four CWDFs were in operation in three declared possessor states; one in India, one in Russia and two in the United States.

A new destruction certificate was issued on 28 February for the HD production and fill facility at Rocky Mountain Arsenal in the US, thereby increasing the number of CWFs destroyed to 29.

**Implementation of Article X** A number of invitations have been issued in relation to assistance and protection training programmes to be held in 2003.

Nominations were sought for participants in the Swiss Emergency Field Laboratory Training Programme (SEFLAB VII), to be held in Spiez, Switzerland during 27 April–2 May. The course will provide training for up to 16 chief instructors from member states in civilian chemical weapons detection and decontamination, and will include training in the use of detection equipment.

An invitation was also issued by the OPCW and Switzerland for participants to be nominated for the sixth training course on chemical weapons protection to be held at the NBC Training Centre in Spiez, Switzerland. The course, which will provide training for up to 40 chief inspectors in detection, decontamination and civilian chemical weapons protection, will be held during 6–11 April.

In late February, the OPCW and the Czech Republic invited member states to nominate participants for a training course on chemical weapons protection. The course, which will provide training in chemical weapons protection, detection and decontamination for 20 chief inspectors from states parties, will be held in Lazne Bohdanec in the Czech Republic from 12–16 May.

Also in February, the OPCW, together with the government of Iran, issued an invitation to states parties to nominate candidates for the fifth annual course on the medical aspects of defence against chemical weapons. The course is currently scheduled to be held in Tehran during 26–30 May and is designed for medical personnel and to assist member states in the implementation of programmes related to protection against chemical weapons.

In addition, participants have been sought for the Swedish Assistance and Protection Training Course to be held in Revinge, Sweden, during 4–22 August.

**Implementation support** The fourth regional meeting of National Authorities in Latin America and the Caribbean was held in Panama City during 27–28 February. The meeting was attended by 53 delegates from 25 states parties, as well as representatives of two states not party, Haiti and Honduras.

The first regional meeting of National Authorities in the Asian region, originally planned for 26–28 March, has been postponed until 14–16 May. The meeting is to be hosted by Singapore.

Another first regional meeting, for National Authorities in the African region, is scheduled to be held during 19–21 April in Khartoum, the Sudan. Both the African and Asian meetings will follow the tradition established by the National Authority meetings held in Latin America and the Caribbean and Eastern Europe.

National Authority training courses are also planned for Ecuador, Bolivia, the Philippines and possibly Senegal between late April and the end of May.

A planning meeting for the Central Asian Republics, part of a three-year project on the implementation of the Convention in the Central Asian Republics, is due to be held during 1–3 April in Kazakhstan.

A regional CWC implementation workshop for the Gulf Co-operation Council, previously scheduled to be held in Riyadh, Saudi Arabia, during 7–9 April, has been postponed.

**Implementation of Article XI** Applications have been sought for an internship for the development of analytical skills in the analysis of chemicals at the OPCW laboratory. The internship is for a period of six months, beginning 1 May 2003, and is intended for a chemist with an academic background and relevant practical and theoretical experience in analytical chemistry.

In January, the 2003 OPCW Associate Programme was announced. This year, due to increased funding in the 2003 Programme and Budget of the Organization, 24 participants (double last year's number) will receive ten weeks of training in The Hague and elsewhere in Europe during 28 July–3 October.

**Proficiency Testing** The Twelfth Proficiency Test was scheduled to take place in October under the newly adopted evaluation criteria. On 28 February, the meeting regarding the twelfth proficiency test took place. No report of the meeting is yet available.

On 23 January, the Director-General released the schedule for the thirteenth and fourteenth official Proficiency Tests for laboratories. The samples for the thirteenth test will be dispatched on 2 April. The US Army's Chemical/Biological Forensic Analytical Center in Edgewood will prepare the test samples, with the Centre d'Etudes du Bouchet (CEB) in France assisting with the evaluation of the results.

The samples for the fourteenth test will be dispatched on 8 October. The test samples will be prepared by the Centre for Chemical Defence, DSO National Laboratories, in Singapore and the Swedish Defence Research Agency (FOI), Division of NBC Defence, in Sweden will assist with the evaluation of the results.

An announcement of the thirteenth test, together with a request for nominations of interested laboratories, will be faxed to member states at a later date.

**Legal Issues** A report on *National Implementation Measures* was provided to the Council at its thirty-second session, outlining the status of submissions under Article VII, paragraph 5 of the Convention and efforts made to improve the situation, and providing an analysis of the responses to date to the two legislation questionnaires disseminated by the Legal Adviser's Office. The report will be considered further at the next regular session of the Council. However, a number of states made preliminary comments expressing concern at the state of affairs reflected in the report.

The report, together with its addendum, showed that, as of 17 March, 82 states (representing 55 per cent of states parties) had made a submission in compliance with the Article VII, paragraph 5 obligation. This reflected a growth of some seven per cent in submissions since October 2002.



However, the report emphasised that the content, as well as the number, of submissions should be taken into account and indicated that only 42 states (or 28 per cent of all states parties) have legislation covering all key areas. For 108 states parties, there is either no legislation in place, gaps in legislation or an unknown legislative situation.

By 17 March, 73 states (49 per cent of states parties) had responded to the first legislation questionnaire on national measures to regulate scheduled chemicals. The report stated that the trends apparent in the previous reports of March and August 2001 remained the same.

Fifty-seven per cent of states parties had also responded to the second (penal enforcement) legislation questionnaire. An analysis of the responses reflected that the majority of responding states parties have penal measures to prosecute and punish violations of Article I, paragraph 1, which contains the most basic obligations of the Convention, more so than in respect of violations of Article I, paragraphs 2, 3 and 4 (destruction of chemical weapons and production facilities). Eleven of the 86 responding states parties (13 per cent) reported having no legislation in place to enforce any of the obligations under Article I of the Convention.

The survey of responses annexed to the report shows that enforcement of restrictions concerning Schedules 1, 2 and 3 chemicals may be more problematic since fewer states parties reported penalties for violations of Parts VI, VII and VIII of the Verification Annex than for Article I violations. Furthermore, only 57 of the 86 responding states parties responded that they are enforcing the end-user certificate for transfers of Schedule 3 chemicals to states not party, required by Part VIII, paragraph 26, of the Verification Annex.

The report also stated that at least 35 per cent of all states parties have extraterritorial application of their implementing legislation, and that most responding states parties impose criminal sanctions on violations of the CWC's prohibitions.

**Official visits** The Director-General has continued with a programme of official bilateral visits during the period under review. On 19 February, the Director-General visited the Russian Federation, immediately followed by a two-day visit to Germany. During 12–13 March, the Director-General visited Austria and he will visit Switzerland during 7–8 April.

The OPCW hosted visits from the Foreign Minister of the Sudan on 14 January and a group of Kuwaiti diplomats on 13 February. The Director-General met with the Pakistani Special Adviser on Weapons of Mass Destruction on 17 February. On 10 March, the Mayor of the Hague and the Secretary-General of the Dutch Ministry of Foreign Affairs and senior officials visited OPCW headquarters.

**Outreach Activities** The beginning of 2003 saw a new approach to universality efforts at the Organization, involving more targeted, bilateral assistance visits to non states parties, in co-operation with relevant member states. As part of this, and as a result of the meetings with non states parties in Brussels and London in December last year, the OPCW, in joint co-operation with France, made visits to Chad and Haiti in February.

In early March, in conjunction with participation in a symposium hosted by the Stanley Foundation in New York, the Director-General met with non-member states from the African, Latin American and Caribbean, and South Pacific

regions. Those non-member states with whom meetings took place include Angola, Antigua and Barbuda, Bahamas, Barbados, Belize, Cape Verde, Central African Republic, Democratic Republic of the Congo, Djibouti, Dominican Republic, Egypt, Grenada, Guatemala, Liberia, Marshall Islands, Sao Tome and Principe, Sierra Leone, Somalia and Tonga.

A universality regional workshop took place during 10–12 March in Thailand, focusing on states not party in ASEAN and neighbouring regions. States which attended the workshop include: Bhutan, Cambodia, Kyrgyzstan, Myanmar (Burma), the Solomon Islands, Timor-Leste, Tonga and Tuvalu, as well as states parties Palau, Viet Nam and Singapore.

A briefing was also held in The Hague on 2 April for both states parties and non-states parties which do not have representation in The Hague.

In terms of other outreach events planned for 2003, a regional seminar in the Caribbean is planned for May 2003, to be hosted by the Netherlands in the Netherlands Antilles. Furthering the OPCW Plan for Africa, initiated in 2002, a workshop will be held in the second half of the year in Africa. This will address both implementation and universality, and is intended to be conducted in co-operation with regional organisations. Further bilateral assistance visits to a number of non states parties are also planned.

**Staffing** The Deputy Director-General of the OPCW, John Gee of Australia, formally separated from the OPCW on 26 March 2003, having effectively departed a month prior to that. Mr Gee had held this position since May 1997, prior to which he had been Director of the Verification Division of the Provisional Technical Secretariat in the Preparatory Commission for the OPCW since April 1993.

Mr Gee is replaced by Brian Hawtin of the United Kingdom, who started at the OPCW on 27 March 2003. Before taking up this position, Mr Hawtin was Director General for International Security Policy at the Ministry of Defence.

In February, it was announced that there would be changes to OPCW administrative arrangements and structures, in conformity with the organogram contained in the *Programme of Work and Budget for 2003* adopted by the Conference in October 2002. As a result, the Office of Confidentiality now reports to the Director-General and the Health and Safety Branch to the Deputy Director-General.

At 10 March, there were 507 personnel employed by the Organization, 448 of whom were fixed term staff, and 313 of whom were professional staff. The *Programme of Work and Budget for 2003* leaves 33 posts vacant during 2003.

### **Subsidiary Bodies**

**Scientific Advisory Board** The SAB resumed its fifth session during 4 and 5 February, to finalise its report for the forthcoming Review Conference. The report will be made available under cover of a note by the Director-General, containing the Director-General's recommendations to the First Review Conference on possible follow-up regarding the SAB's findings. This note has not yet been released.

**Confidentiality Commission** The Confidentiality Commission will hold its fifth meeting during 26–27 May, having not met since January 2001.



## Future work

The major item on the OPCW's agenda for the next quarter is the First Review Conference, to be held in The Hague during 28 April–9 May. While a provisional agenda has now been agreed, much work remains to be done in the working group on preparations for the Review Conference, which will now continue to meet until the Conference opens.

Before the end of the Review Conference, a Special Session of the Conference will be convened to consider the recommendations of the Council in relation to the implementation of the tenure policy of the OPCW. Having

endured a difficult year in 2002, Secretariat staff are currently undergoing another unsettling period, as they await the outcome of that Special Session. Some uncertainty has now been alleviated with the taking of a decision as to the starting date of the seven-year total length of service. However, with the Council having recommended that implementation of the policy requiring staff turnover begin this year, staff morale within the Organization remains of concern.

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*This review was written by Fiona Tregonning, the HSP researcher in The Hague.*

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## News Chronology

## November 2002 through January 2003

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*What follows is taken from issue 59 of the Harvard Sussex Program CBW Chronicle, which provides a fuller coverage of events during the period under report here and also identifies the sources of information used for each record. All such sources are held in hard copy in the Sussex Harvard Information Bank, which is open to visitors by prior arrangement. For access to the Chronicle, or to the electronic CBW Events Database compiled from it, please apply to Julian Perry Robinson.*

**1 November** US Under-Secretary of State John Bolton accuses a number of "rogue states" of pursuing chemical, biological and nuclear weapons programmes [see also 6 May]. His comments are made at the Second Global Conference on Nuclear, Bio/Chem Terrorism: Mitigation and Response at the Hudson Institute in Washington DC. According to Bolton: "Iran ... is known to be seeking dual-use materials, technology and expertise for its offensive biological and chemical weapons programs from entities in Russia, China and Western Europe ... [Iraq] has rebuilt its civilian chemical infrastructure and renewed production of chemical warfare agents, probably including mustard, sarin and VX. It actively maintains all key aspects of its offensive BW program. And in terms of its support for terrorism, we have established that Iraq has permitted al-Qa'ida to operate within its territory ... [T]here is little doubt that North Korea has an active [chemical weapons] program ... The news on the biological weapons front is equally disturbing. The U.S. government believes that North Korea has one of the most mature offensive bioweapons programs on earth". Bolton continues: "Libya continues to pursue an indigenous chemical warfare production capability, relying heavily on foreign suppliers for precursor chemicals, technical expertise, and other key chemical warfare-related equipment. Moreover, the United States believes that Libya has an offensive BW program in the research-and-development [R&D] stage, and it may currently be capable of producing small quantities of biological agent ... Syria, through foreign assistance, is seeking to expand its chemical weapons program, which includes a stockpile of nerve agent. We believe that it is developing biological weapons and is able to produce at least small amounts of biological warfare agents". He also says: "Cuba ... we believe has at least a limited, developmental offensive biological warfare R&D effort, and ... has provided dual-use biotechnology to other rogue states ... We are also concerned about the activities of some states not party to the treaty, including Syria and Sudan. The administration believes it is critical to put such states on notice. Should they choose to ignore the norms of civilized society and pursue biological weapons, their actions will not go unnoticed."

**1 November** In Utah, an employee of the Deseret chemdemil facility in Tooele, is charged with having tampered with safety records between 29 June and 16 August. David Yarborough is accused of having indicated that air-monitoring units were performing at approved levels during baseline tests, in spite of knowing that they were in fact operating below such levels. The said facility undertakes research into chemical-agent disposal methods. If found guilty Yarborough could face up to five years in prison or a maximum \$250,000 fine.

**4 November** In Kazakhstan, a man is arrested after having entered the scientific centre of quarantine and zoonotic infections. The centre's deputy director, Alim Aikimkbayev, says the man was detained before he could get past a second security level, and adds that US financial aid had recently been put into improving security. During the Cold War, the centre was involved in the production of biological weapons. It also undertook experiments with anthrax on the Vozrozhdeniye peninsula. Today it studies viruses and undertakes research aimed at countering the threat of biological weapons.

**4 November** In Germany, the Public Prosecutor for Lüneburg is investigating the activities of two employees of a German company, with regard to the export in 1999 of water filtration components to Libya. The components were subsequently installed in Libya's Rabta chemical facility [see also 19 June 01]. According to the Hamburg weekly *Der Spiegel*, the German Federal Export Office approved the transaction — worth DM 510,000 (approx. EUR 250,000) — because Libya had declared that the components were destined for a pharmaceutical company. When German officials later visited this company to check that it was not involved in the manufacture of chemical weapons, they were informed that the components had been installed at the Rabta facility. It first transpired during the autumn of 2001 that the Libyan National Company for Pharmaceutical Industries had been placing orders for the Rabta facility. Subsequently, it was put on the Federal Department of Economic Affairs' 'black list'. Under German law, if found guilty, the two accused face a minimum of two years in prison.

**4 November** In the UK House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Mike O'Brien responds to a question regarding the identity of the gas used during the Moscow theatre siege [see 26 Oct]. O'Brien says: "Following inquiries by the United Kingdom and others, Russian authorities have announced that the gas used ... was based on Fentanyl, an opium based narcotic. Fentanyl is not a chemical scheduled under the Chemical Weapons Convention. Non-scheduled chemicals are not in themselves prohibited under the Convention for use in law enforcement, including domestic riot control purposes. On 30 October, the Russian Health Minister, Mr. Shevchenko said 'I officially declare that chemical substances of the kind banned under international conventions on chemical weapons were not used'".

**4 November** The London *Financial Times* reports on a secret November 2000 meeting between UK and US defence officials at which agreement had been reached, so the newspaper states, to launch a "public relations offensive to promote the use of non-lethal nerve gases and other biological weapons". The newspaper was apparently basing itself on an account of the *US/UK Non-Lethal Weapons (NLW) / Urban Operations Executive Seminar* that had been convened at the UK Defence Ministry nearly two years previously. [Note: The Seminar had indeed agreed that a "pro-active public affairs campaign" was needed in order to enhance "the 'acceptability' of NLW use", but this referred to the "use of NLW generally", not to chemical or biological NLW specifically. Indeed, the seminar report drew express attention to fundamental and continuing UK/US differences regarding the legality of the most widespread "non lethal" chemicals, namely the irritant chemicals often used as riot control agents: "The UK interpretation considers them to be chemical weapons under the CWC, and thus proscribed; the US view is that they are not banned under that agreement". The seminar report went on to observe: "This could lead to difficulties in combined operations in certain circumstances".]

**4 November** The US National Research Council (NRC) advises the US Department of the Navy to give non-lethal weapons a higher priority. It further concludes that shifts in emphasis and resources are required within the Joint Non-Lethal Weapons Directorate (JNLWD) to meet its goals. The study, *An Assessment of Non-Lethal Weapons Science and Technology*, was undertaken by the NRC's Naval Studies Board at the behest of the JNLWD and the Office of Naval Research. Chair of the committee responsible for the study Miriam John says: "Our report gives the Navy and Marine Corps specific recommendations to improve their non-lethal capabilities." It advises *inter alia* the JNLWD to establish at least five or six centres of excellence, with a view to focusing on particular classes of non-lethal weapons requiring "unique expertise". In relation to the use of calmative agents to maintain public order, John says, "lawyers have got to get together on [the complexity of international treaties]". "There is", she says, "so much latitude for interpretation" that "it needs a very, very careful look". Jonathan Tucker, of the Monterey Institute for Nonproliferation Studies, says that the study "is ... very confused in its analysis of the legal implications of the weapons [perhaps because the committee had] no experts in international law or arms control".

**4 November** The US Commerce Department announces that the Sigma-Aldrich Corporation has agreed to pay a \$1.76 million settlement, relating to charges that a company it acquired in 1997 had made unauthorized exports of controlled biological toxins. The settlement was reached after the adjudicating judge had ruled in August that companies could be held liable for export control violations committed by acquired companies. The fine was reduced owing to the fact that there was no evidence that the material had been destined for weapons-related

programmes. Michael Garcia, assistant secretary for export enforcement, referred to the exported material as "dual-use items that can be used in the production of biological weapons". In 1996 Sigma-Aldrich was fined \$480,000 for exporting certain toxins.

**5 November** In Rotterdam, responding to the possibility of the EU bringing EU law infringement proceedings against member states that have signed bilateral agreements under the US Customs Service Container Security Initiative, Director of US Homeland Security Tom Ridge: "We regret this action because these are our friends and allies". The Netherlands, Germany, Belgium and France comprise the EU member states that have so far signed up to the Initiative; China, Japan, Hong Kong and Singapore comprise the non-EU signatory states. EU spokesman Jonathan Todd says: "Customs policy in Europe is coordinated by the European Commission." Ridge quotes US ambassador to the Netherlands Clifford Sobel as having said to him: "I've got the port, I've got the government, give me a day or two and we'll make it happen". Rotterdam is the first city to play host to US Customs officers. Four are currently working alongside Dutch inspectors, developing risk profiles and screening procedures to turn up possible shipments of radioactive substances, biological agents or chemical weapons. Two days later the US Customs Service announces that Italy has signed up to the Initiative, and that customs officials will now be installed in the ports of La Spezia and Genoa.

**5 November** The *Washington Post* reports the US Central Intelligence Agency as suspecting that France — together with Russia, Iraq and North Korea — possesses covert stockpiles of smallpox virus. The paper says it obtained the information from unidentified officials who received a classified briefing from "senior homeland security, public health and national security officials" last spring. The quality of the information in the Agency's Weapons Intelligence, Nonproliferation and Arms Control Center assessment is said to vary from "very high" to "medium". The assessment is reported to say with "very high" confidence that Russia, contrary to diplomatic assurances, retains covert stocks of the virus. France and Iraq are assessed as having smallpox with "high", and North Korea with "medium" confidence. The assessment is said to consider that France is most likely using its stockpile as part of a defence programme. The next day France denies that it possesses any stocks of smallpox. French Foreign Ministry spokesman Bernard Valero says: "France scrupulously respects its international engagements ... Therefore, France does not possess any stocks of smallpox in its laboratories, either civilian or military". He adds, that France has limited its smallpox research to the search for a new-generation vaccine and that researchers have used only "authorized animal samples, which are not dangerous to man".

**5 November** In the UK House of Commons, Parliamentary Under-Secretary of State for Trade and Industry Nigel Griffiths responds to a question regarding the number of industrial facilities inspected by the OPCW since its inception. "All the Schedule 1 sites and some of the Schedule 2 sites have been inspected by the OPCW on a number of occasions ... All OPCW inspections carried out on sites in the United Kingdom have found them to be in compliance with the CWC", says Griffiths. In relation to the UK, he says: "The OPCW last inspected (a) CBD Porton Down on 28–30 January 2002 and (b) the Royal Military College of Science at Shrivenham on 23–25 July 2001".

**6 November** In Geneva, a thermos flask containing simulated sarin nerve agent is left in a rubbish bin in the vicinity of the city's airport. This is the theme of the CAPITO 02 exercise — the intention of which is to evaluate emergency preparedness and response following a bioterrorist attack on the airport. Local

police arrive to help evacuate the terminal 20 minutes after symptoms are first reported; within 30 minutes, medical experts diagnose the symptoms as indicating the use of a nerve agent. In total 14 fatalities are simulated. "Four hours are needed between the moment of the attack and the time the whole plan of action is totally operational", says Raymond Wicky deputy commander of the Geneva fire department and co-ordinator of the exercise. In total 200 people participate in the exercise, which is observed by 60 representatives from the OPCW.

**6 November** At UN headquarters, on the occasion of the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict, President of the UN General Assembly Jan Kavan highlights the danger to the environment of the use of weapons of mass destruction. "[W]e should not forget the long-term damage [on the environment] that may be caused by use of weapons of mass destruction ...", says Kavan. He continues: "Their indiscriminate impact can lead to an environment hostile towards many forms of life. Entire species may be wiped out. Their interaction with living forms threatens to alter the very basis of life, as we know it today, through mutations or destruction of the genome code ... We have to avoid any further escalation of this situation through exploitation of the environment in war and armed conflict ... [and] take preventive measures more vigorously and resolve disputes peacefully".

**7 November** Visiting Russia, Vil Mirzayanov [see 15 Feb 95], rejects reports that a fentanyl had been used to end the Moscow theatre siege [see 26 Oct]. In an interview with *Le Monde* (Paris) he says: "It is ruled out that fentanyl could have been developed, tested, and produced in Russia in recent years because Gosniokht was short of financing ... The official version is totally false. The Russians are mentioning fentanyl because it does not come under the prohibitions in the Chemical Weapons Convention ... In fact, they used what they had in hand because they didn't have any time. The decision was made on an emergency basis. They brought from Gosniokht what had already been developed and produced in Russia, that is, a derivative of the BZ gas. Not BZ gas but a derivative. Such an agent was tested in the past at Gosniokht as an anesthetic agent. Furthermore it was used in the Bourdenka military hospital (in Moscow). I do not rule it that it might have been combined with halothane. We produced that BZ derivative in the past (in the USSR), in relatively small quantities, about several hundred kilograms. They had held onto them and used them". Mirzayanov concludes: "I have kept my contacts there and I am well acquainted with what is happening in this sector ... The accounts from ex-hostages describing an odor reminded me of BZ and halothane".

**7 November** In Geneva, the Western Group backs a proposal put forward by Tibor Tóth, Chairman of the Fifth BWC Review Conference [see 7 Dec 01], comprising a five-point plan requiring annual meetings on such matters as strengthening national laws. The said plan is to be circulated at the resumed BWC Review Conference, which is reconvening in four days time. Diplomatic sources say that there is general support for the plan, and that China and Russia — both strongly in favour of a protocol — have indicated that they could accept it.

**7 November** UK Home Secretary David Blunkett releases a draft statement on the terrorist threat to the UK. The statement reads, *inter alia*: "[Terrorists] may attempt to use more familiar terrorist methods, such as leaving parcel or vehicle bombs in public places, or hijacking passenger aircraft. However, they may try something different, perhaps as surprising as the attacks on the World Trade Center, or the theatre siege in Moscow. Maybe they will try to develop a so-called dirty bomb, or some kind of poison gas, maybe they will try to use boats or trains rather than planes. The bottom line is that we simply

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## 40 Years Ago

**November 1967** In Washington, DC, the Institute for Defense Analyses study of *Nonlethal Weapons for Use by Law Enforcement Officers* observes: "The single most promising avenue for the development of new and useful police weapons is through chemical agents. ... They ... offer opportunities to deal with situations of fight and flight which hitherto have not been satisfactorily dealt with, such as the attempted assault on the policeman, or the apprehension of a fleeing suspect or the immobilization of a number of aggressive opponents at one time ... Since many interesting and promising developments are currently security classified, or best known to the military, it is recommended that a study be requested of the appropriate military agency to assess the availability of agents, agent combinations and weapons for use by law enforcement officers, meeting prescribed criteria of health, safety and effectiveness. ... Injector darts may be especially useful as an alternative to firearms ... a fast-acting drug combined with a slower-acting antagonist should be explored. This may allow many agents with risky safety factors to become feasible agents ... Research should be supported on the application of itch-inducing agents to crowds and mob control and to sit-ins." The study provides much descriptive commentary for these recommendations.

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cannot be sure". The said statement is withdrawn minutes later and replaced with a revised text that warns of "ever more dramatic and devastating" terror attacks. Blunkett says the warning was toned down in order to avoid "creating unjustified panic and disruption". He adds, that the initial statement was released as a result of "a simple clerical error".

**7 November–5 January** In Germany, at the Heimerer Schule in Döbeln, there is an exhibition on the history of biological warfare 'Schwarzer Tod und Amikäfer', organized by Erhard Geissler of the Max-Delbrück-Centrum für Molekulare Medizin, Berlin-Buch [see 29 Nov 00]. The exhibition had previously been showing at the Erich Maria Remarque Center, Osnabrück, from 8 August to 27 October. Next year it will be moving on to the Volkshochschule Gütersloh, from 31 March to 8 May; the Kongress der Deutschen Gesellschaft für Katastrophenmedizin, Berlin, from 17 to 18 May; and the BioTechnikum Greifswald, from 20 May to 27 June. From 15 to 21 September it will be showing at Mainz Castle, as an official exhibit of the 'Science Summer 2003'.

**8 November** The UN Security Council unanimously adopts resolution 1441, under which UNMOVIC weapons inspectors are sanctioned to return to Iraq. After eight weeks of negotiations, the breakthrough only came after French and Russian concerns — that only the UN inspectors could declare Iraq to be in "material breach" of its obligations — were addressed. Paragraph 4 of the resolution, which in previous drafts stated that a "further material breach" by Iraq must be reported to the Council for assessment in accordance with paragraph 11 *or* 12, now refers to paragraph 11 *and* 12.. The resolution states:

... *Acting* under Chapter VII of the Charter of the United Nations ...

3. *Decides* that ... Iraq shall provide to UNMOVIC, the IAEA, and the Council, not later than 30 days from the date of this resolution, a currently accurate, full, and complete declaration of all aspects of its programmes to develop chemical, biological, and nuclear weapons, ballistic missiles, and other delivery systems such as unmanned aerial vehicles and dispersal systems

designed for use on aircraft, including any holdings and precise locations of such weapons, components, sub-components, stocks of agents, and related material and equipment, the locations and work of its research, development and production facilities, as well as all other chemical, biological, and nuclear programmes, including any which it claims are for purposes not related to weapon production or material.

4. *Decides* that false statements or omissions in the declarations submitted by Iraq pursuant to this resolution and failure by Iraq at any time to comply with, and cooperate fully in the implementation of, this resolution shall constitute a further material breach of Iraq's obligations and will be reported to the Council for assessment in accordance with paragraphs 11 and 12 below.

5. *Decides* that Iraq shall provide UNMOVIC and the IAEA immediate, unimpeded, unconditional, and unrestricted access to any and all, including underground, areas, facilities, buildings, equipment, records, and means of transport which they wish to inspect, as well as immediate, unimpeded, unrestricted, and private access to all officials and other persons whom UNMOVIC or the IAEA wish to interview in the mode or location of UNMOVIC's or the IAEA's choice pursuant to any aspect of their mandates; further decides that UNMOVIC and the IAEA may at their discretion conduct interviews inside or outside of Iraq, may facilitate the travel of those interviewed and family members outside of Iraq, and that, at the sole discretion of UNMOVIC and the IAEA, such interviews may occur without the presence of observers from the Iraqi Government; and instructs UNMOVIC and requests the IAEA to resume inspections no later than 45 days following adoption of this resolution and to update the Council 60 days thereafter. ...

7. *Decides* further that ... the following revised or additional authorities ... [are] binding upon Iraq ... .

UNMOVIC and the IAEA shall have ... the right to inspect any sites and buildings, including immediate, unimpeded, unconditional, and unrestricted access to Presidential Sites equal to that at other sites, notwithstanding the provisions of resolution 1154 (1998) of 2 March 1998;

UNMOVIC and the IAEA shall have the right to be provided by Iraq the names of all personnel currently and formerly associated with Iraq's chemical, biological, nuclear, and ballistic missile programmes and the associated research, development, and production facilities; ...

UNMOVIC and the IAEA shall have the right to declare, for the purposes of freezing a site to be inspected, exclusion zones, including surrounding areas and transit corridors, in which Iraq will suspend ground and aerial movement so that nothing is changed in or taken out of a site being inspected; ...

UNMOVIC and the IAEA shall have the right at their sole discretion verifiably to remove, destroy, or render harmless all prohibited weapons, subsystems, components, records, materials, and other related items, and the right to impound or close any facilities or equipment for the production thereof; and

UNMOVIC and the IAEA shall have the right to free import and use of equipment or materials for inspections and to seize and export any equipment, materials, or documents taken during inspections, without search of UNMOVIC or IAEA personnel or official or personal baggage.

9. *Requests* the Secretary-General immediately to notify Iraq of this resolution, which is binding on Iraq; demands that Iraq confirm within seven days of that notification its intention to comply fully with this resolution; and demands further that Iraq cooperate immediately, unconditionally, and actively with UNMOVIC and the IAEA.

10. *Requests* all Member States to give full support to UNMOVIC and the IAEA in the discharge of their mandates, including by providing any information related to prohibited programmes or other aspects of their mandates, including on Iraqi

attempts since 1998 to acquire prohibited items, and by recommending sites to be inspected, persons to be interviewed, conditions of such interviews, and data to be collected, the results of which shall be reported to the Council by UNMOVIC and the IAEA;

11. *Directs* the Executive Chairman of UNMOVIC and the Director-General of the IAEA to report immediately to the Council any interference by Iraq with inspection activities, as well as any failure by Iraq to comply with its disarmament obligations, including its obligations regarding inspections under this resolution.

12. *Decides* to convene immediately upon receipt of a report in accordance with paragraphs 4 or 11 above, in order to consider the situation and the need for full compliance with all of the relevant Council resolutions in order to secure international peace and security.

13. *Recalls*, in that context, that the Council has repeatedly warned Iraq that it will face serious consequences as a result of its continued violations of its obligations.

France, Russia and China transmit to the President of the Security Council a letter containing a joint statement on their interpretation of the resolution. The statement reads: "Resolution 1441 (2002) adopted today by the Security Council excludes any automaticity in the use of force. In this regard, we register with satisfaction the declarations of the representatives of the United States and the United Kingdom confirming this understanding in their explanations of vote, and assuring that the goal of the resolution is the full implementation of the existing Security Council resolutions on disarmament of Iraq's weapons of mass destruction. All Security Council members share this goal. In case of failure by Iraq to comply with its obligations, the provisions of paragraphs 4, 11 and 12 will apply. Such failure will be reported to the Security Council by the Executive Chairman of UNMOVIC or by the Director General of IAEA. It will be then for the Council to take a position on the basis of that report. Therefore, the resolution fully respects the competences of the Security Council in the maintenance of international peace and security, in conformity with the Charter of the United Nations."

US Permanent Representative to the United Nations John Negroponte declares that the resolution contains no "hidden triggers" and no "automaticity" for the use of force. The procedure to be followed, he says, is laid out in the resolution, but that it does not constrain any Member State from acting to defend itself against the threat posed by Iraq, or to enforce relevant United Nations resolutions and protect world peace and security, where the Security Council fails to so act. UK Permanent Representative to the United Nations Jeremy Greenstock declares that there is no "automaticity" in the resolution, but that the Security Council should to meet its responsibilities therein. He adds: "[I]f Iraq chooses defiance and concealment, rejecting the final opportunity it has been given by the Council in operative paragraph 2, the United Kingdom — together, we trust, with other members of the Council — will ensure that the task of disarmament required by the resolutions is completed".

**9 November** In the UK, three men are arrested under Section 57 of the Terrorism Act 2000, for possessing articles for the preparation, instigation and commission of acts of terrorism. Later police say that no cyanide or noxious gas was found at the time of the raid. Responding to suggestions that a poison gas attack was being planned on the London Underground [see also 17 Feb 01], Foreign Secretary Jack Straw says: "I have seen no specific threat whatever in respect of the use of nerve gas or anything else like that on the Underground". Deputy Prime Minister John Prescott says: "In this case it does not appear there is any evidence whatsoever there was going to be a gas attack or use of bombs regarding the three people who have been arrested". The three are thought to be of either Tunisian or

Moroccan background and belong to a group called the North African Front, which is said to have loose connections with Osama bin Laden's al-Qa'ida network.

**10 November** India is training 400 military personnel to form "highly specialized" rapid reaction units capable of responding to incidents involving the use of nuclear, chemical and biological weapons, according to senior unidentified Indian defence officials. The Press Trust of India reports that the US has so far trained 13 military personnel under an eight-week programme, with 7 more to undergo the training before returning to India to pass the expertise on to other members of the units. Units are to be stationed in Ghaziabad to the north, Chennai to the south, Ranchi to the east, and Kota to the west. The formation of an additional two units is expected.

**11 November** In Australia, a suspicious white powder is found inside a magazine that had been circulating around the parliament building; eventually ending up in the Senate Office. Fire service officer Ron Weston says that anyone who came into contact with the powder has been isolated, but describes the risk of the powder proving harmful as low. "We are following the procedures to ensure that no rock is left unturned", he says.

**11 November** In Geneva, states parties to the BWC reconvene for the resumption of the 5th BWC Review Conference — officially set to conclude on 22 November — under the continuing presidency of Ambassador Tóth. The original session, held from 19 November to 7 December 2001, was suspended in controversial circumstances [see 7 Dec 01]. Toth circulates the following five-point plan [see 7 Nov] to be considered by delegations over the coming days on a 'take it or leave it' basis:

1. The Conference decides to hold three annual meetings of the States Parties of one week duration each year commencing in 2003 until the Sixth Review Conference, to be held not later than the end of 2006, to discuss, and promote common understanding and effective action on:

- i. the adoption of necessary national measures to implement the prohibitions set forth in the Convention, including the enactment of penal legislation;
- ii. national mechanisms to establish and maintain the security and oversight of pathogenic microorganisms and toxins;
- iii. enhancing international capabilities for responding to, investigating and mitigating the effects of cases of alleged use of biological or toxin weapons or suspicious outbreaks of disease;
- iv. strengthening and broadening national and international institutional efforts and existing mechanisms for the surveillance, detection, diagnosis and combating of infectious diseases affecting, humans, animal, and plants;
- v. the content, promulgation, and adoption of codes of conducts for scientists.

2. All meetings, both of experts and of States Parties, will reach any conclusions or results by consensus.

3. Each meeting of the States Parties will be prepared by a two week meeting of experts.

The topics for consideration at each annual meeting of States Parties will be as follows: items i and ii will be considered in 2003; items iii and iv in 2004; item v in 2005. The first meeting will be chaired by a representative of the Eastern Group, the second by a representative of the Group of Non-Aligned and Other States, and the third by a representative of the Western Group.

4. The meetings of experts will prepare factual reports describing their work.

5. The Sixth Review Conference will consider the work of these meetings and decide on any further action.

"I am aware that the proposal is not likely to fully satisfy many or even any delegation ... This is a rescue operation," says Tóth. "Everyone in the conference is walking on eggshells", adds

Indian Ambassador Rakesh Sood. A number of NAM states subsequently press for a broader range of subjects to be considered, as well as a change to allow discussion of export control regimes, e.g., Australia Group restrictions. The Western Group, however, resists any change to the plan.

**11 November** In Geneva, during the ongoing resumed session of the 5th BWC Review Conference, the BioWeapons Prevention Project (BWPP) is launched. The Project was conceived partly as a result of the breakdown in intergovernmental negotiations to formulate a BWC protocol and partly to raise awareness of biological weapons issues in developing countries. It brings together eight non-governmental organizations: the British American Security Information Council (UK-US), the Centre for Conflict Resolution (South Africa), the Department of Peace Studies at the University of Bradford (UK), the Federation of American Scientists (US), the Graduate Institute of International Studies (Switzerland), the Harvard Sussex Program (UK-US), the International Network of Engineers and Scientists for Global Responsibility and the Verification Research, Training and Information Centre (UK).

With the objective of reinforcing the international norm against the weaponization of disease, BWPP aims to establish a global monitoring network to increase openness in biological weapons matters. The eight founding organizations have already been joined by a number of partner organizations and the Project is actively seeking new partners, particularly in developing countries. One of the Project's several goals is to produce an annual report *BioWeapons Monitor* detailing states parties' compliance with the BWC and related agreements and developments in biotechnology which could also be put to hostile purposes. The Project will use its website and occasional publications to inform decision-makers, the media and the public about biological weapons compliance issues.

Making the keynote speech at the BWPP launch event is UN Under-Secretary-General for Disarmament Affairs Jayantha Dhanapala. In his statement, Dhanapala says: "As I have reiterated on numerous occasions, NGOs and civil society are an indispensable part of international disarmament efforts. They have played various roles in this respect, complementing the work of Governments, being engaged in advocacy on disarmament issues, educating the public and working in partnership with Governments and intergovernmental organizations." Addressing the creation of BWPP, Dhanapala says: "It is also encouraging to see that this new endeavour will establish a global network of civil society organizations working not only in the area of disarmament and arms control, but also in related fields such as biosciences and technology, health and the environment. By increasing the level of general awareness of biological weapons issues and generating new expertise in this area in countries around the world, as it is proposed, such a network could actually be tapped by interested Governments for the expertise that it will have at hand."

**11–12 November** Russian Munitions Agency Director General Zinovi Pak says that Russia complied with its obligations under the CWC vis-à-vis its ending of the Moscow theatre siege [see 26 Oct]. On the occasion of the first day of the Fourth National Dialogue Forum in Moscow — hosted by Green Cross Russia, in coordination with Green Cross Switzerland and Global Green USA — Pak says: "[I]n dealing with this terrorist act Russia did not depart an iota from the Convention. Russia fulfilled that mission in full accordance with the Convention. Namely, the convention allows the use of chemical agents to restore order in a country. These chemicals must be declared by the state to the international organization. Russia has done all that. The chemicals have been declared and Russia uses them. But in this situation we were talking about a law-

enforcement action, a unique law-enforcement action that the Convention also allows for ... I must tell you that the substance used is child's play compared with List 123 of banned substances. If, God forbid, anyone had used a substance from List 123, not a single soul would have remained alive. In fact, most people living in the neighboring houses would have died. So, there are neither legal nor actual grounds of suspecting Russia. Russia has complied with everything scrupulously. And the special services can share with you what this substance was".

[Note: Pak seems here to be implying, but not actually stating, that Russia has reported to the OPCW, in accordance with its Article III.1(e) obligation to declare "each chemical it holds for riot control purposes", the chemical identity of the opioid used to end the Moscow theatre siege. Yet opioids, which have long-lasting effects, do not fall within the Article II.7 definition of "riot control agents".]

The next day at the conference, the head of the Russian Munitions Agency's chemical and biological weapons department, Alexander Gorbovskiy, says that chemical weapons buried before 1977 must be destroyed only if they pose a real danger to the public. "Former burial sites of products related to the manufacturing of chemical weapons must be examined to see whether they pose damage for people and the environment. Activity to eliminate consequences can be started only after environment protection services confirm this danger", he says. Pointing out that the CWC does not require the declaration or destruction of chemical weapons buried prior to 1977, he adds: "We see a substitution in terms here. The thing is that old chemical weapons are registered when they are found to be present, that is when they display the characteristics of these weapons". More generally, Gorbovskiy says: "The [CWC] is intended to operate for a long period of time, and its main goal is to both destroy current stocks of chemical weapons and prevent the emergence of their new types in the future. That is why the ability to obtain new chemicals and chemical weapons of next generations should be subject to monitoring and control, including international control ... An entire set of the convention's provisions allows various interpretations of these issues and does not provide reliable protection from obtaining dangerous chemicals using cutting-edge achievements of present-day science".

**12 November** The Istanbul *Milliyet* reports that the Turkish Ministry of National Defence has placed an order with TUBITAK (Turkish Scientific and Technical Research Organization) for 300,000 chemical, biological and nuclear protective suits. TUBITAK Director Tarik Baykara says that this number will increase to one million, were Turkey to join any US led attack against Iraq. The said suits are expected to be ready within a few months.

**12 November** Finland announces its refusal to grant an export licence to Environics Oy, to export its Chempo 100 gas-detection kits to Israel. A statement issued by the Finnish Government reads: "Finland has twice earlier granted licences for exports of two examples of the previous model of gas detectors. In both cases, the exports for demonstration purposes did not lead to larger commercial deals". Spokesman for the Finnish Embassy in London Ilkka Rentola says that although Israel was prepared to pay for the upgrade sample kits "consideration was given to the fact that they are not buying bigger quantities". Rentola adds: "This is a high-tech product ... and there is the question of safeguarding the know-how".

**12 November** Czech Defence Minister Jaroslav Tvrdik says that "Kuwait has offered the possibility of fully financing the [Czech chemical warfare] unit [now based in Kuwait]". To cut costs, the plan is to bring 200 of the 250-strong unit back to the Czech Republic in the New Year, on the basis that they could return to Kuwait within 48 hours if required. The unit has been

stationed in Kuwait since March as part of Operation Enduring Freedom. The Czech television channel, Nova, reports that ideally Kuwait and other Arab states would like to purchase all of the unit's equipment and then pay to train their own specialists. Two days later Tvrdik briefs the Czech Senate on the Kuwaiti proposal. A month later, two unidentified sources from the Czech foreign and defence ministries say that Kuwait has reconsidered its offer, and that the unit may therefore have to be withdrawn at the end of the year after all. *Mlada fronta Dnes* adds that, according to the said sources, around 70 Czech military personnel will remain in Kuwait to maintain the equipment.

**12 November** *The New York Times* reports that Iraq has ordered a million doses of atropine autoinjectors, according to senior White House officials. According to one official, "if the Iraqis were going to use nerve agents they would want to take steps to protect their own soldiers, if not their population. This is something that US intelligence is mindful of and very concerned about". As well as ordering atropine — which can counter some of the toxic effects of agents such as sarin and VX — the officials claim that Iraq has also placed orders for obidoxime chloride. The next day Undersecretary for the Turkish Ministry of Health Sefer Aycan says: "News stories published in the New York Times daily of the United States claiming that Iraq ordered an antidote known as atropine from Turkey to use against nerve gas, are baseless ... We did not receive such a request from Iraqi government, and we did not make such an official export ... All exports and imports of medicines are made through Health Ministry Directorate General Medicine and Pharmacy. Turkey did not receive an official request from the Iraqi government to purchase atropine. However, other ways like shuttle trade can be used to purchase medicine".

A month later the *Washington Post* reports unidentified UN sources and confidential UN documents as saying that Iraq imported — with US approval — more than 3.5 million vials of atropine over the past five years. It also says that between late 1997 and November 2001, French, Russian and Italian companies signed at least five contracts through the UN oil-for-food program to sell Iraq more than 3.5 million ampoules of atropine. According to the UN sources, more than two million units have been delivered to Baghdad; the quantities being consistent with dosages used for medical purposes. More than 3.4 million vials, the vast majority, contained 0.6-milligram doses of atropine sulphate, an amount typically used to speed up the heart rate of heart attack victims. [Note: a typical military autoinjector contains 2 milligrams of atropine].

**13 November** In Tel Aviv, a high-casualty chemical warfare attack is being simulated, with a view to testing the city's emergency response and preparedness. The exercise comprises two scenarios: non-conventional explosive devices are detonated on a train, releasing a cloud of dangerous gas in the direction of the towers in the bourse area; and, an office building in the compound is seized by terrorists. Several weaknesses are subsequently exposed by the exercise, including a delay in fire-fighters arriving at the scene after encountering a road block, and a shortage of around 500 protective suits for the fire-fighters.

**13 November** Iraqi Minister for Foreign Affairs Naji Sabri transmits to UN Secretary-General Kofi Annan a letter under which Iraq accepts the terms of UN Security Council resolution 1441. The letter reads: "[I]n the name of the Security Council, we hereby inform you that we will deal with resolution 1441 (2002), despite its iniquitous contents ... We request you to inform the Security Council that we are ready to receive the inspectors in accordance with the established dates ... We are eager for them to accomplish their task in accordance with international law as soon as possible. If they do so in a professional and lawful manner, and without previously planned goals, the

fabrications of the liars will be revealed to the public and the declared aim of the Security Council will be achieved. At that point, the Security Council ... will be under obligation to apply paragraph 14 of its resolution 687 (1991) to the Zionist entity (Israel) and thereafter to the entire region of the Middle East so that it is free of weapons of mass destruction ... The fabrications of the liars and the deceit of the charlatans in the American and British administrations will be revealed before the world in contrast to the truthfulness of the proud Iraqis and the correctness of what they say and do."

In Washington, UN Secretary-General Kofi Annan makes a statement vis-à-vis the US interpretation of UN Security Council resolution 1441. "The US does seem ... to have a lower threshold than others may have" to justify military action, he tells reporters prior to a meeting with US President George Bush. "I think the discussion in the council made it clear we should be looking for something serious and meaningful, and not for excuses to do something".

Ten days later Sabri transmits to Annan a lengthy and detailed follow-up letter setting out the reasons why Iraq takes exception to the resolution. Sabri concludes the letter by saying: "Your Excellency, the above facts [as set out in the letter] prove that those who urged the UN Security Council to issue Resolution No 1441 have aims other than ascertaining that Iraq had not produced weapons of mass destruction".

**13 November** At a US State Department press briefing, the question: "Can you confirm that North Korean Vice Foreign Minister Kang Sok-ju told Assistant Secretary of State James Kelly during the latter's visit to Pyongyang in October [3 to 5] that North Korea has biological weapons?" prompts the following answer: "Vice Foreign Minister Kang made no such remarks or admission during his meeting with Assistant Secretary Kelly". A Japanese Government official had earlier quoted Kang as having told Kelly during the said visit: "We have bio. We have everything apart from nuclear". The next day, Japanese Chief Cabinet Secretary Yasuo Fukuda admits that the Japanese official had essentially misquoted Kang, who "did not clearly say" that the North possesses the said weapons. "It was not that kind of story", he says.

**14 November** In Geneva, states parties to the 5th BWC Review Conference agree to adopt — without amendment — the draft decision proposed by BWC Chairman Tibor Tóth [see 11 Nov]. A statement submitted on behalf of the group of the Non-Aligned Movement (and other states) reads: "The NAM and Other States are disappointed at the limited nature of the decision that we've just taken ... which at the best only has the potential of enhancing the implementation of the Convention". It adds that "the language of the decision has many ambiguities"; that at any time states could "together and at any time decide on further work that may be required"; that the time set aside to decide on accepting the decision had been "extremely limited", and that during the next Review Conference in 2006 states parties would "decide on further action"; and that the Convention "forms a composite whole" and a such it was "necessary for all of the inter-linked elements of the Convention ... to be dealt with". A statement submitted on behalf of the Western Group reads: "The text ... circulated to us a week ago and which we adopted today, carefully balances the views of all the States Parties and results in a substantive and valuable conclusion to the Fifth Review Conference". It notes that the decision "provides for a qualitatively different outcome to that found in the final products of previous Review Conferences". It also states that the decision is "clear and self-explanatory"; and would "strengthen the effective implementation" of the Convention by "establishing a framework for an ongoing multilateral process in

the lead-up to the Sixth Review Conference". The Review Conference formally closes the next day.

**14–15 November** In Washington DC, some 500 invitees participate in the Carnegie International Non-Proliferation Conference, the theme of which is 'Threat Assessment'. Among the keynote speakers are UN Under-Secretary General for Disarmament Affairs Jayantha Dhanapala and IAEA Director General Mohammad ElBaradei. The panel on Preventing the Misuse of Biotechnology (sitting on the second day), brings together Nancy Gallagher of the University of Maryland, Gerald Epstein from the Defense Threat Reduction Agency, Elisa Harris of the University of Maryland, Barry Kellman of DePaul University and Jeanna Kwik of Johns Hopkins University. The panel points out the difficulty of preventing the misuse of biotechnology, given its dual-use nature and its dispersal around the world. It notes that the BWC does not cover the research stage of biotechnology, and that whilst the BWC does control the proliferation of biotechnology by states, there are no existing controls relative to its misuse by individuals. The panel explores alternative strategies for preventing the misuse of biotechnology without impeding beneficial research, including self-governance, cooperative security, and criminalization.

**15 November** In the UK, the National Audit Office releases *Facing the Challenge: NHS Emergency Planning in England*, which identifies a number of deficiencies in the National Health Service's ability to cope with a major chemical and/or biological incident involving 500 or more casualties. The report states: "[T]here are deficiencies in NHS planning arrangements. These existed before September 11 events, and though there have been improvements since, momentum needs to be maintained to deal with remaining weaknesses in planning and testing major incident plans, both in respect of the type of events experienced to date and for the newer threats of mass casualty, and biological, radiological and nuclear incidents ... deficiencies in the way that the NHS plans and prepares for major incidents. Arrangements in some other countries, for example Sweden, provide possible models, including the creation of a national incident database ... Before September 11 only half of health authorities had considered the impact of potential major incidents but since then most had done so. The quality of plans and preparedness improved after September 11, but coverage of chemical, biological and radioactive incidents was mixed, some plans were still out of date and there was scope to improve arrangements for working with other emergency organisations, such as the police and fire services. Importantly, one third of health authorities considered post September 11 that they did not test their plans frequently enough and nearly a fifth considered that their testing was not effective ... Post September 11, all except two health authorities were prepared for dealing with major incidents generally. However, readiness in respect specifically of chemical, biological, radiological or nuclear incidents was unsatisfactory." The Government's chief medical officer Sir Liam Donaldson, later announces a public education campaign, which will involve the use of posters and mock-emergency drills, to give advice on how to respond to a biological or chemical attack. The campaign will commence in the New Year. "It will be alarming for people but it is important", says Donaldson.

**15 November** The US Centers for Disease Control and Prevention' Advisory Committee on Immunization Practices (ACIP) issues *Supplemental Recommendations on the Use of Anthrax Vaccine in Response to Terrorism*. The said recommendations supplement ACIP's December 2000 recommendations in three areas: use of anthrax vaccine for pre-exposure vaccination in the US civilian population; the prevention of anthrax by post-exposure prophylaxis; and, recommendations for



additional research related to using anti-microbial agents and anthrax vaccine for preventing anthrax.

**15 November** In the USA, researchers at the Department of Energy's Idaho National Engineering and Environmental Laboratory (INEEL) announce their discovery that the chemical makeup of concrete reacts with VX, causing the latter to break down. "At the time, we didn't know VX would degrade on concrete," says INEEL chemist Gary Groenewold. "Then we realized that we were looking at the spectral fingerprints for VX degradation products".

**15 November** In Georgia, USA, a team from Emory University announces that a ring-vaccination strategy would be most effective to counter an outbreak of smallpox. The study, published in *Science* magazine, therefore contradicts the findings of the team from Yale University headed by Edward Kaplan [see 8 Jul], which advocated mass vaccinations. Using a computerized model (as with the Kaplan study), the Emory team took into account the fact that the individuality of each member of a population would allow the disease to die out if contacts among people are limited by where they live or with whom they socialize. According to the study's author, Elizabeth Halloran, mass-vaccinations would not completely prevent a smallpox outbreak because a significant number of people would be missed, including those unable to receive the vaccine for health reasons and those who may not be able to reach a clinic to receive the vaccine.

**16 November** In Cairo, Egyptian President Hosni Mubarak says that the demands made of Iraq — as set out in UN Security Council resolution 1441 [see 8 Nov] — should apply equally to Israel. Furthermore, he urges the United Nations to pass a resolution to that effect. Addressing the Egyptian Parliament, he says that one of the elements required for a comprehensive solution of the crisis in the Middle East is to have the region cleansed of chemical, biological and nuclear weapons.

**17 November** In Belgrade, *Glas Javnosti* quotes former head of Yugoslavia's National Plant Protection Agency Slavoljub Markovic as saying that the US deliberately exported the western corn rootworm beetle to Yugoslavia. "Diabrotica [western corn rootworm beetle] can not survive in the ordinary passenger plane or ship due to the long distance ... It is also not possible to get this pest through seed or corn shipment. All this lead [sic] to the conclusion that we received corn rootworm on purpose", says Markovic. Three weeks later Professor of entomology at Purdue University (USA) Richard Edwards dismisses the claim. "I don't really believe that someone planted the insect there ... It is highly likely that the insects hitched a ride on an airplane into Yugoslavia in the mid-1980s, and they weren't observed until 1992 when plant damage was first noticed".

**17 November** In the USA, *Newsweek* reports unidentified senior intelligence officials as saying they are now "100 percent certain" that, before the US attack on Afghanistan, Osama bin Laden had succeeded in "making and experimenting" with small amounts of biological and chemical agents.

**18 November** In Baghdad, UNMOVIC Executive Chairman Hans Blix arrives with IAEA Director-General Mohammed ElBaradei for two days of talks with Iraqi Government officials on implementing Security Council resolution 1441 [see 8 Nov]. An advance team of 25 weapons inspectors is accompanying them. During a joint press conference at Lamaca airport in Cyprus — en route to Baghdad — Blix says: "We are on our way to a new chapter of inspections in Iraq". Prior to returning the next day, Blix says that the discussions had focused on a mechanism for the inspection mission in Iraq, and that they had been "positive and fruitful". Under an agreement of 30 October 2002, the

Government of Cyprus agreed that the new UNMOVIC / IAEA field office would be established in Cyprus. It will serve as the main logistical support base for inspections in Iraq, with the field office in Bahrain to be retained as a back-up.

**18 November** In Prague, Czech Deputy Defence Minister Stefan Fuele announces that by the end of next year the Czech Army will have created a chemical, biological and nuclear rapid response unit for NATO requirements. It is one of fourteen contributions that the Czech Republic intends to offer NATO at the forthcoming NATO summit in Prague during 21–22 November. Fuele states that the Czech Republic has one of the world's best anti-chemical units. Each current NATO member is expected to announce at the summit how it intends to contribute to the organization's joint defence and set a timetable therefore.

**18 November** The UK Foreign and Commonwealth Office transmits a memorandum to the House of Commons Foreign Affairs Select Committee which is conducting a review of the *Biological Weapons Green Paper* [see 29 Apr]. On the subject of criminalization, the memorandum reads: "[The Harvard-Sussex Program] draft builds on existing legal precedents and international agreements and has been considered by officials since it was first launched in the late 1990s. It was one of the measures especially identified in the Green Paper as a possible option and it remains one that the government would be ready to see taken forward as part of international efforts to counter the threat posed by CBW proliferation. We are also aware of a similar but more ambitious proposal developed by Professor Barry Kellman, a US academic from DePaul University College of Law. However, this proposal contains some concepts that are problematic, which make it less attractive".

**18 November** In London, the High Court approves a new inquest into the death of Ronald Maddison in May 1953 [see 22 Apr]. Lord Chief Justice Lord Woolf, sitting with another judge in London, took the "exceptional" course of quashing the original "misadventure" verdict. He says he is satisfied that "justice requires that these matters are properly investigated" at a fresh inquest. A new inquest, with a jury, is expected to take place lasting six to eight weeks. Lawyers for the Ministry of Defence did not oppose the move to quash the original verdict.

Maddison died within minutes of the start of an experiment at the Porton Down research centre. An inquest at the time — held in private for "reasons of national security" — ruled he died from asphyxia.

**18 November** US President George Bush praises his "good friend" Russian President Vladimir Putin for taking "very tough decisions" in authorizing the use of an opiate to end the Moscow theatre siege [see 26 Oct]. During a press conference, he says: "People tried to blame Vladimir ... They ought to blame the terrorists. They're the ones who caused the situation ... Eight hundred people were going to lose their lives ... These people were killers, just like the killers that came to America. There's a common thread — that any time anybody is willing to take innocent life for a so-called cause, they must be dealt with."

**18–21 November** In Las Vegas, the threat posed by biological terrorism and ways to combat it is being debated at the BioSecurity 2002 summit. The summit — organized by Harvard University and the Annenberg Center for Health Sciences — brings together emergency responders, police, military personnel, scientists, public health officials and local government leaders. In his address, Matthew Meselson of Harvard University says, "we should consider ... an international law designed to restrain hostile regimes (from using) biological weapons". A united global effort would punish anyone knowingly supporting or ordering the production or use of biological weapons, he says.

**19 November** In Kazakhstan, all the sites where stockpiles of Soviet-era anthrax were buried on the Vozrozhdeniya peninsula have now been decontaminated, according to the director of the Kazakh scientific centre for quarantine and zoonotic infections [see 4 Nov] Bakhyt Atshabar. The ten anthrax burial sites were decontaminated during the summer under a project organized by the US and undertaken together with Uzbekistan, says Atshabar. He further says that a specialized Kazakh team is scheduled to travel to the peninsula in May next year to analyse air, soil and water samples to evaluate the decontamination effort. "This research is very important as we fear that biological agents that were tested on the island might have leaked into the environment", says Atshabar.

**19 November** In Sorø, Denmark, a magistrate rejects prosecution requests that Nizar al-Khazraji of Iraq's army be detained in custody, ordering instead that he be detained under house arrest. Khazraji is facing charges of ordering the use of chemical weapons during Operation Anfal [see 18 Sep 00]. According to the magistrate, there were "justifiable suspicions" that Khazraji was implicated in Iraqi war crimes. He was arrested after a Kurdish refugee apparently recognised him in the street and informed the police. He headed the Iraqi Army from 1987 until 1990, when he fled to Denmark via Jordan. Replying to an accusation that he knew of Operation Anfal, Khazraji says that in theory the orders crossed his desk, but that he in fact never saw them. Kurdistan "was Majeed's problem ... I was fighting the war against Iran". During a break in the proceedings, he tells reporters that the allegations are part of a campaign instigated by Iraqi agents to discredit him and damage opposition to Saddam Hussein. "They're dancing to Saddam's music", "I am a victim of known parties in the Iraqi regime", he adds.

**19 November** In Birmingham, Alabama, an alliance of environmental and civil rights groups file a federal lawsuit, seeking a preliminary injunction against the US Army, in a final attempt to block the chemdemil at Anniston Army Depot. The lawsuit argues that under federal environmental law the Government is obliged to: research safer alternatives to burning weapons; burning weapons creates "imminent and substantial endangerment to public health"; and, the Army "knowingly misrepresented and underestimated the risks and impacts" of the emissions on minority populations.

**19–21 November** In Hunt Valley, Maryland, the 2002 Joint Service Scientific Conference on Chemical and Biological Defense Research is convened under the aegis of the US Department of Defense Chemical and Biological Defense Program. The conference covers the areas of prevention and preparation; response; information technology; and, recovery.

**20 November** The US Defense Department releases a memorandum stating that the use of neutralization should be the "preferred alternative technology for chemdemil at the Lexington Blue Grass Army Depot. Adoption of neutralization as the preferred method should be finalized after a thirty-day consultation period. US Senator Mitch McConnell (Kentucky) says: "This is a victory for Kentucky won by Kentuckians".

**21 November** In Washington DC, a police officer is convicted by a federal jury for making false statements in relation to an anthrax hoax he staged at an underground guard station. On 7 November last year, James Picket, 36, sprinkled granules of a sugar substitute on a desk at a guard station in a tunnel connecting an office building of the House of Representatives to the Capitol. He left a scrawled note saying: "Please inhale. Yes this could be? Call your doctor for flu symptoms. This is a Capitol Police training exercise! I hope you pass!" Of the numerous anthrax hoaxes that have occurred following last year's anthrax

attacks in Washington, this is the first case to involve a police officer.

**21 November** In Chicago, a man calling himself 'Dr Chaos' pleads guilty to two counts of possession of chemical weapons, during a hearing in Chicago District Court [see 11 Mar 02]. According to his plea agreement, Joseph Konopka, 25, obtained two bottles of cyanide compounds from an abandoned warehouse during the summer of 2001, and then stored them in an electrical substation. Arrested in March, Konopka faces a sentence of up to 13 years and 9 months in prison if convicted.

**21–22 November** In Prague, heads of state and government of the 19 NATO member states convene for a NATO summit. The Prague Summit Declaration reads: "Today [21 November], we have decided to invite Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia to begin accession talks to join our Alliance ... We will begin accession talks immediately with the aim of signing Accession Protocols by the end of March 2003 and completing the ratification process in time for these countries to join the Alliance at the latest at our Summit in May 2004". The Declaration continues: "In order to carry out the full range of its missions, NATO must be able to field forces that can move quickly to wherever they are needed ... to sustain operations over distance and time, including in an environment where they might be faced with nuclear, biological and chemical threats ... We have therefore decided to: ...

c. Approve the Prague Capabilities Commitment (PCC) as part of the continuing Alliance effort to improve and develop new military capabilities for modern warfare in a high threat environment. Individual Allies have made firm and specific political commitments to improve their capabilities in the areas of chemical, biological, radiological, and nuclear defence ... [see 18 Nov]

d. Endorse the agreed military concept for defence against terrorism ... We are committed, in cooperation with our partners, to fully implement the Civil Emergency Planning (CEP) Action Plan for the improvement of civil preparedness against possible attacks against the civilian population with chemical, biological or radiological (CBR) agents. We will enhance our ability to provide support, when requested, to help national authorities to deal with the consequences of terrorist attacks, including attacks with CBRN against critical infrastructure, as foreseen in the CEP Action Plan.

e. Endorse the implementation of five nuclear, biological and chemical weapons defence initiatives, which will enhance the Alliance's defence capabilities against weapons of mass destruction: a Prototype Deployable NBC Analytical Laboratory; a Prototype NBC Event Response team; a virtual Centre of Excellence for NBC Weapons Defence; a NATO Biological and Chemical Defence Stockpile; and a Disease Surveillance system. We reaffirm our commitment to augment and improve expeditiously our NBC defence capabilities. ...

g. ... Today we initiated a new NATO Missile Defence feasibility study to examine options for protecting Alliance territory, forces and population centres against the full range of missile threats, which we will continue to assess. Our efforts in this regard will be consistent with the indivisibility of Allied security. We support the enhancement of the role of the WMD Centre within the International Staff to assist the work of the Alliance in tackling this threat."

A Prague Summit Statement on Iraq is also issued. This reads: "NATO allies stand united in their commitment to take effective action to assist and support the efforts of the UN to ensure full and immediate compliance by Iraq ... Iraq will face serious consequences as a result of its continued violation of these obligations" [see 8 Nov].

**22 November** In the USA, the US General Accounting Office issues a report *Homeland Security: CDC's* [Centers for Disease

Control and Prevention] *Oversight of the Select Agent Program*, which it directs to Secretary of Health Tommy Thompson. The report states: "In the wake of the anthrax incidents and mounting concerns about the potential for another bioterrorism attack, we have assessed CDC's oversight of the Select Agent Program. We brought program weaknesses we identified to the immediate attention of CDC and HHS officials, who agreed that improvements were warranted. The purpose of this report is to summarize our findings [vis-à-vis the CDC's oversight of the Select Agent Program] and confirm your agreement to take prompt corrective action ... We found significant management weaknesses in CDC's facility registration and transfer monitoring processes that impede effective program oversight. As discussed with CDC officials, we recommended that CDC establish proper internal control [to] include improvements in the following areas: inspection and approval of facilities registering to transfer select agents; monitoring of the transfer and shipment of select agents; accuracy of CDC databases of registered facilities and select agent transfers; and CDC organizational structure to improve oversight ... Correcting these internal control weaknesses is essential to CDC's ability to effectively oversee both the original and the expanded program required by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 [see 12 Jun]."

**22 November** The US General Accounting Office briefs the staffs of the House and Senate Armed Services Committee on its assessment of the Defense Department's FY2002 Cooperative Threat Reduction annual report. Amongst other things, it concludes that the report: does not clearly set out future funding data required by Congress; does not include certain important planning elements; in some instances asserts the use of a more rigorous methodology than that actually used; and, incorporates some, but not all of its recommendations. Furthermore, it could not assess the validity of the data contained in the report because it had not been updated prior to its late submission — being "almost 19 months after the submission date mandated by law".

**25 November** In Moscow, Canadian Foreign Affairs Minister William Graham and Russian Munitions Agency Director-General Zinovi Pak sign an agreement on chemical weapons, under which Canada will provide \$5 million in aid to Russia for the construction of the chemdemil facility at Shchuch'ye [see 14 Mar]. The agreement is adopted under the G8 Global Partnership against the spread of weapons and materials of mass destruction [see 26–27 Jun].

**25 November** In the Hague, following three years of negotiations, more than 75 states sign up to an International Code of Conduct (ICOC) [see 7–8 Feb], aimed at preventing the proliferation of ballistic missile technology. The ICOC is not signed by *inter alia* Pakistan, India, North Korea, Israel, Iran and Syria. It builds on the Missile Technology Control Regime 1987 (MTCR) that acts as an export control mechanism and which has 33 signatories.

**25 November** At UN headquarters, UNMOVIC Executive Chairman Hans Blix briefs the UN Security Council on his recent visit to Baghdad where he discussed the implementation Security Council resolution 1441 with Iraqi Government officials [see 18 Nov]. "In view of the fact that time for submission [of the Iraqi declaration] was short and omissions could have serious consequences, the Iraqi side said it had concerns ... [Whilst I have no authority to interpret the provisions of operative para 3 of the resolution] ... if the Iraqi side were to state — as it still did at our meeting — that there were no such programmes, it would need to provide convincing documentary or other evidence".

**25 November** In Washington DC, US President Bush signs the Homeland Security Act into law six days after the US Senate had approved the Bill. "Today we are taking historic action to defend the US and protect our citizens against the dangers of a new era", says Bush. "Creating a new Department of Homeland Security will ensure that our efforts to defend this country are comprehensive and united", he adds, prior to signing. The Department of Homeland Security will combine 22 federal agencies and 170,000 employees, and have a budget of around \$38 billion. Headed by the Secretary of Homeland Security, it will comprise four main divisions, each headed by an under-secretary. The four divisions are Informational Analysis and Infrastructure Protection; Border and Transportation Security; Emergency Preparedness and Response; and, Chemical, Biological, Radiological and Nuclear Countermeasures. All but one of the 22 agencies will be moving from pre-existing departments, the new agency being the National Biological Weapons Defense Analysis Center.

**25 November** The *Washington Post* reports that newly released Environmental Protection Agency (EPA) documents reveal that unexploded munitions at 16,000 inactive military ranges, including chemical and biological weapons, pose "imminent and substantial" public health risks. Executive Director of the Public Employees for Environmental Responsibility Jeff Ruch says his organization obtained the documents confidentially from an EPA whistle-blower. One of the three documents — a briefing paper written this summer for the EPA's head enforcement officer — cites a "disturbing trend" by the military services and the Army Corps of Engineers to limit their cleanup activities or "take ill-advised short-cuts to limit costs". "Cleanup of [unexploded ordnance] on military ranges has the potential to be the largest environmental cleanup program ever to be implemented in the United States," the document begins. "Some ranges each cover 100 to 500 square miles. Many of these properties are Formerly Used Defense Sites (FUDS) where the military has relinquished control and are now being utilized for purposes other than a military range yet still contain" unexploded ordnance. Most unexploded ordnance, the document says, contains chemicals defined as "hazardous" under federal law, however, the cleanup process is complicated even further by "the potential presence of explosives." "Defining the true nature of the explosives or [unexploded ordnance] threats must be addressed first, before standard investigative activities are undertaken to define the extent of hazardous chemical contamination," the document states. The other two documents made public by PEER are reports written in 2000 summarizing the results of a survey conducted by EPA officials of 61 current and former military facilities containing 203 ranges that were either inactive, closed or transferred to other owners.

**25 November** In Havana, UNESCO's biotechnology adviser Albert Sasson says that the United States lacks any evidence to accuse Cuba of producing biological weapons [see 1 Nov US] and that the US Government, its scientists, the WHO and other international institutions know that Cuban policy is aimed at improving the quality of life of its population. Speaking on the second day of the six-day International Biotechnology Congress on "Agro-Biotech in the New Millennium" — attended by around 900 experts from 48 countries — he says, that in contrast to other nations, Cuba's success can be traced to the systematic political and governmental support that favours social and economic development.

**26 November** At UN headquarters, the UNMOVIC College of Commissioners holds its eleventh plenary session [see 29–30 Aug]. It discusses *inter alia* the media interest in the UNMOVIC inspection process, which it welcomes. Nevertheless it

considers that the media presence should not be allowed in any way to interfere with the conduct of inspections.

**27 November** In Iraq, after nearly four years of absence, UN weapons inspectors are once again undertaking verification duties. UNMOVIC inspectors visit two sites: a graphite plant and a missile engine testing facility, at al-Rafah, approximately 130 kilometres southwest of Baghdad. UN Secretary-General Kofi Annan says that the inspections have begun with “a fairly good start”.

**27 November** UN Secretary-General Kofi Annan submits to the Security Council the eleventh quarterly report [see 3 Sep] of the Executive Chairman of UNMOVIC, in accordance with Security Council resolution 1284. The report covers the activities of UNMOVIC from the period 1 September to 30 November. It states: “The period under review has been one of intense activity in preparation for the resumption of inspections and monitoring in Iraq following Iraq’s statement [see 16 Sep] that inspectors could return to Iraq without conditions, the subsequent unanimous adoption ... of Security Council resolution 1441 [see 8 Nov], which provides for a strengthened inspection regime, and Iraq’s confirmation [see 13 Nov] that it would implement the resolution ... UNMOVIC conducted its sixth basic training course in Vienna from 7 October to 8 November with specialized training in Austria, Germany and Sweden for 54 selected experts ... From 2 to 13 September ... UNMOVIC conducted the third advanced chemical course in Beijing for 15 experts from its roster to further develop practical inspection skills. An enhanced chemical training course was held in New York, from 18 to 22 November, for experts from the roster and from Headquarters on the inspection and monitoring of dual-use chemical items and capabilities in Iraq ... UNMOVIC has now received the results of a contract with the International French Research Institute [sic] for the review of open-source data relevant to the mandate of UNMOVIC, with particular emphasis on European, Mediterranean and Middle Eastern sources ... [Such] data helps to shed further light on the reconstruction of infrastructure that was formerly used by Iraq in prohibited programmes ... UNMOVIC continues to receive commercial satellite imagery, which is being used to prepare for the inspections in Iraq.”

**27 November** The US Department of State issues amendments to the International Traffic in Arms Regulations, Munitions List [22 CFR Part 121]. As regards the CW-related export controls in the regulations, the amendments only cover the well-known chemical warfare agents, with no mention of, for example, novichoks. DA and DC are listed as “incapacitating agents”, while DM is listed as a “tear gas”. The amendments continue the practice of listing riot control agents under “Toxicological Agents”.

**28 November** The Canadian health ministry announces that it is to purchase enough smallpox vaccine to vaccinate Canada’s entire population. Ministry officials and the company most likely to supply the vaccine say, however, that it could take ten months before the requested ten million doses — a sufficient quantity when diluted — are delivered. “The view is that the possibility that smallpox could be used as a biological weapon is low ... however, Canada felt it was prudent to take all necessary steps to protect the health and safety and security of all Canadians”, says Tara Madigan, a spokeswoman for Health Canada. She adds that Canada currently has enough vaccine to inoculate up to 1.5 million people. Canada was named as an al-Qa’ida target nearly two weeks ago in a recorded message the voice of which was claimed to have been that of Osama bin Laden. A team of Swiss scientists subsequently said, however, they were 95 per cent certain that the tape was not authentic.

**29 November** Kazakh Foreign Minister Kasymzhomart Tokayev is reported by *Novoye Pokoleniye* as having requested information from Russian Foreign Minister Igor Ivanov on tests undertaken on the Vozrozhdeniye peninsula. Ivanov replies: “As a rule, harmless simulated biological means based on non-pathogenic strains of micro-organisms were used in the tests. Pathogenic micro-organisms were used in insignificant quantities and the necessary safety and environmental protection measures were observed. Under the impact of powerful solar radiation and high temperatures, all the micro-organisms that were used remained viable for between a few hours to a few days”. The Kazakh newspaper therefore asks what US experts were recently doing on the peninsula [see 19 Nov] and why the US has allocated \$6 million [see 1 May] to decontaminate the area. It also points out that the heads of the Russian and Kazakh emergency ministries announced a joint programme to decontaminate the peninsula a year ago. The Russian Foreign Ministry is also reported to have denied that “any biological materials were buried on the territory of the island which might lead to negative environmental consequences”.

**30 November–1 December** In Berlin, there is a symposium on the scientific aspects of bioterrorism. Director of the Max Planck Institute for Infection Biology Stefan Kaufmann says that under the European Union’s Sixth Framework Programme for research funding “virtually no money is specifically earmarked for [bioterrorism] research”. Milton Leitenberg of the University of Maryland, however, says “there would be a greater spin-off for military purposes by putting money into diseases that are the biggest public-health threat, such as HIV and tuberculosis”.

**1 December** Australian Prime Minister John Howard says that Australia may adopt the pre-emptive military strike doctrine earlier espoused by US President Bush [see 1 Jun and 20 Sep]. “I think many people are saying ... that maybe the body of international law has to catch up with the new reality,” says Howard. The statement follows comments by Australian Defence Minister Robert Hill, in a speech last week, calling for the UN Charter to be amended to “review the limits of self-defense and the right of national governments to take pre-emptive action”.

**2 December** In Israel, head of the National Security Council, Ephraim Halevy, says: “The emergence of a mega-terror attack ... changes the rules of the game, changes the national mood and creates an international dynamic that opens options that so far have been unacceptable to public opinion”. Speaking at the Third Herzliya Conference on the Balance of Israel’s Security, Halevy — who recently stepped down as head of Mossad — says that Israel has “a broad and varied range of capabilities [to cope with a threat to its existence] that better not be exposed prematurely”.

**2 December** The UK Department of Health publishes *Interim Guidelines for Smallpox Response and Management in the Post-Eradication Era*. The Guidelines describe contingency plans for diagnosis and management of the first cases, vaccination strategies before and in the event of an outbreak; and other essential measures to ensure outbreak preparedness and control. Announcing the publication in the House of Commons, Minister of State for the Department of Health John Hutton says: “There are three components to the Department’s preparation for response to a possible smallpox emergency: improved vaccine stocks, a plan of action and a cohort of immunised staff who could deal safely with any potential smallpox cases ... Under this plan, it is intended to establish 12 Regional Smallpox Response Groups around the UK ... Preparations for the vaccination of these key workers is now underway. I expect these vaccinations to be completed by the end of next month. It is intended to vaccinate around 350 health care staff across the UK. This will be

on an entirely voluntary basis with informed consent ... The Ministry of Defence, with whom we are working closely, is planning to vaccinate a similar cohort of specialist military personnel". Parliamentary Under-Secretary of State for Defense Lewis Moonie says: "We have decided to offer vaccination against smallpox to a small number of specialist military personnel who face a greater risk of exposure to smallpox by virtue of their specialisation. This will include those NBC specialists and specialist medical personnel who would form the spearhead of our defensive response, including vaccination teams, in the event of a confirmed, suspected or threatened release of smallpox ... As with other vaccines, vaccination against smallpox will be voluntary and on the basis of informed consent".

**2 December** US President Bush signs the FY 2003 National Defense Authorization Act into law. "We're a nation at war. America must understand we're at war ... [The Act] sets priorities of our Defense Department in a critical, critical period for our country has unprecedented challenges, and we're facing them with unmatched technology, careful planning and the finest traditions of valor ... America's military is strong. And that's the way it should be. Our nation and the world are safer that way", says Bush. Three weeks previously the House Armed Services Committee had submitted its Conference Report on the Act to the House of Representatives. The conferees authorized *inter alia*: \$993 million (\$57.5 million more than the President's request) for research and development of advanced individual protection programmes and equipment to detect and decontaminate chemical and biological agents; \$416.7 million (matching the President's request) to dismantle, secure, and eliminate chemical, biological and nuclear weapons and related facilities in the former Soviet Union, under the Cooperative Threat Reduction Program; \$456.5 million (\$9 million more than the President's request) for the Defense Advanced Research Projects Agency research and development programmes to deter, reduce, and counter chemical, biological and nuclear threats; and \$148.2 million (\$4 million more than the President's request) for the Defense Advanced Research Projects Agency efforts to develop technology to detect and counter the effects of biological weapons attacks.

**2 December** In Washington, the World Health Organization (WHO) and the Nuclear Threat Initiative (NTI) announce the formation of the WHO-NTI Emergency Outbreak Response Fund. The purpose of the Fund (which starts with \$500,000) will be to strengthen the global response to infectious disease outbreaks — whether naturally occurring or from the release of biological weapons — by ensuring that response teams can be on the ground within 24 hours of a detected outbreak anywhere in the world. It will comprise a key operational element of the Global Outbreak Alert and Response Network, coordinated by the WHO Alert and Response Operations Centre in Geneva. WHO Director-General Gro Harlem Brundtland says: "Crucial hours lost in the early days of a disease outbreak can mean the difference between a handful of cases and a major epidemic ... As soon as an outbreak occurs, it is critical to get people on the ground as soon as possible. This revolving fund will enable WHO to provide medical experts and equipment immediately". Co-chairman of the Nuclear Threat Initiative Sam Nunn says: "The nexus between health and security has become increasingly clear ... Diseases don't recognize national boundaries. In today's global world, it is in our own health and security interest to immediately contain an outbreak wherever it occurs around the world".

**2-6 December** In Singapore, around 300 international experts participate in the Singapore International Symposium on the Protection Against Toxic Substances (SISPAT). The theme of the third symposium is protection against toxic substances

relative to chemical and biological defence. The topics include: chemical detection; biological detection; physical protection (individual and protective); decontamination; verification of chemical and biological agents; pharmacology and toxicology of chemical and biological agents; and, homeland security.

**3 December** The *New York Times* reports that the US Central Intelligence Agency is investigating whether Iraq obtained a virulent strain of smallpox from a Russian scientist. Judith Miller bases her article on the accounts of "senior American officials and foreign scientists", who base their claims on an unidentified "informant's accusation". They say that in August they were told that Iraq may have obtained the virus from Nelja Maltseva, a virologist who worked for more than 30 years at the Research Institute for Viral Preparations in Moscow. She died two years ago. Two days later, Natalia Maltseva — Nelja Maltseva's daughter — announces her intention to "file a lawsuit against the paper". Svetlana Marennikova, an expert for dangerous infections with the WHO, who used to work together with Maltseva says: "We knew [Maltseva] as a very honest, hard-working and decent person, who loved her job and her country ... Control over the access to strains of particularly virulent infections is so strict that no one could have taken anything from the lab or even entered it without my knowledge". Head of the Institute Vitaly Zverev confirms that Maltseva had worked on smallpox strains until the late 1970s, when she was appointed head of the lab for diagnosing dangerous diseases such as herpes, measles and German measles and no longer had any access to strains of smallpox. "One need only to have known her ... She could not have sold a virus she fought against throughout the best part of her life ... The last time she went abroad was in 1988, to Finland ... [T]he Americans are alleging that [Maltseva] sold smallpox to Iraq because she is the only smallpox expert no longer alive and is therefore unable to say anything in her defence". Maltseva travelled widely on WHO missions to eradicate smallpox epidemics. Subsequently, the *Associated Press* quotes "US officials" as saying that "US intelligence agencies believe any smallpox samples Iraq possesses came from the last domestic outbreak of the deadly disease in the 1970s, rather than from rogue Russian scientists or other external sources".

**3 December** The US National Research Council releases its report *Evaluation of Chemical Events at Army Chemical Agent Disposal Facilities*. The report concludes: "Safe [chemdemil] operations are feasible at the new facilities scheduled to begin operating at Anniston, Alabama; Umatilla, Oregon; and Pine Bluff, Arkansas, if their management is diligent in setting and enforcing rigorous operational procedures, in providing comprehensive training, in establishing a strong safety culture encompassing all plant personnel, and in absorbing programmatic lessons learned from the first two operational facilities, JACADS [Johnston Atoll Chemical Agent Disposal System] and TOCDF [Tooele Chemical Agent Disposal System] ... No evidence derived from previous chemical events causes the committee to doubt that the new incinerator technology plants or the disposal they will employ can be operated safely and effectively ... The destruction of ageing chemical munitions should proceed as quickly as possible". Chairman of the committee responsible for the report Charles Kolb, says: "Unfortunately, we had a very specific statement of task that was negotiated with the sponsor, which was the Army ... That restricted us to commenting on things that actually happened [at older incinerators]". Director of the Chemical Weapons Working Group Craig Williams, says of the report: "[This is a] review of carefully selected information".

**3 December** At the US Army's Umatilla chemdemil facility, a laboratory technician drops several small glass vials containing diluted sarin nerve agent, which shatter on the floor. US Army spokesman Jim Hackett says "It's diluted enough that you would

not normally have exposure to it ... We would say that's a minor lab incident".

**3–4 December** In Washington DC, a meeting on *Federal Biodefense Research FY2003* is convened by the American Association for the Advancement of Science, Research America and The Scientist. The aims of the meeting are to provide a comprehensive, in-depth status report and outlook for federal government biodefence research, including budgets, priorities, research projects and prospects for commercialization.

**5 December** In Moscow, the arms manufacturer, Bazalt Works, is preparing to manufacture "non-lethal ammunition with chemical substances, produced on the basis of irritants", according to Bazalt Works Director-General Vladimir Korenkov. He points out that production will be for "anti-terrorist operations". The Bazalt Works was one of three Russian arms-manufacturing companies upon which the US imposed sanctions last September. Korenkov says "the indisputable advantage of this type of ammunition is that the damage to the health of people, involved in crisis situations, is reduced to the minimum".

**5–6 December** In Arlington, Virginia, a symposium on *Detection Technologies — The Next Generation in Identification and Analysis* is convened. The object of the conference is to explore the latest research and state-of-the-art technologies for biological and chemical detection.

**6 December** In Mexico City, health ministers from the G7 and Mexico convene for the third meeting of the Global Health Security Initiative, to review progress in anti-bioterrorism measures, following their first meeting in Ottawa in November 2001. A joint statement is issued, stating: "We believe it is in the best interest of all countries to support and increase the existing WHO global vaccine reserve for emergency response to outbreaks of smallpox ... We, therefore, intend to pursue, to the extent possible, the means to increase the WHO reserve and encourage others to do the same. We approved final plans, which have been spearheaded by Canada, to hold an unprecedented multi-nation exercise to evaluate and build on our current response plans and protocols for international assistance and collaboration in case of a smallpox incident. This smallpox emergency response exercise will be held in mid 2003, and link the multiple locations involved via communication networks ... In the area of risk management and communication, we approved work completed on an Incident Scale for use in the rapid communication of chemical, biological and radio-nuclear (CBRN) incidents. The scale will inform those responsible for emergency planning and response of the magnitude, gravity and immediate impact of such incidents to enable them to respond appropriately within and, where necessary, across national boundaries ... We recognized that there are many commonalities in preparedness and response for bioterrorism and influenza pandemic. We agreed to establish a technical working group on influenza pandemic, which will be co-chaired by the US and the UK, to address existing gaps and research and development needs. This work should be carried out in conjunction with the WHO and other appropriate international organizations".

**7 December** In Baghdad, Iraq submits its declaration to UNMOVIC and the IAEA in accordance with Security Council resolution 1441 [see 8 Nov]. The declaration — amounting to around 12,000 pages and accompanied by numerous CD ROMs — is not made public. A few days later, however, the *New York Times* posts on its website the table of contents. It is divided into four parts: nuclear, chemical, biological, and ballistic missile.

Part 2 relates to chemical weapons. Section 1 thereof contains the following chapters: chronological summary of the activities of the former chemical weapons programme; organizational

chart of the former chemical weapons programme; list and description of relevant imported materiel, including contracts; research and development activities of the chemical weapons programme; production facilities and the equipment in those facilities; production of chemical agents; chemical munitions research and development activities; field tests and conversions; munitions-filling techniques; foreign technical assistance; materials balance; unilateral destruction of chemical munitions, agents and precursors; miscellaneous subjects (103 pages). Section 2 "deals with chemical activities from 1991 to 2002 and includes information on: Fallujah 2 — chlorine and phenol plant; Fallujah 3 — pesticides plant; Nasr Public Company; Public Mechanical Industries Company; Al Qaadaa Public Company; Hattin Public Company; and 25 additional sites, including university science departments and facilities belonging to the Ministry of Agriculture and the Ministry of Industry and Minerals.

Part 3 relates to biological weapons. Section 1 thereof contains the following chapters: activities of the Hassan bin al-Maytham Establishment (1974–78); activities of the Muthanna State Establishment (1985–87); activities of the Salman facility (1987–90); activities of the Taji facility (January 1988–October 1998); activities of the Hakam factory (1988–91); activities of the Foot-and-Mouth Disease Institute (July 1990–January 1991); activities of the Failiyah facility (1990–91); weaponization activities; organizational chart of the former biological weapons programme and military institutions connected with the former biological weapons programme; miscellaneous subjects (288 pages). Section 2 describes the non-proscribed activities during the period 1991–2002 and includes information on the biological research, development and production facilities which contain dual-use equipment or materials, as well as on new facilities for biological activities unrelated to any proscribed activities.

A number of miscellaneous documents are included with this declaration, including the Iraqi Air Force logbook retained by Iraq after its discovery by UNSCOM in 1998 [see 18 Jul 98].

The next day the UN Security Council agrees to allow the permanent members full-uncensored access to the documents, on the grounds that they alone have the technical expertise to assess the risks involved in releasing the contents to other states. A number of other members of the Security Council protest against the extent to which the US takes charge of proceedings. According to US State Department spokesman Richard Boucher, the reason behind the decision was that the US has better and more secure photocopying facilities. "We have been asked to ensure that the document is copied in a controlled environment in order to guard against the inadvertent release of information", says Boucher. UN Secretary General Kofi Annan describes the development as "unfortunate". An Iraqi Foreign Ministry statement reads: "This American behaviour aims at manipulating UN documents to find cover for aggression against Iraq". Norwegian Foreign Minister Jan Petersen objects to being treated as "a second-class country".

**7 December** Iraqi Deputy Prime Minister Tariq Aziz says that Iraq had no option but to use chemical weapons against Iran during the 1980–88 Iran–Iraq War. The comments come during an interview on Swedish television.

**7 December** In Stockholm, UNMOVIC Executive Chairman Hans Blix says he has yet to see convincing US evidence that Iraq possesses chemical or biological weapons. "We are not claiming that (Iraq) still has weapons of mass destruction but the British and Americans are. They feel that they have secret material that proves it but we have been given no such material", says Blix during an interview on Swedish radio.

**10 December** In Hamburg, FBI special agent Matthew Walsh says that the 11 September 2001 hijackers probably used gas or spray as mace against passengers and crew on the first plane

to hit the World Trade Center. Walsh makes the statement in the course of giving evidence at the trial of Mounir el-Motassadeq — the first suspected conspirator to stand trial. He says that an American Airlines stewardess “stated that it was very hard to breathe, so we assume that mace or another gas was used”.

**10 December** At UN headquarters, Thailand deposits its instrument of ratification of the CWC with the UN Secretary-General. Thailand will thus become the 148th state party to the CWC on 9 January 2003.

**10 December** The US Department of Health and Human Services (HHS) and the US Department of Agriculture (USDA) issue complementary interim regulations relating to the possession, use, and transfer of select biological agents and toxins. The HHS interim regulations update the previous select agent regulations by requiring facilities to register with the HHS’ Centers for Disease Control and Prevention (CDC) if they ‘possess’ a select agent or agents that pose a potential threat to human health. The previous regulations only required facilities to register with CDC if they intended to ‘transfer’ a select agent. Similarly, the USDA interim select agent regulations require facilities to register with USDA’s Animal and Plant Health Inspection Service (APHIS) if they possess a select agent or agents that pose a potential threat to animal or plant health. The regulations require that every facility registering with the CDC or APHIS undergo an inspection, and that background checks be performed on personnel who work or intend to work with select agents. Facilities to which the regulations apply will also have to develop a biosecurity plan. The regulations, which will come into force as of 7 February 2003 following a 60-day consultation period, are being issued under the USA Patriot Act 2001 and the Public Health Security and Bioterrorism Preparedness and Response Act 2002. Three days later the regulations are published in the Federal Register.

**10 December** In Maryland, state environment approval is granted for Aberdeen Proving Ground to accelerate its chemdemil of mustard agent using a manual technique as supposed to with the aid of robotics. Spokesman for the facility Jeff Lindblad says: “There is no change in the technology, but what we will be doing is skipping a step in the process of destroying the mustard agent. The thinking after 9/11 was to quicken the destruction process by two years because the agent is stored in one location”. The accelerated decommissioning will begin in March next year.

**10–13 December** At OPCW headquarters, the Executive Council reconvenes [see 10–13 Sep] for its thirty-first regular session.

**11 December** The UK House of Commons Foreign Affairs Committee issues a report on the Government’s *Biological Weapons Green Paper* [see 29 Apr and 18 Nov]. The report states: “We recommend that the Government consider carefully the merits of proposing the establishment of a secretariat, with a mandate similar to that of the Organisation for the Prohibition of Chemical Weapons ... We ... recommend that the Government consider the establishment of a central authority responsible for control of dangerous pathogens in the United Kingdom ... We recommend that, in its response to this Report, the Government outline how it hopes to proceed towards achieving greater transparency between States Parties about legitimate dual-use capabilities which might be in danger of being misconstrued or misused”.

**11 December** The US White House issues *National Strategy to Combat Weapons of Mass Destruction*. The Strategy states: “The United States will continue to make clear that it reserves the right to respond with overwhelming force — including

through resort to all of our options — to the use of WMD against the United States, our forces abroad, and friends and allies”. In addition “[The US] must have the capability to defend against WMD-armed adversaries, including in appropriate cases through pre-emptive measures”. The *Washington Times* subsequently reports on the contents of a classified 14 September 2001 *National Security Presidential Directive 17*, which specifically advocates the use of nuclear weapons in response to chemical or biological attacks. The directive is said to state: “The United States will continue to make clear that it reserves the right to respond with overwhelming force — including potentially nuclear weapons — to the use of [weapons of mass destruction] against the United States, our forces abroad, and friends and allies”.

**11 December** In Arkansas, construction of the US Army chemdemil incinerator at Pine Bluff Arsenal is complete. The Army expects to commence incineration in April 2004. The facility — holding 12 per cent of the US chemical weapons stockpile — cost a total of \$300 million to construct.

**12 December** The US Justice Department did not intend to focus media attention on Steven Hatfill by describing him as a ‘person of interest’ in relation to last year’s anthrax attacks; in fact it tried to protect him from public scrutiny. This is the Department’s position according to letters written by Assistant Attorney General Danial Bryant to Senator Charles Grassley on 18 October and 4 November, as posted on Grassley’s web site.

**12 December** In Iraq, Islamic extremists affiliated with al-Qa’ida have taken possession of VX nerve agent within the last couple of months, after its having been smuggled into Iraq overland via Turkey. The claim is made by “knowledgeable officials, speaking without White House permission”, according to *The Washington Post*. An unidentified senior White House official subsequently describes the claim as “far too conclusive sounding”, saying that the US government had no conclusive evidence or corroborated evidence of such a transaction. “We are used to hear [*sic*] such reports from the enemies of Iraq”, says Hossam Mohammed Amin Iraqi chief liaison officer to UNMOVIC.

**13 December** In London, VERTIC launches its *Verification Yearbook 2002*, which includes a rare account of the process jointly initiated by the UK and the USA in 1990 to promote USSR compliance with the BWC, a process that included the Russia–UK–US trilateral agreement of September 1992 [see 10–11 Sep 92] and the on-site inspections conducted in the three countries within its framework [see 20 Sep 99]. The account is by Dr David Kelly [see 10 Oct London], identified as a Senior Advisor to the Proliferation and Arms Control Secretariat of the British Ministry of Defence and the Non-Proliferation Department of the Foreign and Commonwealth Office. He describes connections — indirect ones — between the process, the work of UNSCOM and the design of possible BWC compliance measures, and he relates how the process ultimately foundered on Russia’s unwillingness to demonstrate its current compliance with the BWC. Its last act was a letter from Russian Foreign Minister Yevgeniy Primakov to US Secretary of State Warren Christopher in April 1996 that went unanswered. Dr Kelly concludes: “The trilateral process achieved many successes but was not allowed to take all the steps which could have dispelled suspicions and uncertainties about Russia’s BW programmes. The precedent has been important, but if similar circumstances ever arise again the states concerned know that they will have to do better.”

**13 December** US President Bush announces the Administration’s smallpox vaccination plan, which involves the mandatory vaccination of around 500,000 frontline military personnel and a voluntary program to inoculate as many as 439,000



first responders [see also 19–20 Jun]. Bush says: “I’m ordering that the military and other personnel who serve America in high-risk parts of the world receive the smallpox vaccine, men and women who could be on the front lines of a biological attack must be protected. These vaccinations are a precaution only and not a response to any information concerning imminent danger. Given the current level of threat and the inherent health risks of the vaccine, we have decided not to initiate a broader vaccination program for all Americans this time. At present, the responsible course is to make careful and thorough preparations in case broader vaccination program should become necessary in the future. There may be some citizens, however, who insist on being vaccinated now. The public health agencies will work to accommodate them. But that is not our recommendation at this time. We do recommend vaccinations for one other group of Americans that could be on the front lines of a biological attack. We will make the vaccine available on a voluntary basis to medical professionals and emergency personnel and response teams that would be the first on the scene in a smallpox emergency”. Assistant Secretary for Emergency Preparedness at the Department of Health and Human Services Jerome Hauer says the voluntary programme will begin in late January and could end as early as March. The vaccine will then be offered to as many as 10 million health care workers, police, fire-fighters, paramedics and other emergency workers, according to. These vaccinations could be completed by the summer, he says. The vaccination of military personnel commences soon after Bush made the announcement.

**13 December** In the US House of Representatives, Congressman John Mica, advocates the use of new a biological agent to eradicate coca production in Colombia. Speaking during a Government Reform Committee hearing on *America’s Heroin Crisis, Colombian Heroin, and How We Can Improve Plan Colombia*, Mica Says: “We have to restore our... mycoherbicide [biological agent] ... things that have been studied for too long need to be put into action ... We found that we can not only spray this stuff, but we can also deactivate it for some period of time... it would do a lot of damage... it will eradicate some of these crops for substantial periods of time”. [see also 4 Jan 01]

**14 December** In Australia, Commonwealth Chief Medical Officer Richard Smallwood says: “There is no known risk [of a smallpox attack in Australia]. However, it’s a possibility that has to be considered. I think the important thing is that we have the vaccine here and that gives us the ability to contain an outbreak”. Australia has received 50,000 doses of smallpox vaccine within the last 48 hours, with another 50,000 to 100,000 doses expected to be delivered in the New Year.

**15 December** In the USA, the Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction (also known as the Gilmore Commission), releases its fourth annual report [see 15 Dec 01], *IV. Implementing the National Strategy*.

**16 December** In Paris, two Algerians and a Moroccan are arrested following a raid by French police. According to French Interior Minister Nicolas Sarkozy, two vials of unidentified chemicals were discovered during the raid and “a protective military suit against biological, chemical and nuclear risks”. One of the detainees is identified as Ben Ahmed Mirouani, 29 — whose wife is also being detained. Three days later an unidentified official in the Paris police’s criminal investigation department says, “all the materials seized point to preparations for attacks using explosives”.

**16–17 December** In Brussels, the European Commission hosts the second *Non-proliferation and Disarmament Co-*

*operation Initiative* conference [see 8–9 Mar 01], which is being co-sponsored by the European Union, United States and Canada. Around 200 representatives from some 40 countries and 9 international organizations attend. The conference comprises five working sessions: nuclear security, chemical weapons destruction, biological cooperation, scientific expertise, and export control. The conferees agree that donor support should be increased vis-à-vis the chemdemil facilities at Kambarka and Shchuch’ye, so as to reduce transportation risks and vulnerability to terrorist attacks; and, that there should be increased transparency in the tendering procedures undertaken by the Russian Munitions Agency. Financial and human resource problems being experienced by the OPCW and questions relating to the health consequences of CW destruction are identified as requiring further exploration. The conferees support the full development of projects to enhance the physical protection and biosafety at Russian facilities. International instruments for detecting disease outbreaks — such as those operating under WHO — are described as powerful tools, that could be supported by regional organizations, such as the EU Health Security Task Force. Efforts to revise international health regulations and improve national legislation for handling and transporting microorganisms, are singled out as requiring further action.

**17 December** In Warsaw, Polish Foreign Minister Włodzimierz Cimoszewicz and Russian Munitions Agency Director-General Zinovy Pak sign an accord under which Poland will assist Russia in its chemdemil of lewisite. The assistance will come in the form of Polish technology, which utilizes a chemical decomposition method. Adviser to the Polish Minister of Foreign Affairs Krzysztof Paturej says that Poland has allocated US\$100,000 for the project, and envisages that under it around 2,000 tonnes of arsenic will be retrieved from Russia’s stockpiles of lewisite.

**17 December** The Berlin *Tageszeitung* reports that the Iraqi declaration [see 7 Dec] — sections of which it says it has obtained — details covert arms transactions between 80 German companies and Iraq for dual-use technology and/or specialist military hardware. Germany is named as having been Iraq’s primary supplier, having delivered technical know-how, components, basic substances and even entire technical facilities for the development of atomic, chemical and biological weapons since 1975. In addition to listing a number of the largest German companies involved, it also lists the names of companies from other states. In total, it says that 150 companies are named in the declaration. Two days later the newspaper reports that three companies from Russia made exports to Iraq subsequent to the Gulf War, and one from China did so after the withdrawal of UNSCOM inspectors from Iraq in 1998. It details which of the listed companies (excluding German ones) have been and/or continue to be involved specifically in the export of components to Iraq that could be used in the manufacture of chemical and/or biological weapons. These are: American Type Culture Collection (USA); Alcolac International (USA); China Wanbao Engineering Company (China); Protec SA (France); MEED International (UK); Melchemie B.V. (Netherlands); KBS Holland B.V. (Netherlands); NU Kraft Mercantile Corporation (Belgium); Philips Petroleum (Belgium); Treblam (Spain).

**17 December** In New York City, the inaugural issue of the magazine SEED carries an interview with Dr Vladimir Pasechnik, who, aged 64, had died a year previously [see 21 Nov 01] having been a leading figure in the clandestine USSR BW programme prior to his defection from it in 1989. The interview adds much detail to the public record, for, apart from a sudden burst of publicity some three years after his arrival in the United Kingdom [see 19 Sep 92 and 21 Jan 93], Dr Pasechnik had remained largely out of the public eye, working at the Public

Health Laboratory Service Centre for Applied Microbiology and Research in Wiltshire until the end of 1999.

In 1974, Dr Pasechnik had been recruited by General Ogarkov to build the All Union Scientific Research Institute of Ultra Pure Biochemical Preparations, which was to be a part of the FARMPRIBOR production association that would be one of six such associations making up Biopreparat [see 13 May 95]. Headquartered in Leningrad, the new institute occupied three sites when it opened in 1981 and employed around 3500 people. Pasechnik's own work involved the breeding of a strain of *Yersinia pestis* (the plague bacterium) that was capable of resisting 15 types of antibiotic. Pasechnik had also been credited with inventing an "air mill" capable of converting a dried cake of cultured plague bacteria into ultrafine powder using a blast of compressed air. "Weapon of Special Designation Number One" was what the Soviet military had called his *Y. pestis* preparation. By 1987, Pasechnik had developed a process for producing it at a rate of 200 kg/week. The preparation had a shelf-life of five months, and a 20-tonne stockpile was maintained. In 1988 Pasechnik was made general director of FARMPRIBOR, and it was while on a purchasing visit to Paris a year later that he telephoned the British embassy, after being rebuffed by the Canadian embassy, to set in motion his defection. One of his subsequent British interrogators, Dr David Kelly [see 2 Aug 91 Iraq and 13 Dec London] is quoted thus: "He believed that the Soviet BW program was immoral. It wasn't so much that it contravened the BW Convention — although that was of course a motivating factor — but it was that, as a person, the whole concept of using these materials for military purposes was unacceptable."

**19 December** In Russia, the Gorny chemdemil facility commences its operations. By the following morning more than a tonne of mustard gas is destroyed.

**19 December** At UN headquarters, UNMOVIC Executive Chairman Hans Blix says that the Iraqi declaration [see 7 Dec and 17 Dec Berlin] contains "relatively little" evidence in relation to activities after 1998. "[Since these questions have not been answered] one cannot have confidence [in the absence of such evidence] that there do not remain weapons of mass destruction", says Blix, after emerging from a closed-door briefing with the Security Council. US Secretary of State Colin Powell says: "[The declaration] is a catalog of recycled information and flagrant omissions. [T]he pattern of systematic holes and gaps in Iraq's declaration is not the result of accidents or editing oversights or technical mistakes. These are material omissions that, in our view, constitute another material breach ... We are disappointed, but we are not deceived".

**20 December** In Brussels, the European Council and the European Commission adopt a joint programme to improve cooperation in the European Union for preventing and limiting the consequences of chemical, biological, radiological or nuclear (CBRN) terrorist threats. The programme aims to increase efficiency of national and Community measures to combat CBRN threats by: improving cooperation and coordination between member states, the European Council and the European Commission; facilitating the provision of practical assistance to member states at their request, particularly when the scale of the disaster is beyond their individual capacity of response; and creating new instruments where necessary. The seven objectives of the programme are: Strengthening risk analysis and assessment of CBRN threats and their lines of propagation; Developing preventative measures with a particular focus on vulnerable sectors; Ensuring quick detection and identification of CBRN attacks and providing all those concerned with appropriate information; Using and further developing all necessary instruments for mitigating and repairing the consequences of an attack (e.g., developing vaccines, sera, and antibiotics for

human and animal use and reinforcing existing stocks); Strengthening the scientific basis of the programme (research and development activities); Cooperating with third countries and international organizations; and, Ensuring efficient coordination and implementation of the programme's instruments.

**23 December** In Moscow, Russian Munitions Agency Director-General Zinovi Pak suggests that due to the current financial crisis relating to the construction of the Shchuch'ye [see 25 Jul and 25 Nov] chemdemil facility may have to be effected at present storage sites. During a press conference, Pak says: "[The new scheme] differs in that with the old scheme we together with the US in Shchuchye develop a super-grandiose project where we take poisonous substances from Pochep, Maradykovo, Leonidovka, Kizner and we will destroy everything in Shchuchye ... Considering however that we have lost pace [we suggest] to carry out ... detoxification in the places of storage — this is a drastically new approach". In relation to the US precondition that Russia must allow its facilities to be inspected prior to releasing funds to finance Russia's chemdemil, Pak says: "[The US] does not say today what facilities they have in mind [to inspect] ... We have projects where we cannot let anyone in, absolutely. There is the national security system and nobody has the right to see it".

**24 December** Israeli Prime Minister Ariel Sharon says that Israel is currently trying to verify reports that Saddam Hussein has smuggled chemical and biological weapons to Syria with a view to evading the UNMOVIC inspectors. A spokesperson for the Syrian Foreign Ministry says in response to the allegation: "Sharon's ... allegations ... are baseless. Such allegations are aimed at diverting attention from the nuclear, chemical and biological arsenal in the possession of Israel. Israel with its arsenal of weapons of mass destruction poses a danger not only to the Palestinians, Syria and Lebanon but also to the entire region and to international peace and security".

**26 December** In Israel, unidentified government officials say that Israel will not be vaccinating its entire population against smallpox, however, it will increase the number of first responders being vaccinated to over 40,000 [see 15 Aug]. The officials say that the decision was taken upon the Government having concluded that the likelihood of a smallpox attack on Israel was slim. Israel has so far vaccinated around 15,000 first responders since July. Two months ago Israeli Health Ministry Director-General Boaz Lev promoted vaccinating the entire Israeli population as a precautionary measure. [See also 8 Jul]

**30 December** In Brussels, the European Commission proposes a regulation for the establishment of a specific trade regime covering certain equipment and products that could be used for torture and other cruel, inhuman or degrading treatment or punishment, including items that might commonly be considered as so-called 'non-lethal weapons'. Annex I of the regulation comprises equipment which has virtually no practical use other than for capital punishment, torture and other cruel, inhuman or degrading treatment. Annex II comprises equipment that could be used for such purposes, but which also has other, legitimate uses. The guidelines to the proposal state: "As regards law enforcement equipment, it should be noted that Article 3 of the Code of Conduct for Law Enforcement Officials [resolution 34/169 of 17.12.1979 of the General Assembly of the United Nations] provides that law enforcement officials may use force only when strictly necessary and to the extent required for the performance of their duty. The Basic Principles on the Use of Force and Firearms by Law Enforcement Officials, adopted by the Eighth United Nations Congress on the Prevention of Crime and the Treatment of Offenders in 1990, provide that law enforcement officials, in carrying out their duty, shall, as far as

possible, apply non-violent means before resorting to the use of force and firearms ... In view of this, those Basic Principles advocate the development of non-lethal incapacitating weapons for use in appropriate situations, while admitting that the use of such weapons should be carefully controlled. In this context, certain equipment traditionally used by the police for self-defence and riot-control purposes has been modified in such a way that it can be used to apply electric shocks and chemical substances to incapacitate persons. There are indications that, in several countries, such weapons are abused for the purpose of torture and other cruel, inhuman or degrading treatment or punishment ... This Regulation should also apply to trade in the chemical substances used to incapacitate persons, including tear gases and riot control agents”.

**30 December** At UN headquarters, the Security Council passes resolution 1454, thereby adjusting the Goods Review List [see 14 May]. The said list itemizes goods that Iraq is barred from importing under the oil for food programme, without first obtaining Security Council approval on a case-by-case basis. Among the goods added to the revised list are medical autoinjectors and specific medicines that could be used in the event of a chemical or biological weapons attack.

**3 January** In Islamabad, a former official in the Afghan embassy in the United Arab Emirates Nasr Ahmed Rouhi says that eight countries have supplied the Taliban with chemical weapons for use against US and allied forces currently stationed in Afghanistan. Rouhi also claims that US forces used chemical weapons against Taliban forces in Mazar-I-Sharif and at the Bagram air base. His claims do not name any specific countries, only that they comprise pro-Islamic as well as non-Islamic countries, notwithstanding that Pakistan was not a supplier. An unidentified Taliban spokesman subsequently dismisses Rouhi's claims as false and that he is not authorized to speak on behalf of the Taliban.

**4 January** India announces that it shall retain the option of retaliating with nuclear weapons in the event of a major attack against India or Indian forces by chemical or biological weapons. The announcement coincides with the establishment by India of its first Strategic Forces Command, the commander-in-chief of which will manage and administer all nuclear and strategic forces. Three days later Pakistani Foreign Office spokesman Aziz Ahmad Khan says that the announcement “signals an important extension of India's policy of using nuclear weapons”.

**5 January** In Amman, a military tribunal upholds the guilty verdict — and with it the death sentence — against Jordanian-American Raed Hijazi, 33, for conspiracy to carry out chemical attacks on American and Israeli targets during *inter alia* the Millennium celebrations on Mount Nebo [see 18 Sep 00]. Assertions by the prosecution that Hijazi was a member of al-Qa'ida are, however, dismissed by the court. Two months previously, an appeals court had ordered a retrial on the grounds of insufficient evidence against Hijazi.

**5 January** In London, police officers discover a “small amount of the material ... tested positive for the presence of Ricin poison”, according to a statement issued by the Metropolitan Police. The discovery is made during the arrest, at residential premises, of six men and a woman — of North African origin — suspected of having terrorist links. Further arrests follow. UK Prime Minister Tony Blair says the arrests illustrate that the continued threat of international terrorism is “present and real and with us now — and its potential is huge”. A week later, the suspects are charged under the Terrorism Act 2000 and the Chemical Weapons Act 1996 [see 12 Dec 01] with being “concerned in the development or production of a chemical weapon” and having materials

“connected with the commission, preparation or instigation of an act of terrorism”.

**5 January** In Kentucky, there is a leak of mustard gas from 155-mm projectiles at the Lexington Blue Grass Army Depot. The Army says the leak poses no threat to the community.

**7 January** The US Central Intelligence Agency releases its *Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions* for the period 1 July–31 December 2001. The report, which was submitted to Congress last month, states: “During the reporting period [Iran] continued to seek chemicals, production technology, training, and expertise from entities in Russia and China that could further efforts at achieving an indigenous capability to produce nerve agents. Iran already has stockpiled blister, blood, and choking agents — and the bombs and artillery shells to deliver them — which it previously has manufactured. It probably also has made some nerve agents. Foreign dual-use biotechnical materials, equipment, and expertise, primarily, but not exclusively, from entities in Russia and Eastern Europe, continued to feature prominently in Iran's procurement efforts. Such materials have legitimate uses, but Iran's [BW] program also could benefit from them ... Iraq has attempted to purchase numerous dual-use items for, or under the guise of, legitimate civilian use. Since the suspension of UN inspections in December 1998, the risk of diversion of such equipment has increased. In addition, Iraq appears to be installing or repairing dual-use equipment at CW-related facilities ... Iraq has continued dual-use research that could improve BW agent R&D capabilities. In light of Iraq's growing industrial self-sufficiency and the likely availability of mobile or covert facilities, we are concerned that Iraq may again be producing BW agents ... Iraq is pursuing an unmanned aerial vehicle (UAV) program that converts L-29 jet trainer aircraft originally acquired from Eastern Europe ... We suspect that these refurbished trainer aircraft have been modified for delivery of chemical or, more likely, biological warfare agents ... Libya remains heavily dependent on foreign suppliers for CW precursor chemicals and other key related equipment ... Tripoli still appears to be working toward an offensive CW capability and eventually indigenous production. Evidence suggests that Libya also is seeking to acquire the capability to develop and produce BW agents ... Syria sought CW-related precursors and expertise from foreign sources during the reporting period. Damascus already holds a stockpile of the nerve agent sarin but apparently is trying to develop more toxic and persistent nerve agents. Syria remains dependent on foreign sources for key elements of its CW program, including precursor chemicals and key production equipment. It is highly probable that Syria also is developing an offensive BW capability ... Sudan, a party to the CWC, has been developing the capability to produce chemical weapons for many years. It historically has obtained help from foreign entities, principally in Iraq. Sudan may be interested in a BW program as well ... As developing countries expand their chemical industries into pesticide production, they also are advancing toward at least latent chemical warfare capability. Likewise, additional nonstate actors are becoming more interested in the potential of using biological warfare as a relatively inexpensive way to inflict serious damage.”

**9 January** At UN headquarters, UNMOVIC Executive Chairman Hans Blix briefs the Security Council on current verification activities in Iraq [see 19 Dec 02]. Blix says: “Prompt access [being provided by Iraq to weapons inspectors] is by no means sufficient to give confidence that nothing is hidden in a large country with an earlier record of avoiding disclosures. Iraq is very familiar with the fact that only declarations supported by evidence, will give confidence about the elimination of weapons. In

this respect we have not so far made progress ... I have not asserted on behalf of UNMOVIC that proscribed items or activities exist in Iraq, but if they do, Iraq should present them and then eliminate them in our presence ... If evidence is not presented, which gives a high degree of assurance, there is no way the inspectors can close a file by simply invoking a precept that Iraq cannot prove the negative. In such cases, regrettably, they must conclude, as they have done in the past, that the absence of the particular item is not assured ... One hundred and fifty inspections of 127 sites have taken place up to 8 January 2003."

**9 January** In Washington DC, the US National Academy of Sciences and the Center for Strategic and International Studies host a workshop *Scientific Policy, Publications & National Security*, bringing together security experts and scientists.

Director of the White House Office on Science and Technology Policy John Marburger says that under Decision Directive 189 of 21 September 1985, research that was not classified as secret when ordered by the government could not be classified retrospectively. Citing the recent paper by the Johns Hopkins Center for Civilian Biodefense Strategies *Biosecurity: Responsible Stewardship of Bioscience in an Age of Catastrophic Terrorism*, he says that he agrees with its conclusion that "traditional regulatory approaches are not well suited to biosecurity concerns". "Those concerns are public concerns, and to them the public deserves a rational and serious response from its government", says Marburger.

**10 January** The London School of Hygiene and Tropical Medicine together with Merlin, a charity that provides healthcare for people in crises, release *Hope for the Best, Prepare for the Worst: How Humanitarian Organisations can Organise to Respond to Weapons of Mass Destruction*. The paper analyses the potential humanitarian response to the use of weapons of mass destruction. It stresses the importance of NGOs collaborating amongst themselves, thereby ensuring that the humanitarian community is able to act independently in its response. The paper concludes: "The humanitarian community needs to learn new skills, to confront the ethical, organisational and practical challenges that such a crisis will bring, to be bold and principled in working with new partners and to be supported to do so".

**11 January** The Canadian navy identifies a chemical weapons dump off the coast of Nova Scotia containing more than 1,200 barrels of mustard gas from the Second World War. The site lies at a depth of 1,800 metres and is located approximately 330 kilometres south-east of Halifax. The scuttling of a barge filled with barrels of mustard gas south of Sable Island, Nova Scotia in February 1946, was part of Operation Mustard; the first Canadian disposal of chemical weapons in the Atlantic Ocean after the Second World War and the only one documented by the military and made available to the public. Canadian Navy Lieutenant Chris Hough says that the projected expenditure of \$10 million over the next five years to search for chemical, biological and conventional munitions "is right for now", but "things could change".

**11 January** In Frederick, Maryland, Dr Riley Housewright dies, aged 89. A microbiologist, he had joined the US biological weapons programme during World War II and was Scientific Director of Fort Detrick when the programme was terminated during 1969–70. In the mid-1960s he had been founding president of the American Society for Microbiology, and was its Executive Director upon his retirement in the early 1980s.

**14 January** In Tblisi, Georgian National Security Ministry Information Department Director Nika Laliashvili says it is "quite possible" that experiments using ricin and other poisonous substances were undertaken at a terrorist training camp in the

Pankisi Gorge. The said camp ceased to be operational at the end of February 2002. He says, however, that no link has been established between those terrorists who trained at the camp and those arrested in London for possessing ricin [see 5 Jan ].

**14 January** In London, the Society for Chemical Industry hosts a seminar *Bioterrorism: Analysing and Coping with the International Threat*, which brings together scientists, policy-makers, the police and the media. Issues such as conveying accurate information to the public and censorship of scientific publications are discussed.

**14 January** US President George Bush signs an executive order under the FY2003 National Defense Authorization Act [see 2 Dec 02], releasing around \$450 million under the US Cooperative Threat Reduction Program. The effect of the order is to make available more than \$150 million to construct the Russian chemdemil facility at Shchuch'ye [see 23 Dec 02]. Under the said Act, the authority to waive the certification requirement continues for the next three years, however, additional authority will be required to complete the construction of the Shchuch'ye facility. Deputy Chairman of the Russian State Defence Committee Nikolai Bezborodov later says: "We welcome the US president's decision to demothball the Russian–American programme...".

**15 January** German Health and Social Affairs Minister Ulla Schmidt says that Germany plans to purchase 100 million doses of smallpox vaccine by the end of the year as a precautionary measure. The Ministry recently ordered 11 million doses of smallpox vaccine from Bavarian Nordic GmbH [see 13 Oct 02].

**15 January** From Brussels, Reuters reports an interview about a "secret EU report on bioterrorism" with one of the report's authors, the immunologist Stefan Kaufmann [see 30 Nov–1 Dec], who is director of the Max Planck Institute for Infection Biology in Berlin. He is described as a member of the 14-person European Commission Expert Group on Countering the Effects of Biological and Chemical Terrorism. The burden of his remarks is that the European Union needs to spend more to guard against biological attacks, but the USA may be spending too much.

**15 January** In Arlington, Virginia, the US Department of Commerce's Bureau of Industry and Security hosts a roundtable discussion on current issues relating to the CWC compliance programme. Attendees discuss clarification of declaration and reporting requirements; lessons learned from recent facility inspections; compliance efforts; and, a preview of proposed changes to regulations.

**15 January** In Texas, Thomas Butler, a professor at the Texas Tech University Health Science Center, is arrested after yesterday informing the US Federal Bureau of Investigations that more than thirty vials of *Yersinia pestis* bacteria had disappeared three days previously. The Bureau says that Butler had in fact already destroyed the vials prior to the alleged date of their disappearance. In a written statement released the following day, Butler writes: "I made a misjudgment because I knew that the pathogen was destroyed and there was no threat to the public, I provided an inaccurate explanation ... and did not realize it would require such an extensive investigation." The Bureau suspect that Butler may have been trying to cover himself from possible university and federal sanctions after not having properly documented the bacteria's destruction in lab records.

**15–18 January** In Warsaw, a NATO-sponsored advanced research workshop on *Preparedness against Bioterrorism and Re-emerging Infectious Diseases — Regional Capabilities, Needs and Expectations in Central and Eastern European Countries* is

convened. The objective of the workshop is to study methods for states that have advanced bio-defence systems to share their experience with states that have less advanced systems. Organizers of the NATO-sponsored workshop say that it will help to increase awareness of the problem at the political level in the region and lead to better funding for efforts to counter bioterrorism". The workshop is organized by the Military Institute of Hygiene and Epidemiology, Warsaw — which also hosts the event — in cooperation with the Cantacuzzino Institute, Bucharest.

**16 January** In Iraq, UNMOVIC inspectors uncover eleven empty chemical warheads during inspections at the Ukhaider ammunition storage depot. UN spokesman Hiro Ueki says: "The warheads were in excellent condition and were similar to ones imported by Iraq during the late 1980s". He does not elaborate on the significance of the find, but the UN office in Baghdad declares that it does not consider the discovery to be a "smoking gun" at the present time. It adds that a twelfth warhead is undergoing further evaluation. Iraqi Chief Liaison Officer General Hossam Mohammed Amin says: "These are 122mm rockets with an empty warhead. There are no chemical or biological agents or weapons of mass destruction or linked to weapons of mass destruction ... These rockets are expired ... forgotten".

**16 January** The US Institute of Medicine of the US National Academy of the Sciences releases *Review of the Centers for Disease Control and Prevention's Smallpox Vaccination Program Implementation*. The Review urges the US Centers for Disease Control and Prevention to address remaining concerns and to spell out more clearly both the risks and benefits for vaccine recipients. Broader vaccination of health care workers and others should begin only after adequate evaluation of the immunization of the first round of recipients has occurred. This caution, it says, is important because any complications experienced during the initial phase of the immunization campaign could lessen willingness to participate in the programme.

**17 January** In Prague, the Czech Chamber of Deputies and Senate approve a government proposal — instigated by the US — to reinforce the Czech chemical warfare unit currently stationed in Kuwait. A further 107 military personnel will now be deployed to Kuwait to work alongside around 251 currently stationed there. The Czech Government approved the initiative four days ago. The majority of the contingent currently in Kuwait must return by 30 June at the latest [see also 12 Nov 02]. Deployment of the additional personnel to Kuwait commences at the end of the month.

**19–20 January** In Baghdad, UNMOVIC Executive Chairman Hans Blix and IAEA Director-General Mohammed ElBaradei meet with Iraqi officials to discuss Iraqi compliance with Security Council resolution 1441, ahead of their next briefing to the Security Council on 27 January. The discussions result from an Iraqi invitation to Blix and ElBaradei shortly after the latter had briefed the Security Council on the Iraqi declaration [see 19 Dec 02]. In a joint statement issued following the discussions, Iraq states that it will do more to assist the inspectors in their verification activities, including *inter alia* encouraging Iraqi scientists to accept private interviews with the inspectors.

**20 January** In London, an international coalition of fifteen research and security organizations release a four-volume report *Protecting Against the Spread of Nuclear, Biological and Chemical Weapons*. The report — which took three years to compile — is launched during a conference at the International Institute for Strategic Studies, organized by the Washington-based Center for Strategic and International Studies. The report urges the United States, Russia and Europe to do more to reduce the "grave proliferation risks" of their remaining stockpiles of

chemical, biological and nuclear weapons. Furthermore, it says that the international community must treat Russia "not as a dependant client but as an equal partner" in the process of decommissioning weapons of mass destruction.

**20 January** In the UK, a spokeswoman for the UK Ministry of Defence says that coastguards have recovered numerous vials of anthrax vaccine on West Bay, Dorset. "We haven't been able to search the source of the vaccine but we can confirm it was issued to the armed forces", she says. According to the same source, an internal investigation has been launched which will be looking at whether the vials originated from a warship involved in the recent naval deployment to the Gulf.

**20 January** The UN Security Council passes resolution 1456, thereby adopting a declaration at the level of Ministers of Foreign Affairs on the issue of combating terrorism. The declaration highlights, amongst others, the need to strengthen controls with respect to chemical and biological materials so as to prevent their being obtained by terrorist organizations. Paragraph 7 states: "International organizations should evaluate ways in which they can enhance the effectiveness of their action against terrorism, including by establishing dialogue and exchanges of information with each other and with other relevant international actors, and directs this appeal in particular to those technical agencies and organizations whose activities relate to the control of the use of or access to nuclear, chemical, biological and other deadly materials; in this context the importance of fully complying with existing legal obligations in the field of disarmament, arms limitation and non-proliferation and, where necessary, strengthening international instruments in this field should be underlined". UN Secretary-General Kofi Annan says that greater efforts are needed to ensure universality, verification and full implementation of the key treaties related to those weapons, to tighten national export controls over items needed to produce them, and to criminalize the acquisition or use of such weapons by non-State groups.

**20 January–7 February** In Vienna, the seventh [see 7 Oct 02] month-long UNMOVIC general training course takes place.

**22 January** The US Environmental Protection Agency commences a programme under which it will update many of its existing 3,000 air quality monitoring stations, currently sampling for pollution, so as to be able to detect bacteria or viruses. White House spokesman Ari Fleischer says: "It's part of our precautions to protect the country from any potential threats of bio-weaponry ... The system will be deployed in major population centers across the country, and the CDC [Centers for Disease Control and Prevention] will monitor equipment on a regular basis. It will be funded by the new Department of Homeland Security".

**23 January** In Moscow, the Tverskoi district court rejects three claims for damages — amounting to a combined total of \$4 million — filed by relatives of victims of the Moscow theatre siege [see 26 Oct 02]. Judge Marina Gorbachyova postponed ruling on the remaining twenty-one lawsuits — which claim a collective total of \$60 million — on the grounds that the claimants did not appear in court. "In this case, a ruling on one lawsuit is sufficient to understand how the rest will be decided", says lawyer Igor Turnov.

**23 January** The US White House releases a report *What Does Disarmament Look Like*, documenting the US Administration's view of the action that Iraq needs to take in order to satisfy the requirements of UN Security Council resolution 1441. It says: "When a country decides to disarm, and to provide to the world verifiable evidence that it has disarmed, there are three common elements to its behavior: The decision to disarm is made at the

highest political level; the regime puts in place national initiatives to dismantle weapons and infrastructure; and the regime fully cooperates with international efforts to implement and verify disarmament; its behavior is transparent, not secretive ... Iraq's behavior contrasts sharply with successful disarmament stories [in South Africa, the Ukraine and Kazakhstan]. Instead of a high-level commitment to disarm, Iraq's concealment efforts are led by Saddam's son Qusay. The inspectors are labeled spies and treated as the enemy, not as a partner in disarmament. Instead of national initiatives to disarm, Iraq's SSO and National Monitoring Directorate are national programs involving thousands of people to target inspectors and thwart their duties. Instead of cooperation and transparency, Iraq has chosen concealment and deceit best exemplified by a 12,000 page declaration which is far from 'currently accurate, full, and complete,' as required by the United Nations Security Council."

**23 January** US Deputy Defense Secretary Paul Wolfowitz asserts that numerous UNMOVIC weapons inspectors — and their superiors in New York — have become Iraqi agents and are informing Iraq in advance of those facilities earmarked for inspection. Addressing the Council on Foreign Relations in Washington D.C., he describes such inspectors as "anti-inspectors", who, now "vastly outnumber the couple of hundred of UN personnel on the ground in Iraq". Wolfowitz says: "In the 1990s, there were reports that Iraqi intelligence recruited UN inspectors as informants, and that Iraqi scientists were fearful about being interviewed. Recent reports that Iraq continues these kinds of efforts are a clear sign that it is not serious about disarmament. We have reports and other evidence of prohibited material and documents being relocated to agricultural areas and private homes or hidden beneath mosques and hospitals. Furthermore, according to these reports, the material is moved constantly, making it difficult to trace or find without absolutely fresh intelligence. It is a shell game played on a grand scale with deadly serious weapons."

**24 January** In Iraq, key units of the Iraqi military are being equipped to counter the effects of chemical weapons in the event of an invasion of Iraq, according to the British Broadcasting Corporation. The BBC reports having obtained hand-written papers — smuggled out of Iraq by the Iraqi National Coalition — that refer to the distribution of chemical warfare suits and the drug atropine to counter the effects of nerve gas. A spokesperson for the UK Prime Minister says: "We are not in a position to say whether the report ... is correct or not. That is a matter for the BBC".

**24 January** In Spain, police seize two barrels of chemicals, following dawn raids on a number of properties in Barcelona, Girona and Bagnols. Spanish Interior Minister Angel Acebes says the material — the subject of much media speculation that it might be ricin — is being analysed [see also 5 Jan]. The raids result in the arrest of sixteen individuals, mostly of Algerian nationality. Spanish Prime Minister Jose Maria Aznar, says: "The dismantled network has connections with terrorists arrested recently in France and Britain who were preparing to carry out attacks, using explosives and chemical materials". Subsequent tests reveal that the chemicals seized are common detergents.

**24 January** In Denver, Colorado, a US district court dismisses a claim by a member of the US Army that the Army violated her constitutional rights when it required her to take the anthrax vaccine. Jemekia Baker had been given a less than honourable discharge after refusing to take the vaccine on the grounds that it would prevent her becoming pregnant for a period of 18 months. Judge Edward Nottingham said that allowing the claim to succeed "would significantly interfere with the function of the military", and that Baker had not exhausted all her options in the

military's justice system. He says, however, that "if the court were reviewing the [anthrax vaccination] program the court would be very concerned by the questions raised by the plaintiff".

**26 January** In Bratislava, US Ambassador to Slovakia Ronald Weiser requests Slovak Prime Minister Mikulas Dzurinda to deploy its chemical warfare unit 'Chemika Rota' to the Gulf ready for any future conflict with Iraq. Three days later Slovak Defence Minister Jaroslav Tvrdik says that a joint Czech-Slovak chemical warfare unit will be formed in Kuwait by April [see also 17 Jan]. Tvrdik says that the joint-unit would only be deployed for combat under a UN Security Council mandate authorizing the use of force against Iraq, or where weapons of mass destruction are actually used in the region. This he says is in line with the mandate issued by the Czech Government in relation to its chemical warfare unit. Dzurinda says that the Slovak Parliament would debate the Government's proposal to send up to 75 personnel to remain in Iraq on 6 February, to remain there until the end of the year.

**26 January** The Trinidad *Sunday Express* reports that a local group of radical Muslims claim to be manufacturing chemical and biological weapons. The group, it is reported, will use the weapons against US and UK interests in Trinidad and Tobago, were the former to launch a war against Iraq. Two of the paper's journalists are reported to have visited a secret underground location belonging to the group, where they say they found "organic and inorganic chemical compounds used to manufacture various weapons". Among the many concoctions of chemicals in the group's possession, were mustard oil and CFCs, which the group said could be mixed to make a form of nerve gas.

**27 January** At UN headquarters, UNMOVIC Executive Chairman Hans Blix updates the Security Council in accordance with Security Council resolution 1441 [see 8 Nov 02]. Blix's statement reads: "[Iraq has provided access] to all sites we have wanted to inspect and with one exception it has been prompt ... The environment has been workable ... On 7 December 2002, Iraq submitted a declaration of some 12,000 pages in response to paragraph 3 of resolution 1441 (2002) and within the time stipulated by the Security Council. In the fields of missiles and biotechnology, the declaration contains a good deal of new material and information covering the period from 1998 and onward. This is welcome. One might have expected that in preparing the Declaration, Iraq would have tried to respond to, clarify and submit supporting evidence regarding the many open disarmament issues ... Regrettably, the 12,000 page declaration, most of which is a reprint of earlier documents, does not seem to contain any new evidence that would eliminate the questions or reduce their number".

Blix then refers to chemical weapons matters requiring further evidence from Iraq: "[The] 'Air Force document' [see 7 Dec 02] ... gives an account of the expenditure of bombs, including chemical bombs, by Iraq in the Iraq-Iran War. I am encouraged by the fact that Iraq has now provided this document to UNMOVIC. The document indicates that 13,000 chemical bombs were dropped by the Iraqi Air Force between 1983 and 1988, while Iraq has declared that 19,500 bombs were consumed during this period. Thus, there is a discrepancy of 6,500 bombs. The amount of chemical agent in these bombs would be in the order of about 1,000 tonnes. In the absence of evidence to the contrary, we must assume that these quantities are now unaccounted for ... [A] number of 122 mm chemical rocket warheads [were discovered] in [a relatively new] bunker at a storage depot 170 km southwest of Baghdad [indicating that] the rockets must have been moved there in the past few years, at a time when Iraq should not have had such munitions. The investigation of these rockets is still proceeding. Iraq states that they were overlooked from 1991 from a batch of some 2,000 that were stored



there during the Gulf War ... The discovery of a few rockets does not resolve but rather points to the issue of several thousands of chemical rockets that are unaccounted for. The finding of the rockets shows that Iraq needs to make more effort to ensure that its declaration is currently accurate. During my recent discussions in Baghdad, Iraq declared that it would make new efforts in this regard and had set up a committee of investigation. Since then it has reported that it has found a further 4 chemical rockets at a storage depot in Al Taji. I might further mention that inspectors have found at another site a laboratory quantity of thiodiglycol, a mustard gas precursor”.

On biological weapons, Blix says: “Iraq has declared that it produced about 8,500 litres of [anthrax], which it states it unilaterally destroyed in the summer of 1991. Iraq has provided little evidence for this production and no convincing evidence for its destruction. There are strong indications that Iraq produced more anthrax than it declared, and that at least some of this was retained after the declared destruction date. It might still exist. Either it should be found and be destroyed under UNMOVIC supervision or else convincing evidence should be produced to show that it was, indeed, destroyed in 1991. As I reported to the Council on 19 December last year, Iraq did not declare a significant quantity, some 650 kg, of bacterial growth media, which was acknowledged as imported in Iraq’s submission to the Amorim panel in February 1999. As part of its 7 December 2002 declaration, Iraq resubmitted the Amorim panel document, but the table showing this particular import of media was not included. The absence of this table would appear to be deliberate as the pages of the resubmitted document were renumbered. In the letter of 24 January to the President of the Council, Iraq’s Foreign Minister stated that “all imported quantities of growth media were declared”. This is not evidence. I note that the quantity of media involved would suffice to produce, for example, about 5,000 litres of concentrated anthrax. Some 400 names for all biological and chemical weapons programmes as well as their missile programmes were provided by the Iraqi side. This can be compared to over 3,500 names of people associated with those past weapons programmes that UNSCOM either interviewed in the 1990s or knew from documents and other sources. At my recent meeting in Baghdad, the Iraqi side committed itself to supplementing the list and some 80 additional names have been provided”.

In addition, Blix says: “To date, 11 individuals were asked for interviews in Baghdad by us. The replies have invariably been that the individual will only speak at Iraq’s monitoring directorate or, at any rate, in the presence of an Iraqi official. This could be due to a wish on the part of the invited to have evidence that they have not said anything that the authorities did not wish them to say. At our recent talks in Baghdad, the Iraqi side committed itself to encourage persons to accept interviews “in private”, that is to say alone with us. Despite this, the pattern has not changed. However, we hope that with further encouragement from the authorities, knowledgeable individuals will accept private interviews, in Baghdad or abroad.” Blix will report to the Security Council again on 14 February.

**28 January** US Assistant Secretary of State for the European and Eurasian Affairs Elizabeth Jones says, during a visit to Bishkek, that the United States would not consider using even “low powered” nuclear weapons, in any future operation against Iraq.

**28 January** US President Bush proposes the earmarking of “almost \$6 billion to quickly make available effective vaccines and treatments against agents like anthrax, botulinum toxin, Ebola, and plague”. During his State of the Union address to Congress, he says that the programme — called Project

Bioshield — is based on the assumption that the United States’ “enemies would use these diseases as weapons”.

On the issue of Iraq possessing chemical and biological weapons, Bush says: “The United Nations concluded in 1999 that Saddam Hussein had biological weapons [sic] sufficient to produce over 25,000 liters of anthrax ... He hasn’t accounted for that material. He’s given no evidence that he has destroyed it. The United Nations concluded that Saddam Hussein had materials sufficient to produce more than 38,000 liters of botulinum toxin ... He hadn’t accounted for that material. He’s given no evidence that he has destroyed it. Our intelligence officials estimate that Saddam Hussein had the materials to produce as much as 500 tons of sarin, mustard and VX nerve agent ... He’s not accounted for these materials. He has given no evidence that he has destroyed them. US intelligence indicates that Saddam Hussein had upwards of 30,000 munitions capable of delivering chemical agents. Inspectors recently turned up 16 of them — despite Iraq’s recent declaration denying their existence. Saddam Hussein has not accounted for the remaining 29,984 of these prohibited munitions. He’s given no evidence that he has destroyed them.”

Referring to Iraq’s alleged nuclear weapons programme, Bush says: “The British government has learned that Saddam Hussein recently sought significant quantities of uranium from Africa [see 24 Sep 02]”. On 19 December 2002, the US Administration publicly identified Niger as being the country from which Iraq had attempted to purchase 500 tons of uranium oxide, known also as ‘yellow cake’. Addressing the UN Security Council six weeks later, IAEA Director General Mohammad ElBaradei says that the IAEA, together with outside experts, have concluded that the documents involved in the transaction “are in fact not authentic”. An unidentified senior IAEA official adds: “These documents are so bad that I cannot imagine that they came from a serious intelligence agency.”

**30 January** In Bucharest, a new national chemical, biological and nuclear early warning system is launched by the Romanian Ministry of Defence. Operating under the auspices of the Romanian Military Management Operational Centre, the system will use sensors to transmit data to mobile emergency teams.

**30 January** In Geneva, The World Health Organization releases its report *Terrorist Threats to Food: Guidance for Establishing and Strengthening Prevention and Response Systems*. The purpose of the report is to help national governments establish mechanisms to minimize possible acts of terrorism against food supplies. It examines means of establishing basic prevention, surveillance and response, and provides suggestions for specific measures for consideration by the food industry. The report emphasizes the need to strengthen existing emergency alert and response systems by improving links with all relevant agencies and with the food industry. Furthermore, it states that many developed, and most developing countries, are not yet adequately prepared to deal with a large-scale food safety emergency. It urges all countries should undertake preparedness and response planning to be able to cope with food safety emergencies regardless of their cause.

**31 January** In Mannheim, two German businessmen are found guilty of having violated German arms-export laws for exporting drills used to bore tubes for long-range 209mm cannons to Iraq in 1999. During the trial, the Prosecution asserted that the said cannons — of the Iraqi-built Al Fao variety — are capable of firing chemical, biological and nuclear weapons. Through Al-riwo GmbH, Bernd Schompeter, 59, purchased the drills from Burgsmüller GmbH, the company for which Willi Heinz Ribbeck, 53, worked. The drills were then delivered to an Iraqi-born US businessman Sahib Abd al-Amir al-Haddad in Jordan, whose extradition Germany is currently seeking from Bulgaria.



Schompeter is sentenced to five years and three months' imprisonment and Ribbeck to two years' probation.

**31 January** In *The New York Times*, Stephen Pelletiere restates an earlier US Army War College Strategic Studies Institute Review [see 8 Nov 90], which concluded it more likely that Iran — not Iraq — had been responsible for the Halabja massacre. Pelletiere — a senior US Central Intelligence Agency analyst during the Iran-Iraq war and one of the three authors responsible for the said review — says: "Immediately after the battle the United States Defense Intelligence Agency investigated and produced a classified report, which it circulated within the

intelligence community on a need-to-know basis. The study asserted that it was Iranian gas that killed the Kurds, not Iraqi gas."

[Note: Pelletiere's persistence in propagating this allegation is impressive. For a focused discussion see Jean Pascal Zanders, *Allegations of Iranian Use of Chemical Weapons in the 1980–88 Gulf War*, 29 March 2001. See further 7 Mar 01.]

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*This Chronology was compiled chiefly by Nicholas Dragffy from information supplied through HSP's network of correspondents and literature scanners.*

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## Forthcoming events

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**26–27 April**, The Netherlands — 19th workshop of the Pugwash Study Group on Implementation of the CBW Conventions

**28 April–9 May**, The Hague — CWC First Review Conference

**11–16 May**, Bucharest — CBMETS–Pharmaceutical I, contact info@asanltr.com

**13–14 May**, Ettlingen, Germany — Second European Symposium on Non-Lethal Weapons, organized by Fraunhofer-Institut

f. Chemische Technologie, details on www.non-lethal-weapons.com

**20–22 May**, Prague — CWD2003 [International CW Demil Conference], contact dml@dstl.gov.uk

**26–30 May**, Tehran — OPCW and Iranian Government, Fifth Annual Course on Medical Aspects of Defence Against Chemical Weapons, details in S/339/2003.

**15–18 June**, Jyväskylä, Finland — Association of Finnish Chemical Societies

symposium "Nuclear, Biological and Chemical Threats — A Crisis Management Challenge", details on www.nbc2003.org

**24–27 June**, The Hague — Thirty-Third session, OPCW Executive Council. Further sessions — EC-34: 23–26 September; and EC-35: 2–5 December.

**7–12 September**, Dubrovnik, Croatia — CBRMETS – Industry III [World Congress on Chemical, Biological, Radiological Terrorism], details on www.asanltr.com

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## IRAQ CHRONOLOGY

HSP is considering publishing a compilation of material from the *News Chronology* and its associated databases on the subject of Iraq and chemical and biological weapons.

The publication would be in a similar format to the *News Chronology* but for each record it would identify all of the information sources.

The draft that has now been put together comprises more than 1500 records over some 300 pages and has the beginnings of an index. Additional entries from before the start of the *News Chronology* have been created, the earliest of them recording 1965 newspaper reports of Iraqi CBW-related activity.

Two factors have to be considered before a decision on publication can be taken. The first is that the time taken to turn this draft into a publication meeting HSP standards would be significant. Secondly, as there is no separate financial allocation for this project, it would have to be substantially self-financing from sales of the publication.

With this second factor in mind, HSP would like to gauge the possible level of interest in this publication at a guide price equivalent to two years' subscription to the *Bulletin*. Expressions of interest should be sent to Richard Guthrie at the Sussex address or e-mail: r.guthrie@sussex.ac.uk.

## HSP SUSSEX MOVES

During April, the Sussex end of HSP will start moving, together with the rest of SPRU, to a new building — the Freeman Centre — on the University of Sussex campus. The Centre is named after Professor Christopher Freeman, the economist and founding Director of SPRU.

The new address is as before, except with the postcode changing to "BN1 9QE". Telephone, fax and e-mail contacts remain unchanged.

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