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WHAT SHOULD BE THE SCOPE OF THE CWC? A WORKSHOP REPORT

Julian Perry Robinson

Sussex Director, Harvard Sussex Program

With the OPCW now so preoccupied with immediate internal affairs, member states and secretariat alike, longer term issues do not look important, and a workshop on the scope of the CWC held last year in England, which is what this article reports, may seem entirely peripheral. Yet the first special session of the Conference of the States Parties to review the operation of the CWC is barely a year away and needs long and heavy preparatory work if it is to succeed. The special session will provide occasion for looking beyond short-term concerns towards those longer term challenges that are the raison d'être of the Organization. One such challenge was the subject of a workshop convened at the University of Sussex on 12 October 2001 by the Harvard Sussex Program in consultation with the UK CWC National Authority Advisory Committee.

Context of the Sussex workshop

The OPCW Executive Council has initiated open-ended consultations on how the review is to be conducted. The CWC itself makes only two stipulations. Article VII.22 states that the review "shall take into account any relevant scientific and technological developments". Here, the OPCW Scientific Advisory Board and the International Union of Pure and Applied Chemistry (IUPAC), which is an NGO, are already working together. The second stipulation is that the provisions of Part IX of the Verification Annex

shall be re-examined in the light of a comprehensive review of the overall verification regime for the chemical industry ... on the basis of the experience gained.

Paragraph IX.26 of the Verification Annex, which is where this requirement is set out, goes on to say that the Conference

shall then make recommendations so as to improve the effectiveness of the verification regime.

Here, the current crisis is presumably making preparations difficult, and little can yet be seen of them. No clear view, for example, has yet emerged on the practical meaning of that peculiarly opaque and ambivalent concept, "effectiveness of the verification regime".

These two CWC-mandated tasks are important, especially in the context of those other longer-term

challenges that face the Organization. Finishing the job of getting rid of chemical weapons and production facilities is one such challenge. Extending take-up of the CWC regime into regions still haunted by chemical-warfare armament is a further challenge. A third is the task of suppressing any subsequent emergence of armament outlawed by the CWC, which is to say weapons exploiting the toxic properties of chemicals. This last challenge is arguably the most important of all, for an organization that came to devote itself, however inadvertently, to the past without also paying due attention to the future would be an organization of only transient value.

Moreover, it is an uncomfortable circumstance that the changing character of warfare may be increasing the attractions of chemical weapons in some conflicts, making resort to them, whether by states or by sub-state entities, more likely than during the period when the CWC was negotiated. Not many people then were contemplating the terrorist utility of toxic chemicals, for example, or anti-terrorist roles for chemical weapons.

Post-disarmament emergence of new chemical weapons might happen through two main mechanisms. The first might involve the dual-use attributes of industrial chemistry, including plant, chemicals and intangible technology: industry as a source of what might be called "opportunistic chemical weapons", not necessarily anything like the ones reflected in Schedules 2 and 3 of the Annex on Chemicals. It is not impossible to imagine events tempting a state to desperate or abrupt contravention of treaty obligations in which it turns to its chemical industry for crash acquisition of weaponizable toxic chemicals, whether through adaptation of existing production plant, or through the firing-up of surplus production capacity camouflaged within

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the industry for just such an eventuality, or through the diversion of toxic chemicals already present in the industry. Other variants of this dual-use mechanism can be envisaged, including ones involving the importation of dual technology.

The second mechanism, which also has historical precedent, turns on the technological change that can be rooted in advancing science. As our understanding of the processes of life continues to accelerate, we become more able to manipulate them at the molecular level. The fact that chemicals can kill unprotected people on a large scale is of diminishing interest to many modern armed forces, who have other such weapons at their disposal and therefore suffer no great disadvantage from forgoing chemical weapons in accordance with the CWC. But chemicals designed, not to kill, but to impose harm on processes of, say, locomotion or cognition, metabolism or immunity, or even development or inheritance, may be seen to present altogether more valuable means of force. That the CWC should define a "toxic chemical" as broadly as it does —

Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals

— is some safeguard against the dreadful, albeit non-lethal, possibilities that may thus be opening up. It is not at all difficult to imagine a state deciding to violate the CWC in order to acquire, even use, such weapons.

The challenge of precluding post-disarmament emergence or re-emergence of chemical weapons – or, as some would say, the challenge of ensuring non-proliferation can thus be seen primarily in terms of *controlling dualities*: the dual technologies present in industry and the dual applicability, for war or peace, of some scientific research. There is a third pertinent duality also, one that has long displayed itself in technology-development activities that can feed the design of weapons as well as protection against them. For all three dualities, the problem in implementing the CWC is the same. The impermissible or maleficent side of each duality must be blocked, but there must be no constraint on the permissible or beneficent side. The means provided by the CWC for controlling these dualities are set out in the language defining the scope of the treaty. The interpretation of that language, and its proper reduction to practice, was the subject of the Sussex workshop.

The duality controls of the CWC

For as central a feature of the CWC regime as duality control, the negotiators were careful to make due provision. It is to be found in two places in the treaty: Article II.1(a) and Article VI.2. The first is the language enunciating the scope of the CWC's 'negative obligations' – the obligations upon states parties to refrain from activities such as developing, producing, stockpiling, transferring, or using chemical weapons. Here, the Convention defines the chemical weapons, not in concrete terms (such as physical construction or chemical composition) that could become out of date as technology advances, but in terms of intent. So toxic chemicals and their precursors become banned weapons if they fail to meet the criterion of being

intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes.

A definition of "purposes not prohibited under this Convention" appears in Art II.9, which details four broad categories of purpose to which dual-use chemicals may properly be applied, namely:

- (a) Industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;
- (b) Protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons;
- (c) Military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare;
- (d) Law enforcement including domestic riot control purposes.

The other place is where the CWC sets out the most important of its 'positive obligations' – the ones that require states parties to undertake certain actions. The opening sentence of Article VI.2, which became known during its negotiation as the 'Molander chapeau', uses that same criterion of purpose in regard to duality controls in industry:

Each State Party shall adopt the necessary measures to ensure that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred, or used within its territory or in any other place under its jurisdiction or control for purposes not prohibited under this Convention.

The treaty is thus quite clear in general terms on how dualities are to be controlled, but, even so, there is great variation in how the controls are being applied. For example, the legislation that some states parties have adopted to implement the CWC seems to assume, incorrectly, that the scope of the CWC is set by its schedules of chemicals, not by the criterion of purpose it uses to define its scope. The national legislation of some other countries is not nearly so narrow, however, meaning that there are major differences of practice among states parties. Some CWC National Authorities are empowered to control dualities. Others are not. So some countries will, for example, be more able than others to contribute actively to non-proliferation. In some countries the dualities may be so out of control as to be readily exploitable by proliferators, whether they be states, non-state entities or individuals.

The explanation for this disharmony does not lie in disregard by the implementers of the CWC for what the negotiators had in mind, though this maybe contributed. The disharmony stems, rather, from the practicalities of applying the criterion of purpose. In relation to the *negative* obligations there is no great difficulty, for here its function is rather like that of a catch-all control, of a kind that administration in different countries has long found helpful. Such a control exists, for example, in EU law on dual-use goods. In contrast, when the criterion is used to define the scope of a *positive obligation*, as in the Molander chapeau, it is more difficult to apply, for the action it demands becomes essentially open-ended: what boundaries can there be to measures that are required, in effect, to prove a negative? Must those in charge of CWC implementation at the national level really go out and ascertain that each and

every development, production, other acquisition, retention, transfer or use of a toxic chemical, or of any of its possible precursors, throughout their jurisdiction is for a purpose not prohibited under the Convention? Surely not.

Questions before the Sussex workshop

The Sussex workshop was convened in order to explore this question and related matters arising from that 'general purpose criterion' (GPC). Participating were HSP staff, members of the National Authority Advisory Committee (NAAC), an officer of IUPAC, and a mix of past and present UK government officials concerned with arms control matters. The problem before the workshop was stated as The GPC works best as a catch-all if, in follows. implementing the negative obligations, no bounds are placed upon its interpretation; but positive obligations may sometimes prove impossible to implement unless the meaning of the GPC is narrowed. But the chemical weapons of the positive obligations would then become different from the chemical weapons of the negative obligations. In this ambivalence, could there not be threat to the stability and long-term robustness of the treaty regime? If so, how should that threat best be reduced?

There are certain places where the Convention itself seems to be narrowing, or actually does narrow, the scope of the GPC in the interests of easier implementation of positive obligations. One such place is in the regime for old chemical weapons set out in Part IV(B) of the Verification Annex, where circumstances are specified in which chemicals that would otherwise fail to satisfy the GPC may nevertheless be regarded, not as chemical weapons, but as "toxic waste". Another such place is in Article VI.2, beneath the Molander chapeau: the subsequent provisions that differentiate the "toxic chemicals and their precursors" into four groups – those that are listed in the three schedules contained in the Annex on Chemicals, which are to be subject to verification measures, with the fourth group comprising those that are not so listed. Article VI.2 makes no further provision for the unscheduled chemicals beyond what is stated in the chapeau, thereby implying that, for implementation purposes, the GPC set out in the chapeau applies only to the scheduled chemicals; a drastic narrowing indeed.

Limiting the GPC to scheduled chemicals would remove the protection that the negative obligations of the Convention afford states parties against novel or secret chemical weapons. It would become a defence against charges of violating the Convention to say, yes, we are indeed weaponizing novichoks (say, or atranes or benzomorphans or neurotoxic peptides or bioregulators or RNAi), but, although they are toxic chemicals, they are not scheduled chemicals.

The situation with regard to the positive obligations is less clear-cut. The Background Note before the workshop proposed that a narrowing of the GPC might usefully be considered as a problem of cost-benefit assessment. The benefits of restricting implementation of Article VI.2 solely to the scheduled chemicals hardly need stating. They would be most evident in economy of administration and in harmony of relations between implementers, industry and academia. The costs, however, are less obvious. The

Background Note identified several categories of cost to British interests, which the workshop duly considered.

Workshop results

The main points that emerged from the workshop were these:

- Participants agreed that the scope of the GPC, and its central role in the CWC regime (protecting beneficial dual-use chemistry, and bringing new science and technology into the purview of the CWC), are as described in the Background Note. The Note observes that the expression of the GPC in the Molander chapeau of CWC Article VI.2 creates an open-ended obligation whose implementation is therefore difficult to administer. The workshop heard that the opinion of the Department of Trade & Industry (DTI) and the Foreign & Commonwealth Office (FCO) was that GPC implementation was broadly a policy not a legal matter.
- NAAC members who were present were satisfied that the Schedules-related provisions of the CWC are being implemented effectively in the UK and will be seeking the views of other members and other interested parties on whether the same can be said for the GPC-related provisions. For example, do the "necessary measures" currently in place pay sufficient regard to such anti-terrorist weapons that may be based on toxic chemicals, whether for UK forces or for the export market? Again, are the various costs to the UK of the "necessary measures" adequately offset by the benefits that GPC implementation could confer, for example as regards intelligence collection or outreach to those who are, or should be, affected by the CWC? A main purpose of the workshop was to enable NAAC members to explore different aspects of GPC implementation.
- 3. Participants agreed that the "necessary measures to ensure" requirement of Article VI.2 was satisfiable through the penal provisions of the CWC-implementing legislation required under Article VII plus the normal national means for enforcing such law, provided the GPC was properly incorporated into the legislation. Beyond that basic minimum, more pro-active measures could be contemplated. The workshop discussed several of these.
- Without question, the UK, through the Chemical Weapons Act 1996 and the work of the DTI that the Act empowers, has satisfied the basic minimum standard. But only a small minority of other CWC states parties have also done so. It was thought that many other states parties take the same view as the UK. The workshop learnt that the national-legislation issue is to be discussed at the next meeting of the OPCW Executive Council. Participants spoke of the need to promote reaffirmation of the GPC by the first CWC review conference, in 2003. Some also deplored the opportunities that continued to be missed for publicizing the GPC, notably in the latest OPCW Annual Report, in successive OPCW Secretariat obligation-checklists, in *OPCW Synthesis* and even in the latest annual report by DTI on the operation of the Chemical Weapons Act.
- Participants recognised that enlargement of the CWC Schedules, insofar as the prescribed international proce-

- dures for doing so could be activated successfully, provided an alternative route to fuller implementation of the GPC. In this connection, a new schedule on, say, peptides and toxins, might perhaps be worth considering.
- The workshop considered whether the role of the CWC and its institutions might have changed since the events of 11 September and whether any such change might affect GPC implementation. There was some support for the view that the CWC/OPCW could enhance its relevance if it could demonstrate clearly its anti-terrorism potential. That potential is already there – in the requirement for national implementing legislation that would make acts of chemical armament a crime, in the Article X.8 assistance provisions, and in the network of experts available through OPCW institutions. Perhaps with some restructuring of the OPCW programme of work or else with additional funding, the CWC could become a cost-effective way of addressing chemical terrorism. The workshop also heard, however, that in many of the chemical-terrorism scenarios on which UK preparedness is based, the chemicals involved are frequently ones not on the CWC schedules. Nor is there any particular reason to expect terrorists to use only scheduled chemicals. This makes the GPC relevant to any CWC anti-terrorism function. The OPCW Secretariat has just begun to advertise its anti-terrorist potential, but it does not yet seem to have made the connection between that potential and the GPC.
- 7. From this last discussion emerged an important workshop finding: countries that do not implement the GPC properly by having the necessary penal legislation in place may be providing safe haven, where individuals or groups can produce terrorizing chemicals with impunity.
- 8. Here, then, is one area where pro-active GPC implementation measures that go beyond the bare minimum noted in paragraph 3 above could bring important benefit. The need would be for additional effort in the monitoring of the country's science and technology (S&T) base in order to identify sources of supply of dual-use substances or facilities abusable for terrorist purposes. A priority area may be in the field of toxins.
- 9. Several other roles for additional S&T monitoring in support of GPC implementation came up in discussion. As regards the monitoring of new S&T developments, the basic question was whether the old network of cognoscenti could continue to be relied upon for bringing news of novel agents and suchlike, or whether some more formal and more wide-ranging and therefore more conspicuous monitoring scheme now needed to be put in place. S&T was advancing more rapidly than it used to; biotechnology was opening access to a great range of hitherto inaccessible toxic chemicals; and, with the collapse of the BWC Protocol negotiation, the anticipated safety-net of BWC/CWC overlap would no longer be available. There did indeed seem to be a case for more extensive monitoring of new S&T.
- One way to expand GPC-related S&T monitoring might be to piggy-back on such EU monitoring schemes as NONS, EINECS and REACH, and also to push for inclusion of CWC/GPC considerations in the EU Strat-

- egy for a Future Chemicals Policy. Several problems with this were noted, and participants observed that the chemicals industry should not be exposed to any additional reporting burdens unless the end results would clearly be beneficial. A rather precise idea of what the extra monitoring might yield, and on what exactly it should focus, needed to be formed first. This in turn demanded clear appreciation of why, apart from anti-terrorism, the extra monitoring was needed at all. Was it to protect UK companies from unwittingly selling CW-related goods abroad? Was it to increase the chances of success in prosecutions under the Chemical Weapons Act? Was it to guard against violation of the CWC by state agencies? Or what?
- 11. Another way to enhance S&T monitoring might be through "joined up government", in which relevant data banks maintained by different government agencies, such as the Health & Safety Executive (HSE), might be shared with the UK CWC National Authority (UKNA).
- 12. Yet another way might be to alert the Research Councils and other research-funding bodies to the perils of supporting dual-use research, including possible contravention of the Chemical Weapons Act. Arrangements might be feasible in which new lines of research were brought to the notice of UKNA in return for guidance on dual-use dangers and hence on the propriety of funding the research.
- 13. Or, chemical manufacturers and chemicals-using firms might themselves volunteer new S&T information. An added advantage of establishing a mechanism for this was that a new route might thereby be brought into existence for reporting suspicious transactions and the like. Provided most firms joined in, such S&T monitoring could become an intelligence asset.
- 14. Since these several additional approaches would provide different foci, on manufacturing stages or on research and development activities, it may be necessary for officials to prioritise the operational contexts.
- 15. The workshop also paid much attention to how the various modalities of additional S&T monitoring might also serve an outreach function and keep the requirements of the CWC within the awareness of companies and laboratories. Given the rapidity of personnel turnover, such outreach is a continuing necessity. DTI may need help. For example, its CWC-related outreach into the academic world is, so the workshop was told, largely limited to users of Schedule 1 chemicals, with no mention of GPC considerations.
- 16. There seemed to be general interest in the idea of a follow-on workshop, both for discussing further the form and content of the GPC message and for engaging a wider range of CWC stakeholders in problems of GPC implementation. It was suggested that participation should be drawn from, for example, the Medicines Control Agency, the HSE, further industry organizations, HM Customs and Excise, the Research Councils and other research-funding bodies such as The Wellcome Trust.

HSP, which is actively seeking ways of supporting the CWC review process, is currently planning to convene the follow-on workshop.

Developments in the Organization for the Prohibition of Chemical Weapons

The period under review, from mid-December 2001 through early March 2002, was a time of discussion and reflection on the turbulent events of the previous year at the Organization for the Prohibition of Chemical Weapons (OPCW): the financial crisis and subsequent austerity measures, the delays in both the Russian and US destruction programmes, unresolved issues with respect to the industry regime under Article VI, preparation for and the conduct of the forthcoming first Review Conference for the Chemical Weapons Convention (CWC), and the increased threat of chemical terrorism. The OPCW used the extended period of time between the twenty-seventh and twenty-eighth sessions of the Executive Council to consolidate its position and conduct serious analysis on these issues.

Executive Council

The Executive Council did not meet in a formal regular session during the period under review. The next regular session would be held during 19-22 March. The Council did meet in informal sessions and conduct informal consultations on a number of topics, including the 2002 programme and budget, the OPCW financial rules and regulations, Article IV and V verification costs, assistance and protection against chemical weapons, the memorandum of understanding (MOU) between the OPCW and the World Customs Organization (WCO), the role and response of the OPCW to global terrorism, the status of requests for clarification of declarations, and unresolved chemical weapons-related and industry issues: destruction/ verification requirements for old and abandoned chemical weapons, sampling procedures, boundaries of production and captive use, the selection of plant sites for inspection, aggregate national data, plant site import and export declarations, transfers of Schedule 3 chemicals, and low concentration limits for Schedule 2A and 2A* chemicals.

Administrative and Financial Issues The most extensive consultations were held on administrative and financial issues, and were convened on several occasions — 18 January, 4 and 5 February, 7 February, 14 and 15 February, and 25 and 26 February. Numerous options for addressing the 2002 budget shortfall were discussed.

The estimated cash income available to the OPCW for 2002 stood at EUR 58 million, as compared to the approved budget of EUR 61.9 million. Full programme delivery in 2002 would have required a budget of EUR 64.1 million. The resulting EUR 6 million shortfall or deficit for 2002 stemmed from three causes: the under-budgeting of the OPCW by its member states (manifested largely in the policy of zero budget growth over 1999–2001), unrealistic estimates of income, and compulsory increases in the fixed costs of running the Organization (notably staff-related costs). Of this deficit, EUR 2.1 million was caused by the

under-budgeting the expenditures on staff costs. The actual cost increase for staff costs over two years was about 9.6 per cent, while the budgeted increase was only 3.5 per cent. The remaining EUR 3.9 million of the EUR 6 million shortfall was due mainly to unrealistic budgeted income in the areas of reimbursement of Article IV and V verification costs and the pattern of delayed payment of assessed contributions by the member states.

Options available to address the problems caused by the shortfall were limited to increasing income, by adjusting the 2002 budget, or reducing expenditure, and thus programme delivery. An adjusted budget, which included an additional EUR 2.1 million, was favoured by the Secretariat and a large number of states parties; this additional amount would be assessed to the member states. Additionally, this adjusted budget would be used as the basis for comparison when drafting the 2003 budget. If the Working Capital Fund (WCF) was to be utilised, there would need to be an amendment to the financial regulations to allow the OPCW to replenish the WCF in the next year and not in the same year that the funds were drawn upon. Cost efficiencies, or austerity measures, continued to be pursued in the implementation of the 2002 programme and budget; the states parties were also again encouraged to make voluntary contributions to the OPCW in order to restore the full, approved programme of work.

With respect to the reimbursement of the costs of inspections under Articles IV and V, informal consultations on the matter had made some progress and a number of states parties seemed amenable to the advance payment of up to 70 per cent of the estimated costs of Article IV and/or V inspections for a given year. As of 1 March 2002, about EUR 2.8 million remained outstanding for inspections carried out through 20 November 2001. This amount was owed by the United States (EUR ~1.8 million), Russia (EUR ~676,000), India (EUR ~248,000), the Federal Republic of Yugoslavia (EUR ~21,000), a state party of withheld identity (EUR ~19,000), and Bosnia and Herzegovina (EUR ~9,000). A decision in both this matter and on the handling of the 2002 budget shortfall was expected at the twenty-eighth session of the Council in mid-March.

Twenty-nine states parties continued to be in arrears for more than two years worth of assessments, and thus could not participate in a vote, should one be called, in the Organization. As of 7 March, 54 states parties had paid their 2002 budgetary contributions in full, which were due on 1 January 2002. These monies came to only 23.6 per cent of the total amount assessed to states parties under the approved OPCW budget for 2002. Eighteen states parties, including two of the biggest contributors — Germany and the United States — had made partial payments of their 2002 assessments. Partial payments totalled 17 per cent of the 2002 assessment to states parties.

During 2001–02, the states parties answered the call for voluntary contributions to the OPCW through a variety of vehicles: contributions to the Voluntary Fund for Assistance, the hosting of training courses, support for the Associate Programme, assistance in the conduct of proficiency tests, the hosting of workshops and/or seminars, support for challenge inspection exercises, the loan of consultants to the Secretariat, donations of equipment and information technology.

Review Conference Since its formation at the twenty-sixth session of the Council, the open-ended working group on preparations for the first Review Conference of the CWC met on five occasions: 29 November, 15 January, 4 February, and 18 February, and 5 March. It was scheduled to meet again on 12 March.

The working group discussed the objectives of the Review Conference as well as the methodology to be applied in its own work, as well as in the conduct of the Review Conference. Rather than attempting a traditional Article-by-Article review of the Convention, the group selected a number of themes or clusters of issues in need of review. These included analysis of the general framework of the implementation of the Convention (including universality, changes to the security environment, chemical terrorism, and other challenges), the destruction of chemical weapons and chemical weapons production capabilities, non-proliferation measures, verification, assistance and protection in the case of use or threat of use of chemical weapons, international cooperation, and structural aspects of the work of the OPCW. The Secretariat would prepare background papers on these themes for the working group's consideration. Based on the background papers and taking into account national proposals as well, the working group would prepare a report on draft proposals for the Review Conference. In relation to scientific and technological developments relevant to the Convention, the OPCW's Scientific Advisory Board (SAB) was expected to submit a report to the states parties, through the Director-General, in the fourth quarter of 2002. This SAB report would take account of the findings of a conference on developments in science and technology and the CWC, organised by the International Union of Pure and Applied Chemistry (IUPAC) for July 2002 in Norway.

With regard to participation by non-governmental organizations (NGOs), and their contribution to both the review process and Conference, the possibility of NGOs briefing the open-ended working group was raised. NGOs would not play a formal role in the review process at the international level; it was recognised, however, that NGOs had valuable contributions to make. Discussions about how to involve NGOs in the process informally continued within the working group. NGOs would be able to attend the Review Conference under the usual rules of procedure for attendance at the sessions of the Conference of the States Parties (which also apply to the Review Conference); written papers would also be treated in a similar fashion and could be distributed by NGOs outside the Conference hall. NGO papers would not be considered official Review Conference documents. The possibility was raised, however, of organising a separate session during the Review Conference at which NGOs could make statements.

The first decision of the open-ended working group was made at its 18 February meeting and concerned the timing of the Review Conference. The members of the open-ended working group decided to recommend to the Council at its twenty-eighth session that the Review Conference begin on 28 April 2003, just one day short of the end of the fifth year since entry into force. The Review Conference would then continue over a period of two or three weeks.

Other issues considered by the working group included the level of attendance at the Review Conference (i.e., a ministerial session or segment), the involvement of the UN Secretary-General as the Despositary of the Convention, and media coverage of the event.

Chemical Terrorism The Executive Council engaged during the intersessional period in informal consultations on the role and response of the OPCW in the context of the global effort to prevent, respond to, and combat international terrorism, concentrating on the provision of assistance and protection in the event of use or threat of use of chemical weapons. The open-ended working group on chemical terrorism, established by the Executive Council at its twenty-seventh session, convened its first meeting on 6 March. It reviewed the progress made on the issue of assistance and protection, and began a discussion on measures to improve the implementation of the CWC's provisions on the enactment of national implementing legislation. The Secretariat prepared an analysis of the national implementing measures taken by states parties, including legislation, based on states parties' submissions under Article VII of the Convention. According to this analysis, only 41 per cent of states parties had met their obligation to inform the Organization of the legislative and administrative measures taken to implement the Convention, and only 40 per cent responded to the Secretariat's legislation questionnaire. Furthermore, the scope and coverage of the provisions made in each state party vary widely. Improving the situation with respect to the enactment of proper and complete implementing legislation in all states parties was considered essential to eliminate any possibility of countries becoming safe havens for terrorists who employ or seek to attain chemical weapons. The possibilities for providing assistance to states parties in this area of CWC implementation, by the Secretariat as well as by other states parties, was discussed by the terrorism working group, which intended to produce an action plan to improve the situation with regard to implementing legislation and legal assistance.

The role and possible responses of the OPCW to the global terrorist threat were also discussed both within the Secretariat and by the Executive Council. The Director-General made his views known to the United Nations Under-Secretary-General for Disarmament Affairs, at the latter's request in the context of a UN subgroup on weapons of mass destruction and terrorism. The Director-General stressed the importance of central coordination by the United Nations, for example under the auspices of the counter-terrorism committee formed by the Security Council. He stressed the need to build upon existing strengths and capabilities, as well as the pursuit of new multilateral agreements. The CWC, he emphasised, was, among other things, an anti-terrorism Convention.

The OPCW's capabilities relevant to the global struggle against terrorism were wide-ranging and could be of great utility to the United Nations or national governments in their efforts to stem the tide of international terrorism, particularly the threat of terrorist attack with chemical weapons, or chemical terrorism. Preventive measures that could be taken included the development and enactment of legislation, which would in time create an international legal network criminalising breaches of the Convention's prohibitions on the development, production, stockpiling, transfer or use of chemical weapons and related materials. In this same category, the OPCW was able to provide advise on how to improve security at chemical weapons sites and sites containing toxic chemicals, training in protection against toxic chemicals, and risk assessment of the threat from chemical weapons or toxic chemicals. In support of this work, the OPCW was in contact with international experts in a wide range of fields related to chemical weapons. If chemical weapons were employed by terrorists, or were thought to have been used, the OPCW could provide detection, safety monitoring, and chemical analysis, launch an investigation of the incident to determine use or non-use, assess the impact of the attack, and coordinate the delivery of means of protection and assistance. The OPCW could also provide medical countermeasures and decontamination after exposure to toxic chemicals and provide both operational and administrative support to both international organizations and state party governments.

Other Outstanding Issues A major issue that remained before the Executive Council was the request for extension of both intermediate and final deadlines for destruction of all Category 1 chemical weapons. Two requests were submitted in the last quarter of 2001, by Russia and by a state party of withheld identify. The latter solely requested the extension of the phase II deadline.

Plans for the verification of destruction at Shchuch'ye, Perm and Gorny, in Russia, and at Anniston and the Rocky Mountain Arsenal in the United States, as well as the facility at Norton Disney, United Kingdom, were all pending approval by the Executive Council. The next informal meting on progress in the destruction of chemical weapons and destruction or conversion of chemical weapons production facilities (CWPFs) would be held on 18 March.

Numerous conversion requests were also pending, including two for facilities at Novocheboksarsk in the Russian Federation, at which the destruction of specialised equipment had already begun, and two for other facilities at the same location. Four facilities at Volgograd, in Russia, were awaiting Conversion, in addition to a facility at Dzherzhinsk. The plans for conversion for all the above-mentioned facilities were submitted by the Secretariat to the Executive Council in the course of 2001.

At its last two formal sessions in 2001, the Council received many draft facility agreements for its consideration and approval; action on agreements for Aberdeen, Anniston, Deseret, and Tooele in the United States were deferred. The deferment was in part because the United States and the Secretariat had failed to agree on the text of the draft agreements for Anniston and Tooele. Agreements were also pending for facilities in Sweden and Spain

Outstanding recommendations, contained in the report of the Office of Internal Oversight (OIO) — concerning post succession and the hand-over of responsibilities, the review of posts and upgrades/promotion of staff members, temporary assistance contracts and the appointment of consultants, separation payments, and the Smartstream system — remained under consideration by the Council.

Agenda for the Next Session In addition to those issues listed above that would be carried over from the 2001 Council sessions to the first 2002 session in March, there would also be a host of new topics introduced to the Council at its twenty-eighth session. To start, the Council would be asked to consider a notification received from a state party of withheld identity of changes to chemical process equipment at a converted facility; the changes would have an impact on the frequency of inspection at the facility.

Another conversion request from Russia was forwarded by the Secretariat to the Council, for it to consider at its twenty-eighth session. The initial request was received by the Secretariat in July 2001. The request concerned phase II conversion activities at a facility in Volgograd formerly used to fill munitions with sarin, soman, and viscous soman.

Additional facility agreements that were submitted to the Council for consideration at its twenty-eighth session include an agreement with Iran for a Schedule 1 protective purposes facility, and two agreements with the Federal Republic of Yugoslavia for a chemical weapons production facility and a Schedule 1 protective purposes facility.

The eleventh meeting of the Validation Group took place during 13–14 December. The Group forwarded the new validated analytical data for the Central OPCW Analytical Database to the Director-General, who in turn submitted the information to the Executive Council for consideration, and approval, at its twenty-eighth session in March. The Validation Group also discussed, among other issues, the naming rules for compounds and the need to make them consistent with the current IUPAC nomenclature. The next meeting of the Validation Group would take place during 26–27 March.

The official agenda for the twenty-eighth session of the Council included the following topics: the OPCW's contribution to global anti-terrorism efforts, the extension of deadlines for the destruction of stockpiles of Category 1 chemical weapons, conversion requests for CWPFs, facility agreements, assistance and protection against chemical weapons, lists of new validated data for inclusion in the Central OPCW Analytical Database and approved equipment, chemical industry and financial issues, the financial rules and regulations and proposed amendments, the charter and administrative rules of the OPCW Provident Fund, implementation of the recommendations of the External Auditor and of the Office of Internal Oversight, MOU between the OPCW and the WCO, report of the open-ended working group on preparations for the first Review Conference, and the election of Council Chairmen and Vice-Chairmen.

The following issues remained unresolved or deferred from 2001 Council sessions, but did not appear on the agenda for the twenty-eighth session in March: issues of verification at Schedule 1 facilities, of import and export declarations by a particular Schedule 2 facility, requests for clarification of declarations, information on national

protective programmes, other required notifications, low concentration limits for Schedule 2A and 2A* chemicals, boundaries of production, the selection of other chemical production facilities (i.e. DOC facilities) for inspection, and the transfer of Schedule 3 chemicals to states not party.

Action by Member States

No additional states not party to the Convention ratified or acceded to it during the period under review. However, progress toward joining the treaty was observed in many of those states that remained outside of the CWC regime.

Secretariat

Declaration Processing As of 1 March, initial declarations had been received from 141 states parties. The three newest states parties — Nauru, Uganda, and Zambia — were among those who had yet to make this submission, and the fourth was Mozambique, whose initial declaration was due in October 2000.

States parties were encouraged by the Executive Council to respond to the Secretariat's requests for clarification of declarations. As well, states parties were reminded of their obligation to make the necessary notifications to the Secretariat. As of 1 March, 111 states parties had informed the Secretariat of their National Authority details; only 60 had enacted implementing legislation. The majority of states parties had not identified points of entry, issued standing diplomatic clearance numbers for unscheduled flights, or issued two-year multiple-entry visas for inspectors.

On 5 March, the Secretariat gave a briefing to the Council on the status of clarifications to declarations, as of 31 December 2001. These year-end statistics indicted that of the 158 requests for clarification sent to 99 states parties in 2001, only 28 issues, or 18 per cent, were fully clarified. A total of 70 responses were received. The issues submitted for clarification fell into four main categories: reminders to states parties to submit overdue declarations or missing information from declarations, requests for clarification of ambiguous information, the completion of initial declarations, and requests relating to the declaration of exports and imports of scheduled chemicals. All of the issues concerned impact on the full implementation of the CWC in all its aspects: verification, monitoring, non-proliferation.

The "Technical Workshop on the Development of Electronic Tools for National Authorities to Support CWC Declarations in a Common Electronic Format", which was to have taken place on 28 February, was postponed in order to allow more time for the development and testing of a software package designed to assist states parties in preparing and submitting declaration data under Article VI of the Convention.

Inspections and Verification The Director-General and the Secretariat were in the process of developing detailed technical specifications for all items of on-site inspection equipment to be purchased by the Secretariat; these specifications would emphasis the equipment's utility to the CWC verification regime. Once drafted, the specifications would be distributed to the states parties and the Council for consideration. The Director-General would need to inform

the Council of any circumstances that necessitated deviation from these specifications in the purchase of equipment. Revisions to the specifications, based on scientific and technological developments, would, when appropriate, be made upon the advice of the SAB.

As of 1 March, 1,139 inspections had been completed or were ongoing at 508 sites in 50 states parties. Inspections of chemical weapons and chemical weapons-related facilities had occurred in Bosnia and Herzegovina, China, France, India, Iran, Japan, Russia, UK, the United States, the Federal Republic of Yugoslavia, and one other state party of withheld identity. The breakdown of inspections was as follows: 228 to CWPFs; 271 to CWDFs; 154 to CWSFs; 19 to ACW sites; 38 to OCW sites; 100 to Schedule 1 facilities; 181 to Schedule 2 plant sites; 77 to Schedule 3 plant sites; and 67 to DOC plant sites. Four additional inspections were conducted under special circumstances. OPCW inspectors had spent a total of 67,168 days on mission. Twenty of these inspections were conducted in 2002.

Due to financial pressures, the Secretariat calculated that it could only conduct just over 50 per cent of the inspections originally approved for 2002, unless supplemental funding, in the form of an additional assessment to the states parties or voluntary contributions, was received.

End of the year figures for 2001 were released during the period under review. In 2001, the OPCW conducted a total of 197 inspections, as compared to the number of inspections approved by the Conference of the States Parties in its fifth session, 293. Of these, 121 were of chemical weapons-related sites or facilities, and 76 were of industrial sites. The breakdown, including the percentage of the approved inspections for 2001 completed, was as follows: CWPFS: 26 (57 per cent), CWDFs: 62 (98 per cent), CWSFs: 28 (70 per cent), OCW: 3 (43 per cent), ACW: 2 (40 per cent), Schedule 1: 19 (100 per cent), Schedule 2: 28 (70 per cent), Schedule 3: 12 (29 per cent), DOC/PSF 17 (53 per cent). The total number of inspections completed between 29 April 1997 and 1 January 2001 was 1114.

Destruction/Conversion As of 1 March, the OPCW had overseen the destruction of 6,675 agent-tonnes of chemical weapons (Category 1) and 2,037,596 million munitions or containers — out of a declared total of 69,869 metric tons of chemical agent and 8,624,494 million munitions or containers. Out of the declared total of 61 CWPFs, 27 were certified destroyed, and nine converted for peaceful uses. Fourteen facilities were either awaiting or in the process of destruction; the remaining 12 facilities were to be converted.

Implementation of Article X The Council's deliberations in the areas of assistance and protection — informal consultations were held on 30 January, 18 February, and 6 March — focused particularly on the formation of the Assistance Coordination and Assessment Team (ACAT). The ACAT was a key component of the Secretariat's recently-devised Assistance Response System (ARS) for the emergency delivery of assistance and protection in the event of a request from a state party. The team would be dispatched within hours of such a request. Its main tasks and responsibilities would be transport to the area affected, establishment of a local operations centre and assessment of the threat or risk, coordinating delivery of assistance, and

liasing between the requesting state party and the OPCW as well as with other international organizations that had a mandate to respond to the incident, and supporting and advising the requesting state party on the situation. The ACAT would be comprised of staff of the Secretariat with relevant expertise, as well as any experts offered by the states parties, which may be needed. In the event of an investigation of alleged use (IAU), the IAU team and the ACAT would coordinate their activities and share relevant information. Members of the Council were provided with detailed information on the composition of ACAT and the roles specific members of the team would be expected to play, as well as a proposed list of equipment necessary for ACAT to carry out its assigned tasks and provide initial immediate assistance to the requesting state party. Further consideration of the scenarios under which the ACAT would operative was necessary

In addition to the ACAT, the Secretariat proposed developing internal response procedures to handle effectively and efficiently requests for assistance and/or protection under Article X. To this end, an Assistance Coordination Group (ACG) would be established. Such a body would utilise solely existing resources and thus not entail an additional budgetary allotment.

The fifth Chief Instructor Training Programme (CITPRO V) took place during 10–16 February 2002 in Spiez, Switzerland. Through events such as this that train individuals involved in the training of civilians in protection against chemical weapons, the OPCW was fulfilling its mandate to assist member states in establishing a basic capability to protect their populations against chemical weapons. Also in this field, a civil defence training course was held in the Czech Republic during 28 February–1 March. This course was originally scheduled for 28 October–3 November 2001, but had to be rescheduled due to the Organization's financial constraints.

During 25–27 March, the OPCW would be co-sponsoring, along with the Brazilian ministry of National Integration and the National Authority of Brazil, an international seminar on civil defence in protection and assistance against chemical weapons, in conjunction with the Third Regional Meeting of National Authorities in Latin America and the Caribbean. The meetings would be held in Brasilia. The two programmes would run concurrently, with representatives of the National Authorities and experts in the field of civil protection participating in joint sessions on 25 and 26 March, and in their own respective meetings on 27 March. A similar seminar, dealing with national and international capacity building against chemical weapons, was planned for 15–18 April in Kuwait for members of the Gulf Cooperation Council.

The sixth Swiss Emergency Field Laboratory Training Programme (SEF-LAB VI) would be held during 7–12 April 2002 at the NBC Training Centre in Spiez. The course was related to Switzerland's offer of assistance under Article X, and would provide training in civil chemical weapons detection and decontamination for up to 16 chief instructors from OPCW member states. The course was designed to aid member states in developing their national protective capabilities.

Implementation of Article XI During the period under review, the OPCW released new guidelines for its internship support programme, which aimed to facilitate the placement of scientists and engineers in advanced laboratories or facilities for a limited period of time — up to three months. Such placements enable the sharing of scientific and technical information and further professional growth. Through this programme, the OPCW sought to establish lasting links between research institutes worldwide. Support from the OPCW would take the form of a travel grant for the intern and/or an internship allowance. Areas of research on or with toxic chemicals to be supported include: analytical methodologies and validation techniques, management and use, safe and environmentally-sound destruction, medical treatment and protection, verification techniques, and other applications of chemistry for non-prohibited purposes.

The First Regional Meeting of National Authorities of States Parties in Eastern Europe would be held during 15–17 April in Dunajská Streda, Slovenia. The meeting was designed to review and discuss issues related to the regional implementation of the Convention, including, among others, the functioning of National Authorities, industry verification and experiences, and international cooperation and assistance projects. Due to financial constraints, the OCPW would be able to offer only limited sponsorship to participants. The Third Regional Meeting of National Authorities of States Parties in Latin America and the Caribbean would be held in conjunction with an international seminar on civil defence in protection and assistance against chemical weapons in Brasilia, Brazil during 25–27 March.

The third annual OPCW Associate Programme would take place during 29 July–4 October 2002. Invitations were issued during the period under review. From the applications received, 12 associates would be chosen to participate in the 10-week training course, which combined seminars on the CWC and the work of the OPCW with skills development in best practice chemical industry standards at the University of Surrey, UK and hands-on internships with major chemical companies in Europe. Through the Associate Programme, the OPCW aimed to enhance the national capacity of member states to implement the CWC's industry-related provisions, as well as to promote best practice standards in the chemical industry worldwide.

Proficiency Testing The tenth official proficiency test began on 5 November — The Netherlands prepared the samples and Finland would evaluate the results, both at no cost to the OPCW. A meeting to evaluate the results of the test was convened on 28 February.

The eleventh proficiency test would begin on 18 April, with the United Kingdom preparing the test samples and Finland evaluate the test results, both at no cost to the Organization. The twelfth proficiency test was scheduled for the end of October 2002 with Korea and Switzerland making no-cost offers to the Organization to prepare the test samples and evaluate the results.

Legal Issues As of 1 March, 82 states parties had yet to respond to the legislation questionnaire first distributed in July 2000; 9 were members of the Executive Council.

Only sixty states parties, or 41.4 per cent of the OPCW membership, had informed the Secretariat as of 1 March that

they had implementing legislation in place. Implementing legislation was pending or imminent for eight states parties.

During the period under review, the Secretariat received a request to provide legal assistance to Sudan in drafting its implementing legislation. Assistance was sent, and it was hoped that Sudan's implementing legislation would be unveiled during the CWC workshop being held there in March 2002. The legislation was expected to serve as a model for other countries in Africa. As well, two additional states parties had sent drafts of their implementing legislation to the OPCW for comment and advice, while an additional two states parties requested assistance from the Secretariat. The OPCW legal office continued to analyse existing implementing legislation and to encourage states parties to fulfil this requirement of the Convention as soon as possible. A solid legal network of implementing legislation that criminalises the prohibitions of the Convention would enable the OPCW to fully implement its non-proliferation mandate and eliminate "safe havens" or loopholes that could be exploited by chemical terrorists.

Recent analysis indicated that the Convention was being implemented via a wide range of legal methods and regulatory instruments, in both dualist and monist legal systems; a minority of states parties had legislation that was applicable extraterritorially. There was therefore a need for the OPCW to work toward the better coordination of national implementation of the Convention, especially with regard to implementing legislation. As well, it sought to work with states parties still lacking legislation in the drafting process. In these efforts, the OPCW would like to undertake more bilateral technical assistance visits and develop regional initiatives similar to the model legislation developed for the Eastern Caribbean in 2000; however, increased funding would be necessary.

Official Visits During 8–10 January, the Director-General made his first official visit to Africa. The Director-General was in Khartoum, Sudan to address the ninth summit of the Inter-Governmental Authority on Development (IGAD), as well as to meet with the both the Sudanese Minister of Foreign Affairs and the Minister of Justice. The Director-General also capitalised upon this opportunity to meet with officials from states not party to the Convention.

On 11 February, the Governor of West Flanders, Belgium visited the OPCW, along with the Mayor of the city of Ieper. It was in West Flanders that chemical weapons were first used on a large scale during World War I.

On 13 February, the Vice-Minister of Foreign Affairs of Panama visited the OPCW; on this occasion, the Vice-Minister and the Director-General signed a privileges and immunities agreement between Panama and the OPCW.

Outreach Activities During 27 January—1 February, The Hague International Model United Nations (THIMUN) held its annual meeting. The Director-General was invited to speak at the opening ceremony; during his address, the Director-General emphasised the close relationship between the OPCW and the UN and highlighted the responsibility of both young and old to ensure a safer world for future generations. OPCW headquarters also served as a venue for the THIMUN Disarmament Commission. Representatives from the OPCW addressed this commission on the role of

the OPCW and the progress in CWC implementation as well as on the OPCW ethics project, highlighting the need for greater awareness of the CWC and disarmament issues within the scientific community. During the week-long THIMUN, the OPCW also staffed a booth at the THIMUN conference site with informational and educational literature as well as inspection equipment and inspectors on hand to answer questions about the conduct of inspections, the OPCW verification regime, and the overall work of the OPCW to implement the CWC.

During the period under review, the OPCW launched a youth education project in West Flanders, Belgium — in and around the town of Ieper. Staff members of the Secretariat would be making presentations on the CWC and OPCW to Belgian schoolchildren. These presentations began in February and would continue through 2002.

During 9–11 March, the OPCW would be hosting a workshop on the CWC in Khartoum, Sudan. The workshop would focus on capacity building for CWC implementation in Africa and universality, both in Africa and the Middle East. The workshop would seek to highlight the security and economic benefits of membership, particularly issues of free trade in chemicals and economic cooperation. The Secretariat was hoping for wide participation in the workshop, from throughout both regions. There were 36 states parties, 12 signatory states, and 4 non-signatory states in Africa, and for the Middle East, 9 states parties, 1 signatory state, and 4 non-signatories. Financial contributions, which were needed to enable the workshop to take place as scheduled, had been received from Norway, Sweden, Oman, and the United Kingdom.

Other regional workshops and/or seminars were being planned for 2002, including, potentially, one in Tashkent, Uzbekistan for the Central Asian region. Such a workshop would only be possible with the financial support of member states.

In addition to the agreement between the WCO and the OPCW, which was under consideration by the Executive Council, the OPCW was seeking a cooperation agreement with the World Health Organization (WHO), and representatives from the OPCW met with officials from the UN Environment Programme (UNEP) to discuss their common role and responsibility in combating international terrorism.

Staffing As of 11 March, 464 of the allotted 507 fixed-term posts in the Secretariat were occupied. Of these, 325 were in the professional and higher category and 139 were in the general service category. Including staff on short-term and temporary assistance contracts and others, the total personnel strength was 515 representing nearly 70 different nationalities. Following a decision by the Conference at its sixth session, the Secretariat continued to keep 30 fixed-term positions unfilled. The number of women employed by the Secretariat at the professional level or above stood at 39 or 12 per cent.

Subsidiary Bodies

Confidentiality Commission The Commission had not yet met in 2002. It was not possible to hold a regular annual meeting in 2001 due to financial constraints. The last meeting of the Commission was its special session held

during 18–19 January 2001. The Commission continued to examine the classification of documents within the Secretariat and the implementation of the Confidentiality regime, including a study of the handling of restricted information on the OPCW's security non-critical network. There was no need for the Commission to meet to address breaches of confidentiality at any point during the nearly five years since the Convention entered into force.

Scientific Advisory Board (SAB) The SAB would not meet in 2002 until IUPAC had completed its external review of scientific and technological advances impacting the Convention — likely in August or September. A temporary working group on biomedical samples would be established prior to the next meeting.

In the context of preparations for the first Review Conference, the SAB would prepare a report to the Director-General, for his comment and referral to the states parties. The report would attempt to identify and assess relevant developments and trends in science and technology that may impact on the Convention, which may include such areas as the scope of definitions and prohibitions, the composition of the Schedules, the verification regime and

new verification techniques and/or instruments, and other relevant areas.

Future Work

Much of the focus of the OPCW over the course of 2002–2003, which encompasses its fifth year since entry into force (29 April 2002–29 April 2003), would be preparations for the first CWC Review Conference, scheduled to begin in April 2003. Part of this process was intensive analysis of all areas of CWC implementation: declarations, inspections, verification, non-proliferation, universality, assistance and protection, international cooperation, implementation support, and legislative aspects. Additionally, much energy would be expended in efforts to overhaul and streamline many administrative and financial processes within the Organization in the hope that the budgetary and financial problems that beset the Organization in 2001 and remained troublesome in 2002 would not continue to plague the Organization in 2003 and beyond.

This review was written by Pamela Mills, the HSP researcher in The Hague.

News Chronology

November 2001 through January 2002

What follows is taken from issue 55 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.

November The US Army Soldier and Biological Chemical Command (SBCCOM) publishes *Guidelines for Mass Fatality Management During Terrorist Incidents Involving Chemical Agents*.

- **1 November** In Vilnius, Lithuania, preliminary tests on two of five mailbags sent to the US Embassy there find traces of anthrax. The mailbags had been sent to the embassy from the State Department in Washington, where traces of anthrax have also been discovered [see 31 Oct]. Final results will be known in a few days time.
- **1 November** In the UK House of Commons, the Secretary of State for Trade and Industry, Patricia Hewitt, announces that forthcoming anti-terrorism legislation will include "clauses to cover the intention to use, produce, possess or participate in

unauthorised transfers of chemical and biological as well as nuclear and radiological materials."

Also in the House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw, asked to comment on the US position on the BWC protocol, says: "The United States has not changed its position since it announced its decision, on 25 July, in Geneva, that it could not support the draft protocol and that it could not be made acceptable by further amendment. The United States has, however, made it clear that it remains committed to strengthening the BWC. The United Kingdom is continuing to work with states parties to ensure that multilateral negotiations resume at an early stage, following the 5th Review Conference in Geneva. The United Kingdom remains committed to strengthening the convention by means of effective investigation and enforcement."

- 1 November US President George Bush announces his Administration's proposals for strengthening the international regime against biological weapons, particularly the BWC. The accompanying statement includes the following: "Today, we know that the scourge of biological weapons has not been eradicated. Instead, the threat is growing. Since September 11, America and others have been confronted by the evils these weapons can inflict. This threat is real and extremely dangerous. Rogue states and terrorists possess these weapons and are willing to use them. The United States is committed to strengthening the Biological Weapons Convention (BWC) as part of a comprehensive strategy for combating the complex threats of weapons of mass destruction and terrorism." The President then goes on to propose that all BWC states parties: "Enact strict national criminal legislation against prohibited BW activities with strong extradition requirements; Establish an effective United Nations procedure for investigating suspicious outbreaks or allegations of biological weapons use; Establish procedures for addressing BWC compliance concerns; Commit to improving international disease control and to enhance mechanisms for sending expert response teams to cope with outbreaks; Establish sound national oversight mechanisms for the security and genetic engineering of pathogenic organisms; Devise a solid framework for bioscientists in the form of a code of ethical conduct that would have universal recognition; and Promote responsible conduct in the study, use, modification, and shipment of pathogenic organisms." The statement concludes: "Our objective is to fashion an effective international approach to strengthen the Biological Weapons Convention. The ideas we propose do not constitute a complete solution to the use of pathogens and biotechnology for evil purposes. However, if we can strengthen the Convention against the threat of biological weapons, we will contribute to the security of the people of the United States and mankind as a whole."
- **1 November** US Secretary of Health and Human Services Tommy Thompson announces that DA Henderson, currently the director of the Johns Hopkins Center for Civilian Biodefense Studies, is to become director of the newly created Office of Public Health Preparedness. Secretary Thompson also announces that Phillip Russell, a retired director of the US Army Medical Research Institute of Infectious Diseases, will join the department as a special advisor on vaccine development and production.
- **1 November** In the US House of Representatives, the Committee on Energy and Commerce conducts a hearing on *A Review of Federal Bioterrorism Preparedness Programs: Building an Early Warning Public Health Surveillance System.*
- 1 November The New York Times reports that the US Administration has rejected a French proposal for a UN Security Council resolution condemning the recent anthrax attacks. The Administration has reportedly told the French government that a UNSC resolution would be appropriate only if there was clear proof that the origin of the attack was foreign. However, there had been disagreement between State Department officials, with others thinking that a resolution would be appropriate. The newspaper quotes an unidentified European official as saying: "This was the first time that a biological agent was used against a civilian population, and we felt that it was important at the very least that the international

- community say something about it. The goal was to reaffirm the value of the Convention and assure solidarity."
- **2 November** In Tokyo, US Special Negotiator for Chemical and Biological Arms Control, Don Mahley, meets with Japanese foreign ministry officials to explain the recent [see 1 Nov] new US proposals on strengthening the BWC. The Japanese officials say that the proposals are "worth considering".
- **2 November** In Moscow, Russian First Deputy Health Minister, Gennediy Onishchenko tells a news conference that twelve countries are developing "active offensive programmes of a biological nature".
- **2 November** In Berlin, German health minister, Ulla Schmidt, tells journalists that earlier positive tests for anthrax in packages found in Thuringia and Schleswig-Holstein were false alarms. The initial analysis had been carried out by the local authorities, with the final tests being conducted by the Robert Koch Institute [see 10 Oct] in Berlin. The packages received in Schleswig-Holstein are later found to be part of an art event when the person responsible contacts the police.
- **2 November** From Geneva, the *Weekly Epidemiological Report* of the World Health Organization carries information on smallpox and guidelines for dealing with an outbreak.
- **2 November** In the US Senate, the Subcommittee on Labor, Health and Human Services, Education and Related Agencies of the Committee on Appropriations conducts a hearing on smallpox.
- **3 November** Panamanian Foreign Minister Jose Miguel Aleman reveals that Panama has recently sent a notification to the OPCW requesting that a technical visit be conducted to San Jose Island [see 6 Sep], where it is suspected that old US chemical weapons have been abandoned. The United States will be informed of the request.
- 5 November In the UK House of Commons, Prime Minister Tony Blair announces the creations of three new subcommittees of the Civil Contingencies Committee: London resilience; UK resilience; and chemical, biological, radiological and nuclear consequence management. The terms of reference of the latter are as follows: "To review contingency and other arrangements to protect the UK against the effects of a terrorist attack using chemical, biological, radiological and nuclear means, particularly in the light of the terrorist attacks of 11 September." The subcommittee is to be chaired by the Minister of State with responsibility for crime reduction, policing and community safety, John Denham, and will include officials from the Treasury, the Home Office, the Foreign and Commonwealth Office, the Ministry of Defence, the Department for Transport, Local Government and the Regions, the Department of Trade and Industry, the Department of Health, the Department for Environment, Food and Rural Affairs, the Northern Ireland Office, the Scotland Office and the Wales Office.

Also in the House of Commons, Under Secretary of State and Minister for Veterans' Affairs Lewis Moonie answers a written question on the security of commercial establishments that manufacture antibiotics to counter biological or chemical weapons as follows: "The level of security in place at

commercial establishments that manufacture antibiotics and other agents to counter biological or chemical weapons is based on the threat pertaining to that establishment. In the first instance, security is a matter for the owners/operators of the establishments. Beyond that, security rests with the police who can, if they feel the threat is beyond their capacity, call on established procedures to augment security, for example, through military assistance, at such establishments. The security of such facilities is also under active review as a result of the events of 11 September."

- **6 November** Speaking to the Warsaw Conference on Combating Terrorism by video-link, US President Bush says that groups such as al-Qaeda "seek to destabilize entire nations and regions. They are seeking chemical, biological, and nuclear weapons. Given the means, our enemies would be a threat to every nation and, eventually, to civilization itself. So we're determined to fight this evil, and fight until we're rid of it. We will not wait for the authors of mass murder to gain the weapons of mass destruction."
- **6 November** In the UK House of Commons, Under Secretary of State and Minister for Veterans' Affairs Lewis Moonie answers a written question on the protection of the water supply from chemical and biological attack as follows: "All aspects of the UK's resilience to terrorist attack are being reviewed following the events of 11 September. The Ministry of Defence and DEFRA [the Department for Environment, Food and Rural Affairs] are both involved in that work, and there are well-established arrangements for military assistance to the civil authorities when required. Government responsibilities in relation to the water companies are a matter for DEFRA."
- **6 November** In the US Senate, the Technology, Terrorism and Government Information Subcommittee of the Judiciary Committee holds a hearing on *Germs, Toxins and Terror: The New Threat to America*.
- **6 November** In the United States, the Johns Hopkins Paul H Nitze School of Advanced International Studies, in association with the Novartis Corporation, holds a conference on Globalization and Infectious Diseases: Institutions, Policies and the Threat of Bioterrorism.
- **7 November** In the US House of Representatives, the Subcommittee on Oversight and Investigations of the Committee on Commerce holds a hearing on *HHS Inspector General's Review of Security at NIH and CDC Facilities*.
- **7 November** In the US House of Representatives, the Subcommittee on National Security, Veterans' Affairs and International Relations of the Government Reform Committee conducts a hearing on *Chemical and Biological Defense: Department of Defense Medical Readiness.*
- **7 November** In the United States, a total of 22 cases of anthrax have now been identified according to the CDC surveillance case definition. Of the 22 cases, 10 were confirmed inhalational anthrax and 12 cases (seven confirmed and five suspected) were cutaneous anthrax. Approximately 300 postal and other facilities have been tested for anthrax spores and around 32,000 people have initiated antimicrobial prophylaxis following potential exposure to anthrax. During 8–31 October, the CDC's Emergency Operations Center

received 8,860 telephone enquiries from the United States and 22 other countries. During the week of 21–27 October, nine US states reported 2,817 bioterrorism-related calls (an average of 313 per state) and approximately 25 investigations of bioterrorism threats in each state.

- 7 November In Ottawa, health ministers from the G7 countries and Mexico agree a joint plan for improving health security. The countries agree in principle to: "explore joint cooperation in procuring vaccines and antibiotics; engage in a constructive dialogue regarding regulatory frameworks for the development of vaccines and in particular smallpox vaccines; further support the World Health Organization disease surveillance network and WHO's efforts to develop a coordinated strategy for disease outbreak containment; share emergency preparedness and response plans, including contact lists, and consider joint training and planning; improve linkages to Level-Four laboratories in those countries which have them; undertake close cooperation on preparedness and response to radio-nuclear events; and share surveillance data from national public health laboratories and information on real or threatened contamination of food supplies, along with information on risk mitigation strategies to ensure safe food supplies". A follow-up meeting is scheduled to be held in London in March 2002.
- **8 November** In Tokyo, a cabinet meeting adopts a five-point plan for tackling chemical and biological terrorism. Under the plan, Japan would increase its stocks of vaccines, strengthen contacts among health institutions, step up controls on chemical and biological material, strengthen the ability of the police and the military to respond to attacks and consider the disclosure of information to the public.
- **8 November** The Russian State Customs Committee imposes tighter restrictions on the export of chemicals that could be used to create chemical weapons. The Russian government says these restrictions have been imposed so that Russia can protect its national interests and meet its obligations under the Chemical Weapons Convention.
- **8 November** In Germany, the Hamburg *Die Welt* reports that the government is to spend DM 100 million on 6 million doses of smallpox vaccine.
- **8 November** From London, the journal *Nature* publishes the results of research into one of the major virulence factors of *Bacillus anthracis*, the anthrax toxin. The published research describes two of the three distinct proteins which make up anthrax toxin: lethal factor and protective antigen (the third being oedema factor).
- **8 November** In the US House of Representatives, Representative Robert Menendez introduces the *Bioterrorism Protection Act (BioPAct) of 2001* (HR 3255). Also, Representative Christopher Smith introduces the *National Medical Emergency Preparedness Act of 2001* (HR 3253).
- **8 November** In the US House of Representatives, the Committee on Science conducts a hearing on *The Decontamination of Anthrax and Other Biological Agents*. Hearings also take place before the House Subcommittee on Water Resources and Environment of the Committee on Transportation and Infrastructure.

- **8–9 November** In Manassas, Virginia, George Mason University and Advanced Biosystems Inc. host a conference, *Biological Weapons Threat and Defense: New Directions in Biological Defense.*
- **9 November** In Tokyo, the Diet passes two bills addressing the lack of punitive provisions against the use of chemical and biological weapons [see 8 Nov]. The bills revise existing biological weapons [see 28 Nov 95] and chemical weapons [see 30 Mar 95] legislation. Penalties for crimes are increased and loopholes are closed to punish individuals who place chemical or biological agents in public places not in the form of weapons. The Diet also passes a bill to ratify the International Convention for the Suppression of Terrorist Bombings [see 11 Oct].
- **9 November** In Moscow, the director-general of the Russian Munitions Agency, Zinoviy Pak, tells Reuters that the United States refusal to release funds for the destruction of chemical weapons could force him to halt Russia's chemdemil activities. According to Pak: "... The Pentagon and the State Department are holding up decisions on the start of building work, for incomprehensible and unjustified reasons. Firstly, the United States is not giving the money, and secondly it is not giving the go-ahead for construction work to begin. ... I speak so harshly because I've just had a meeting with representatives of the United States."
- **9 November** In the United Kingdom, Palgrave publishes *Biological Warfare Against Crops* by Simon Whitby of the Department of Peace Studies at Bradford University.
- **9 November** In Ireland, the government takes delivery of 600,000 doses of smallpox vaccine which will be stored in secret high-security locations. The government has also acquired 2.4 million doses of ciprofloxacin.
- **9 November** President Bush extends for another year the national emergency President Clinton had originally declared by Executive Order 12938 [see 14 Nov 94] with respect to the "unusual and extraordinary threat to the national security, foreign policy, and economy of the United States posed by the proliferation of nuclear, biological, and chemical weapons ... and the means of delivering such weapons".
- 10 November The New York Times reports that US intelligence officials suspect the development of chemical and biological weapons at three sites in Afghanistan, none of which have yet been targeted by the US bombing campaign. The article specifically points to a possible cyanide gas production facility in Derunta, a fertilizer plant in Mazar-i-Sharif and an anthrax vaccine facility in Kabul. Interviewed on television the next day, Secretary of Defense Donald Rumsfeld states that the United States has bombed several suspected facilities, although he does not cite the specific locations. Secretary Rumsfeld asserted that US officials do not know where all of the sites are, but if "good information" surfaced regarding a specific location, action would be taken.
- **12 November** Nauru deposits its instrument of ratification to the Chemical Weapons Convention. In 30 days time, on 12 December, it will thus become the 144th state party to the treaty.

12 November In the UK House of Commons, Home Secretary David Blunkett, introduces the *Anti-Terrorism, Crime and Security Bill*. Parts VI and VII of the bill deal with weapons of mass destruction and security of pathogens and toxins respectively.

Part VI of the bill would strengthen existing legislation controlling chemical, nuclear and biological weapons. With regard to the latter, the 1974 Biological Weapons Act would be amended to make it an offence to transfer biological agents or toxins outside the United Kingdom or to assist another person to do so and to extend UK jurisdiction to cover offences under the Act carried out overseas by a UK person. For chemical agents, these two offences are already included in the 1996 Chemical Weapons Act. However, both acts would also be amended to make it an offence for a UK person to assist or induce a foreigner to carry out a prohibited act, to give powers of entry under warrant to the police and Home Office officials to search for evidence for the commission of an offence and to permit Customs and Excise Commissioners to enforce offences under the Acts in cases involving the movement of a chemical or biological weapons across a border.

Part VII of the bill is focused on a greater scrutiny of distribution of dangerous substances and making it more difficult to access areas where such agents are stored and used. A list of viruses, rickettsiae, bacteria and toxins is provided in Schedule 5 of the bill. The list is identical to that used by the Australia Group except for the exclusion of the three equine encephalitis viruses (Eastern equine encephalitis virus, Venezuelan equine encephalitis virus and Western equine encephalitis virus). Owners of premises working with the listed agents would be required to inform the Home Secretary and the police and would need to keep detailed records of people who have access to the premises. New people would need to be vetted before being allowed access to listed agents and the Home Secretary would have the power to deny access to particular individuals if he believes it to be in the national interest. Another clause would allow the Home Secretary to extend the scope of Part VII beyond the agents listed to also include animal and plant pathogens, pests or toxic

There is also the first reading of the *Export Control Bill* [see 26 Jun] in the House of Lords following its passage through the House of Commons.

- **12–22 November** In the United Kingdom, there is the second UNMOVIC advanced training course, this time on biological weapons issues. Some 20 participants from UNMOVIC staff and its roster of trained inspectors participate.
- **12–13 November** In Moscow, Green Cross Russia, Green Cross Switzerland and Global Green USA host a national dialogue forum to coincide with the fourth anniversary of Russia's CWC ratification, *Russian Implementation of the Chemical Weapons Convention: Status, Issues and Perspectives.*
- 13 November In the UK House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw replies to a written question on the United Kingdom's objectives at the forthcoming 5th BWC Review Conference as follows [see also 1 Nov]: "Following the failure of the 24th Session of the Ad Hoc Group to agree a Protocol text, our aim is now to agree with all States parties, a Final Document at the fifth Review Conference of the Biological

Weapons Convention, in Geneva that will lead to sustaining international progress on the further strengthening of the Convention. We welcome proposals that have been made for practical and effective measures to meet the biological weapons threat. We hope that these can be agreed at the Conference." The minister answers another question on the threat posed by weapons scientists in the former Soviet Union: "It is estimated that there may be many thousands of Russian nuclear and chemical and biological warfare scientists who have lost their jobs or who face the prospect of losing their jobs in the next few years. The possibility that these scientists may sell their skills to foreign regimes is one that the UK takes seriously. To address this, UK funds are directed, through the European Union, to the International Science and Technology Centre (ISTC). The ISTC was set up in 1994, following an agreement signed by the EU, United States, Japan and the Russian Federation, to stem the possibility of recruitment of former Soviet scientists by potential proliferators, through the funding of non-weapons related research at former defence institutes."

The next day, the minister is requested to comment on new proposals for strengthening the BWC [see 1 Nov]: "These are among a number of new ideas intended to complement the implementation of the Biological Weapons Convention (BWC). We have been discussing these and other options with other States Parties since the end of the negotiations on a BWC Protocol in August. All are at an early stage of development. We expect them to be further discussed at the 5th Review Conference of the BWC, in Geneva. We welcome proposals that have been made for practical and effective measures to meet the biological weapons threat. We hope that these can be agreed at the Conference."

13 November In Washington, where they are holding a summit meeting, US President Bush and Russian President Putin issue a joint statement on combating bioterrorism. The statement includes the following: "The United States and Russia have a well-established history of cooperation in this field. The Departments of State, Defense, Agriculture, Health and Human Services, and Energy pursue important programs with Russia which collectively aim to: prevent the proliferation of biological material from Russia through increased security and enhanced export controls; dismantle infrastructure once used for biological weapons work that is not needed or appropriate for peaceful biological efforts; and pursue collaborative research to further biodefense and public health. In issuing today their joint statement on cooperation against bioterrorism, President Bush and President Putin have directed their civilian and military officials and experts to expand that cooperation to prevent and defend against the threat of bioterrorism. They also confirmed their strong support for the 1972 Biological Weapons Convention which prohibits all offensive biological and toxin weapons."

13 November In the United States, the PBS television programme Nova screens "Bioterror" which features interviews with Bill Patrick, Sergei Popov and Ken Alibek. The programme, planned for two years, also follows the *New York Times* journalists William Broad, Stephen Engelberg and Judith Miller as they research their book, *Germs: Biological Weapons and America's Secret War.*

14 November In Russia, the Federation Council (the upper house of the legislature) approves an amendment to the law on

the destruction of chemical weapons allowing transportation of munitions across the country.

14 November In Berlin, continuing his tour of national capitals [see 2 Nov Tokyo] to explain the new US proposals on strengthening the BWC [see 1 Nov], US Special Negotiator for Chemical and Biological Arms Control, Don Mahley, addresses a public meeting organized by the German Institute for International and Security Affairs. Also speaking are Friedrich Löhr of the German foreign ministry and Michael Moodie of the Chemical and Biological Arms Control Institute.

14 November In Strasbourg, the European Parliament debates "negotiations within the framework of the Biological and Toxin Weapons Convention following the recent anthrax attacks". Speaking on behalf of the Council of the European Union is Belgian deputy prime minister Isabelle Durant (Belgium currently holds the six-month rotating EU presidency). She states that: "The fight against biological weapons must ... be pursued at a more sustained pace, particularly given the threat of potential bioterrorist attacks. The Biological and Toxin Weapons Convention is a crucial instrument in this process. ... Strengthening this Convention is, furthermore, one of the Union's priorities in the field of disarmament. ... The threat biological weapons pose requires an appropriate multilateral The Council will continue to emphasise the importance it attaches to the work that must lead to a legally binding instrument and, in particular, to maintaining the [Ad Hoc Group]. ... Lastly, the Union hopes that the gains made in the negotiations are preserved and that the Review Conference is able to takes decisions that offer prospects for a rapid renewal of negotiations within the multilateral framework of the Convention, with the participation of all States involved." Speaking on behalf of the European Commission, Phillipe Busquin, the Commissioner for Research, says: "The Union will also be proposing a mechanism that will enable us to pursue regular dialogue on the Convention and will open this up to all parties concerned. ... Consultation is taking place on a regular basis with the United States and we are trying, on the basis of their proposals, to complement them with our own, so as to preserve the spirit of open and regular dialogue with all parties This, in our view, is the key to to the Convention. multilateralism."

Next day, the Parliament, adopts resolution RSP/2001/2620 urging BWC states parties to "increase their efforts to negotiate a protocol that addresses the urgent need to add an effective verification regime to the BTWC, capable of adjusting to changing technical capabilities." It also calls on the United States to "contribute positively to the Ad Hoc Group ... and to develop its new proposals in this multilateral framework." The resolution is forwarded to the Council of the European Union, the European Commission, the AHG chairman, the UN Secretary-General, the US President and the members and associate members of the EU.

14 November In the US Senate, the Subcommittee on International Security, Proliferation and Federal Services of the Committee on Government Reform conducts the first of two hearings on *Combating Proliferation of Weapons of Mass Destruction with Non-Proliferation Programs.* Under consideration is the *Nonproliferation Assistance Coordination Act* (S 673). The second hearing is scheduled for 29 November.

- **14 November** In the US Senate, the Subcommittee on Superfund, Waste Control and Risk Assessment of the Committee on Environment and Public Works holds a hearing on S 1602.
- **14 November** In the US House of Representatives, the Committee on Government Reform holds a hearing on *Comprehensive Medical Care for Bioterrorism Exposure.*
- 15 November In Strasbourg, the European Commission holds talks with senior representatives of the research-based pharmaceutical industry. The participants discuss plans for an EU-wide strategy to ensure production, supply and availability of medicinal products for preventing or treating the effects of a biological attack. Discussion also focuses on identifying possible threats, and how to ensure treatments or preventive methods are available to European citizens in emergencies. According to European Commissioner for Enterprise and Information Society, Erkki Liikanen: "The pharmaceutical industry has a huge responsibility to provide vaccines and other medicinal products in case of an emergency. Our dialogue on access and availability of vaccines will continue. Health protection and industrial competitiveness policies go hand in hand with putting in place an effective response system to bio-terrorist threats."
- **15 November** In Brussels, the Council of the European Union meets at the level of health ministers. At lunch, the ministers discuss the issue of bioterrorism and emergency preparedness for possible health threats. The ministers request the European Commission to develop an action programme addressing the following five priorities: "(1) Develop a mechanism for consultation in the event of a crisis linked to the bio-terrorist risk and a capacity for the deployment of joint investigation teams; (2) Set up a mechanism for information on the capacities of European laboratories with respect to the prevention of and fight against bio-terrorism; (3) Set up a mechanism for information on the availability of serums, vaccines and antibiotics, including concerted strategies for developing and using those resources; (4) Set up a European network of experts responsible in the Member States for evaluating, managing and communicating risks; (5) Promote the development of vaccines, medicines and treatments."
- **15 November** In the US Senate, Senator Tom Harkin introduces the *Bioweapons Control and Tracking Act of 2001* (S 1706). In addition, Senator Bill Frist introduces the *Bioterrorism Preparedness Act of 2001* (S 1715).
- **15 November** In the US House of Representatives, the ranking Democrat on the Committee on Government Reform, Henry Waxman, invites members of Congress to a briefing on *The Biological Weapons Convention: Rethinking Our Priorities After September 11.* Making presentations are Douglas MacEachin, formerly of the CIA, Elisa Harris, formerly of the NSC and James Leonard, formerly assistant director of ACDA.
- **15 November** In the US House of Representatives, the Committee on Energy and Commerce conducts a hearing on *Bioterrorism and Proposals to Combat Bioterrorism*.
- **15 November** From George Washington University, the National Security Archive releases another [see 25 Oct] of its *The September 11th Sourcebooks*, this time on *Anthrax at*

- Sverdlovsk, 1979: US Intelligence on the Deadliest Modern Outbreak. The compilation includes 32 official documents, primarily from the CIA, the DIA and the State Department.
- **15–16 November** In Herndon, Virginia, *Armed Forces Journal* and the Memorial Institute for the Prevention of Terrorism organize *WMD IV*.
- **16 November** In Kabul, journalists from the London *Times* report the discovery of an al-Qaeda weapons laboratory. Among the many documents found, are instructions for the production of the toxin ricin.
- 16 November US Secretary of Health and Human Services Tommy Thompson announces that the Bush Administration has decided against destroying its smallpox repository, "until adequate medical tools are available to counter any future outbreak". The reason for the decision is presented thus: "While known repositories of smallpox exist only in the United States and Russia, it is possible that the virus may also have been acquired by others. Events of the last two months make all too clear that if smallpox virus fell into the wrong hands, it might be deliberately unleashed. While the chance of release of smallpox remains small, it is nonetheless real and we must be prepared to combat it".
- **16 November** In the United States, FBI investigators searching through unopened mail sent to Capitol Hill find another letter contaminated with anthrax. The letter is addressed to Senator Patrick Leahy and appears similar to the earlier letter addressed to Senator Daschle [see 15 Oct].
- **16 November** In Washington, the Arms Control Association holds a press conference on *The BWC After the Protocol: Previewing the Review Conference*. The panelists are former US Conference on Disarmament ambassador James Leonard, president of the Chemical and Biological Arms Control Institute Michael Moodie and former NSC director for non-proliferation and export controls, Elisa Harris.
- **19 November** In Geneva, states parties to the Biological Weapons Convention gather for the 5th BWC Review Conference.
- 19 November In Geneva, on the opening day of the 5th BWC Review Conference, US Under Secretary of State for Arms Control and International Security John Bolton identifies a number of states which the United States believes are in violation of the BWC. He states: "Beyond al Qaeda, the most serious concern is Iraq. Iraq's biological weapons program remains a serious threat to international security. ... The existence of Irag's program is beyond dispute, in complete contravention of the BWC. Also extremely disturbing is North Korea's BW program. The United States believes North Korea has a dedicated, national-level effort to achieve a BW capability and that it has developed and produced, and may have weaponized, BW agents in violation of the Convention. ... We are also quite concerned about Iran, which the United States believes probably has produced and weaponized BW agents in violation of the Convention. The United States believes that Libya has an offensive BW program in the research and development stage, and it may be capable of producing small quantities of agent. We believe that Syria (which has not ratified the BWC) has an offensive BW program in the research

and development stage, and it may be capable of producing small quantities of agent. Finally, we are concerned about the growing interest of Sudan (a non-BWC party) in developing a BW program." Bolton also addresses the threat from non-state actors: "We are concerned by the stated intention of Usama bin Ladin and his al Qaeda terrorist organization to use biological weapons against the United States. While we do not yet know the source of the recent anthrax attacks against us, we do know that some of the September 11 terrorists made inquiries into renting crop dusters, almost certainly to attack our cities."

On the US rejection of the draft BWC protocol [see 25 Jul], Bolton says: "The United States has repeatedly made clear why the arms control approaches of the past will not resolve our current problems. This is why we rejected the flawed mechanisms of the draft Protocol previously under consideration by the Ad Hoc Group. Countries that joined the BWC and then ignore their commitments and certain non-state actors would never have been hampered by the Protocol. They would not have declared their current covert offensive programs or the locations of their illegal work - nor would the draft Protocol have required them to do so. By giving proliferators the BWC stamp of approval, the Protocol would have provided them with a 'safe harbor' while lulling us into a false sense of security. Although the United States has been criticized publicly — both in the media and by foreign governments — for rejecting the draft Protocol, many of those same governments have told us privately that they shared America's reservations, describing the draft as 'flawed' or 'better than nothing.' Do we really believe that a Protocol that would allow violators to conduct an offensive biological weapons program while publicly announcing their compliance with the agreement is 'better than nothing?' We think not. We can — and must — do better."

Bolton also elaborates upon the US proposals for strengthening the BWC, which had been announced earlier by President George Bush. He focuses on three main areas: national implementation; consultation and cooperation; and assistance to victims. He says: "Restricting access and enhancing safety procedures for use of dangerous pathogens, strengthening international tools to detect serious illness and/or potential illegal use of biology and providing assurance of help in the event of a serious disease outbreak — these measures all enhance collective security and collective well-being which is, after all, our ultimate objective. With the exception of the final measure, none of these measures was contemplated in the draft BWC Protocol. The United States believes these proposals provide sound and effective ways to strengthen the Convention and the overall effort against biological weapons. These are measures State Parties can adopt now to make the world safer and proliferation more difficult. The choice is ours."

At a subsequent press conference, Bolton is asked whether the United States intends using the provisions of the BWC to follow up its allegations of non-compliance and whether it will offer further clarification of the claims. He responds as follows: "I don't feel the need to clarify them because our information we believe is sufficient to justify the statements that I made here publicly and many others that we've made in classified fashion to Congress and to other friends and Allies. ... Well, the purpose of this statement here today was not to indicate one way or another what subsequent actions we might take which might cover a broad variety of things, but to say to the international community that these states, we believe, are currently in violation of the convention. As I said before, the ideal way to handle this is for the states that have undertaken

the obligations that they do in the Biological Weapons Convention to adhere to it. That is the best way, and that is the behavior that we would like to see."

Asked about the US position on the draft BWC protocol, Bolton says: "The draft protocol that was under negotiation for the past seven years is dead in our view. Dead, and is not going to be resurrected. It has proven to be a blind alley. We have lost a lot of time in the course of the negotiations and we think that the proposals we have made, and there may well be other thoughts and proposals out there that would be productive as well, ought to be pursued and ought to be pursued in the immediate short term so that they can be implemented. I think that that is why the statement says in a couple of occasions, we think the traditional arms control approaches in this area have not been successful, and we are trying to think — I don't like to use this phrase, but I can't think of another one of the top of the head — why we are trying to think out side the box and why we encourage other governments to do the same."

19 November In Geneva, on the opening day of the 5th BWC Review Conference, the Libyan representative announces during his address to the Conference that Libya will soon accede to the Chemical Weapons Convention.

20 November In Brussels, the Council of the European Union adopts amendments to the EU regime for the control of exports of dual-use items and technology to take into account changes adopted within the international non-proliferation regimes, including by the Australia Group plenary in 2000 [see 2–5 Oct 00]. The changes are incorporated into an updated and consolidated 214-page version of the annexes to Regulation (EC) 1334/2000 [see 22 Jun 00].

20 November In Connecticut, Governor John Rowland reports that an elderly woman in Oxford is being treated for suspected inhalational anthrax. The next day, 94-year old Ottile Lundgren dies, shortly after being confirmed as suffering from inhalational anthrax. This is the fifth anthrax-related death in the United States and the first for three weeks [see 31 Oct].

21 November In Moscow, at a meeting of the Russian State Commission on Chemical Disarmament, its chairman, Sergei Kiriyenko, says that the 2002 budget appropriations for the chemdemil programme are double those of 2001 and represent a twelve-fold increase on the 2000 figure. The 2002 figure is likely to be 7.7 billion roubles, 5.3 billion from Russia, 2.3 billion from international donors and 400 million to ensure safe storage of toxic agents. He also announces that Russia has completed the destruction of its Category 3 chemical weapons [see 3 Sep], ahead of the 29 April 2002 deadline.

21 November In the UK House of Commons, Prime Minister Tony Blair is asked what representations he has made to India, Russia, South Korea and the United States on reducing their declared stockpiles of chemical weapons. He responds as follows: "The Chemical Weapons Convention requires states which have declared possession of chemical weapons to submit plans on ratification for the total destruction of their stockpiles, by 29 April 2007, in accordance with Article 3 of the convention. These plans are subject to review and approval by the Executive Council of the Organisation for the Prohibition of Chemical Weapons (OPCW), of which the UK is a member. The UK takes every opportunity, both through the OPCW

Executive Council and on a bilateral basis, to maintain pressure on the declared possessors to meet their CW destruction obligations."

In another written question, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw is asked under what powers individuals can be prosecuted and extradited for activities involving biological weapons. The minister responds as follows: "Individuals can be prosecuted under Section 1 of the Biological Weapons Act 1974. It is an offence for any person to develop, produce, stockpile, acquire or retain any biological agent or toxin where there is no justification for prophylactic, protective or other peaceful purposes. A person in possession of a biological weapon for terrorist purposes would also commit an offence under section 57 of the Terrorism Act 2000. The United Kingdom has extradition arrangements with well over 100 countries. In most cases, a crime is extraditable if the available prison sentence in the United Kingdom and in the requesting jurisdiction is 12 months or more."

- **21 November** In the United Kingdom, Vladimir Pasechnik dies of a stroke aged 64. Pasechnik had defected to the United Kingdom in 1989 and had given the West its first detailed account of the large Soviet clandestine BW programme, fronted by Biopreparat.
- 22 November In Afghanistan, US forces have "identified more than 40 places which represent potential for WMD research" according to General Tommy Franks. He adds that "very exhaustive" tests will be conducted at those sites. Although two journalists had reported the discovery of a container with vials labelled in Russian as sarin nerve gas, Franks says that no specific evidence of that gas had been found. US Secretary of Defense Donald Rumsfeld indicates that any WMD found in Afghanistan would be removed from the country. Specifically in Kabul, materials left in al-Qaeda safehouses demonstrate the group's interest in WMD, but indicates no clear evidence of possession.
- **22 November** In Geneva, during the 5th BWC Review Conference [see 19 Nov], a further [see 15 Aug] briefing is provided by the Quaker United Nations Office in conjunction with the University of Bradford Department of Peace Studies at which a new paper on *Strengthening the Biological Weapons Convention* is presented by one of its authors, Graham Pearson: *Key Points for the Fifth Review Conference*. The paper includes a foreword by Joshua Lederberg.
- 22 November In the UK House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw is asked whether al-Qaeda poses a nuclear threat to the United Kingdom. Bradshaw responds as follows: "We know that Osama bin Laden has sought to acquire weapons of mass destruction, but we do not believe that he has the capability to deliver them. We have no doubt that Osama bin Laden would have no moral compunction from using weapons of mass destruction, including nuclear weapons, if he could."
- **22 November** In the United Kingdom, the government circulates a consultation paper on proposed emergency amendments to the Genetically Modified Organisms (Contained Use) Regulations 2000. The consultation paper states that "the reason for the change is to prevent terrorists

- obtaining information which could lead them to sources of GMOs which could be used as biological weapons". The existing regulations require that a public register of all notified premises and activities is maintained. However, on 18 October, the Health and Safety Executive decided to withhold temporarily and pending legal advice, further access to the register. The proposed new regulations would allow the government to exclude from the register any information, or description of information, which would be contrary to the interests of national security.
- **22 November** In Canada, the government introduces into the House of Commons the draft *Public Safety Act*, bill C-42, which includes a number of anti-terrorism measures. In addition, the bill includes legislation to implement the BWC in Canada, the *Biological and Toxin Weapons Convention Implementation Act*.
- **23 November** In Istanbul, Turkish police have arrested five of six people detained in connection with 15 bottles of mustard gas, so it is reported.
- **23 November** In Berlin, the federal government responds to an earlier Bundestag question on recent BWC developments.
- **23 November** In Geneva, during the 5th BWC Review Conference [see 19 Nov], there is another EU–NGO meeting hosted by the Belgian CD delegation which currently holds the six-month rotating EU presidency.
- **26 November** In Israel, deputy chief of staff Moshe Ya'alon says that Syria has missiles fitted with chemical warheads which can reach anywhere in Israel. Speaking later on television, he adds that: "A US decision to embark on military activity against Iraq could under certain conditions lead to an Iraqi decision to either launch missiles or send out aircraft to attack Israel. Clearly, however, any undermining of the capabilities that Iraq has been striving for the past two years to rebuild ... could contribute to regional stability."
- **26 November** In Washington, US President Bush, speaking at a press conference, suggests that Iraq could face a military response if it does not allow UNMOVIC inspectors to begin work. He says that the campaign in Afghanistan is "just the beginning" of the war on terrorism. The next stage will involve tackling those states which "develop weapons of mass destruction that will be used to terrorise nations".
- **26 November** In the United States, the Centers for Disease Control and Prevention release interim guidelines for responding to a smallpox emergency.
- **26–27 November** At UN headquarters, the UNMOVIC college of commissioners reconvenes [see 28–29 Aug] for its seventh plenary session. As at the previous sessions, IAEA and OPCW staff attend as observers. UNMOVIC Executive Chairman Hans Blix reports on the Commission's activities since the last meeting and other UNMOVIC staff brief on the measures taken to prepare for operations in Iraq. Blix confirms that, once inspections in Iraq become possible, UNMOVIC would be ready to commence operations without delay. The commissioners also discuss broader issues related to international efforts to prevent the proliferation of weapons of mass destruction by all states and non-state actors, efforts which have been given greater urgency by the events of 11

September. Attending the meeting for the first time are John Wolf and Li Junhua, who have replaced Robert Einhorn and Cong Guang as the commissioners for the United States and China respectively.

26–27 November In New York, at New York University, Green Cross USA co-sponsors a meeting, *Weapons of Mass Destruction: Cold War Legacies in the Post-9/11 World.*

27 November In Brussels, there is an international conference on *Preparedness Planning in the EU: Influenza and Other Health Threats*.

27 November In the UK House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw responds to a question on CWC compliance as follows: "The Chemical Weapons Convention contains comprehensive compliance measures. These include the requirement to declare activities with scheduled chemicals, and of past chemical weapons production facilities and stockpiles; consultations; routine inspections of industrial and military facilities; and challenge inspections for alleged breaches of the Convention. The UK supports the implementation of these measures in the Executive Council of the Organisation for the Prohibition of Chemical Weapons (OPCW) and on a bilateral basis. The UK reviews declarations by other State Parties and, where appropriate, has bilateral consultations to clarify possible ambiguities and omissions with the country concerned in order to ensure full transparency. The UK also undertakes practice challenge inspections, and provides training and technical assistance to the OPCW. We continue to press for the universal adoption of the Convention."

28 November In Brussels, the European Commission approves a communication setting out the action it has taken to mobilize its resources, expertise and networks in the area of civil protection to respond to terrorist threats as a response to the call by the Ghent European Council [see 19 Oct] for the Council and the Commission to improve cooperation between EU member states. The communication focuses on the civil protection framework [see 11–12 Oct], health protection [see 15 Nov] and research activities [see 30 Oct]. The Commission also announces that it intends to nominate a "high-profile European coordinator for civil protection measures" to manage the civil protection mechanism and to coordinate, implement and follow-up the initiatives summarized in the communication.

28 November The US Department of Health and Human Services awards a \$428 million contract to Acambis Inc. and Baxter International Inc. for the production of smallpox vaccine. The contract is for the production of 155 million doses of the vaccine by the end of 2002. Added to the existing supply of 15.4 million doses of the Dryvax vaccine, and the 54 million doses ordered from Acambis in September [see 1 Oct], the extra doses will bring the national stockpile to 286 million by late 2002, enough to protect every US citizen. The bulk vaccine will be produced in Baxter's production facility in Europe and shipped to the United States for refinement and processing.

29 November In the UK House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw declines, for intelligence reasons, to identify countries which the Foreign Office assesses are developing nuclear, chemical or biological weapons. He also

refuses to describe, again for intelligence reasons, the UK assessment of whether Iran or Iraq have covertly produced biological weapons. However, he does refer the questioner to an earlier answer given by the Prime Minister [see 5 Nov] on Iraq's capabilities.

29 November From London, the Foreign and Commonwealth Office announces that the current UK ambassador to Finland, Alyson Bailes, has been chosen to succeed Adam Daniel Rotfeld as the director of SIPRI. She will take up the position on 1 July 2002.

29 November The UN Secretary-General submits to the Security Council UNMOVIC's seventh quarterly report [see 30 Aug]. The report covers the period from 1 September to 30 November. During that time, the Executive Chairman, Hans Blix, has provided monthly briefings to the presidents of the Security Council and has kept the Secretary-General informed of UNMOVIC activities. The UNMOVIC core staff now consists of 46 professional-grade people from 24 countries while the roster of trained experts contains 180 individuals from 36 countries. UNMOVIC has now completed the first phase of a draft inventory of unresolved disarmament issues which involved analyzing Iraqi declarations, inspection reports and other material which the Commission took over from UNSCOM. The second phase is now underway with UNMOVIC staff merging the issues into interrelated clusters thus facilitating the assessment of the overall significance of the individual issues and obtaining a better overall picture of Irag's WMD programmes, the gaps in knowledge and what remains to be verified. UNMOVIC continues to use satellite imagery to examine sites in Iraq which had previously been subject to monitoring for infrastructure changes. The UNMOVIC/IAEA joint unit has continued to receive notifications from states of supplies to Iraq of dual-use items, although Iraq itself has not been providing corresponding notifications. Work on a revised handbook to assist governments in the implementation of the export-import mechanism is continuing and a website is also under preparation. In addition, UNMOVIC officials have visited laboratories and technical companies in a number of countries which may be able to assist the Commission in establishing a network of laboratories for future chemical and biological monitoring work, analysis and sample determination.

29 November At UN headquarters, the Security Council unanimously adopts resolution 1382 which extends for a further 180 days the provisions of resolution 986 [see 20 May 96] which established the "oil-for-food" programme in 1995. Annexed to the resolution is a proposed Goods Review List which will be adopted by the Council, subject to any further refinements, for implementation beginning on 30 May 2002. Among the entries in the proposed list is the heading "certain biological equipment" under which is listed equipment for the microencapsulation of live microorganisms and toxins in the range of 1–15 micron particle size, to include interfacial polycondensors and phase separators.

29 November In the US Senate, the Subcommittee on Proliferation and Federal Services of the Governmental Affairs Committee holds the second [see 14 Nov] of its hearings on Combating Proliferation of Weapons of Mass Destruction with Non-Proliferation Programs.

- **29 November** In the US Senate, the Subcommittee on Labor, Health and Human Services, Education and Related Agencies of the Committee on Appropriations holds another hearing on *Funding for Bioterrorism Preparedness*. Later, Senators Harkin and Specter introduce a bill (S 1747) proposing \$4 billion spending on public health against bioterrorism to be funded from the *Emergency Supplemental Appropriations Act of 2001* [see 14 Sep].
- **29 November** In the US House of Representatives, the Subcommittee on National Security, Veterans' Affairs and International Relations of the Committee on Government Reform conducts a hearing on *Risk Communication: National Security and Public Health*.
- **30 November** In Washington, the Chinese vice-foreign minister, Wang Guangya, heads a delegation for talks with US counterparts on arms control and non-proliferation.
- **30 November** Uganda deposits its instrument of ratification to the Chemical Weapons Convention. In 30 days time, on 30 December, it will thus become the 145th state party to the treaty.
- **2–3 December** In Brussels, the "bio-response working group" of the European Commission's Joint Research Centre holds its first meeting. According to an earlier communication from the Commission: "In the biological field, the JRC has initiated and coordinates a bio-response working group with specialist analytical capabilities comprising state-of-the-art laboratories in member states and world experts in detection and fingerprinting of transgenic DNA strains. The group is set to meet on 2 and 3 December to consider scenarios for emergency response. One of the topics for discussion will be the use of transgenic plants to produce vaccines will be considered for the production of smallpox and other vaccines, in light of recent developments in the USA. The JRC will use its own facilities and those of the bioresponse working group of the European Network of GMO Laboratories it co-ordinates, to detect and identify relevant transgenic strains in the context of addressing biological attacks to the food chain (agri-terrorism). In the chemical field, the JRC will make its collection of open-source intelligence on the presence of chemical agents covered by the Chemical Weapons Convention available upon request to all authorised services of the European Commission and Member States. Building on its foresight expertise, the JRC will immediately launch two studies: one to determine the new scientific issues and questions related to bioterrorism and one to assess the technological, social, economic and psychological vulnerabilities of our modern societies with regard to possible terrorist attacks."
- **3 December** In South Korea, the Seoul *Choson Ilbo* reports on the development of biological weapons by the North. The newspaper reports that the Biological Research Institute, under the jurisdiction of the No 2 Academy of Natural Sciences has played a leading role in the programme, with production being carried out in over 10 other plants. The newspaper also alleges that Russian scientists have played a major role in the North Korean BW programme.
- **3 December** From Moscow, ITAR-TASS reports that Russia has completed destruction of its stocks of phosgene. The agent had been drained from munitions, the munitions

- destroyed and over 10 tonnes of the agent have been sent for reprocessing at the Prikladnaya Khimiya Applied Chemistry Scientific Research Centre in the Urals.
- **3 December** In the UN General Assembly, the Netherlands delegation introduces a draft resolution calling for the agenda of the Assembly's next annual session to include an item on cooperation with the OPCW.
- **4 December** In the European Parliament, the Committee on the Environment, Public Health and Consumer Policy has an exchange of views on bioterrorism with European Commissioner for Health and Consumer Protection David Byrne and European Commissioner for the Environment Margot Wallström. The Commissioners outline the response of the European Commission to the threat of chemical and biological terrorism [see 28 Nov] and describe future activities.
- **4 December** In the US Senate, Senator Bill Frist introduces the *Bioterrorism Preparedness Act of* 2001 (S 1765).
- **4 December** In the US House of Representatives, a joint resolution (H J RES 75) on the monitoring of weapons development in Iraq is referred to the Committee on International Relations. The resolution is passed on 20 December.
- **5 December** In Paris, the 47th ordinary session of the Western European Union Assembly adopts recommendations on chemical and biological weapons control drafted by its Defence Committee, which has also agreed a report on *Chemical and Biological Weapons Control New Challenges*. The resolution adopted by the Assembly demands that WEU member states still holding chemical weapons stocks destroy them, that members continue to pursue through diplomatic channels the matter of strengthening the BWC and that members that participate in the Australia Group enhance cooperation and give thought to the establishment of permanent structures for information exchange and assistance.
- **5 December** In the US House of Representatives, the Committee on Science conducts a hearing on *The Science of Bioterrorism: Is the Federal Government Prepared?*
- **5 December** In the US House of Representatives, the Committee on International Relations conducts a hearing on *Bioterrorism: Potential Sources of Anthrax, Smallpox and Other Bioterrorist Weapons.*
- **5 December** At the US Army Medical Research Institute for Infectious Diseases (USAMRIID) at Fort Detrick, Maryland, the anthrax letter addressed to Senator Patrick Leahy [see16 Nov] is opened after careful preparation and a number of false starts. In addition to what are believed to be thousands of lethal doses of highly refined anthrax, the envelope contains a photocopy of the threatening note sent to Senator Tom Daschle [see 15 Oct]. A scientific analysis of the anthrax is expected to take weeks.
- 6 December In Geneva, during the 5th BWC Review Conference [see 19 Nov] a pre-publication issue of *Public Health Response to Biological and Chemical Weapons: WHO Guidance*, the second edition of the 1970 volume *Health Aspects of Chemical and Biological Weapons: Report of a WHO Group of Consultants*, is launched by its executive editor,

Julian Perry Robinson of the Harvard Sussex Program at a seminar hosted by the Swiss government.

- 6 December In Brussels, the North Atlantic Council holds a ministerial meeting at which it issues a statement on NATO's Response to Terrorism. The statement includes the following: "To accomplish this crucial task of protecting our populations, territory and forces, we will examine ways to adapt and enhance Alliance military capabilities. We will deepen our relations with other states and international organisations so that information is shared, and appropriate cooperative action is taken more effectively. Our countries are also working together closely to meet the threat posed by possible terrorist use of Weapons of Mass Destruction. Disarmament, arms control and non-proliferation can make an essential contribution to the fight against terrorism. We will enhance our ability to provide support, when requested, to national authorities for the protection of civilian populations against the effects of any terrorist attack. We will also enhance cooperation with our Partners in this field taking into account the various proposals and initiatives put forward." The statement adds: "We believe it will be essential to continue to develop cooperation between international organisations in this multi-faceted campaign, taking into account their respective responsibilities. In this context, NATO and the European Union are exploring ways to enhance cooperation to combat terrorism."
- 6 December The US Department of Health and Human Services announces seven new initiatives to accelerate bioterrorism research in response to a flood of calls from scientists offering to help. The initiatives will fund research investigating high-priority, 'Category A' biological diseases as defined by the Centers for Disease Control and Prevention anthrax, botulism, plague, smallpox, tularemia and viral hemorrhagic fevers. The programmes will be coordinated by the National Institute of Allergy and Infectious Diseases, which is the lead institute for research on bioterrorism at the National Institutes of Health. The seven new programmes are: the Anthrax Vaccine Contract; the Rapid Response Grant Program on Bioterrorism-Related Research; the Partnerships for Novel Therapeutic, Diagnostic and Vector Control Strategies in Infectious Diseases; Exploratory/Developmental Grants: Technology Applications to NIAID-Funded Research; the Small Business Program on Bioterrorism-Related Research; the US-Based Collaboration in Emerging Viral and Prion Diseases; and the NIAID Investigator-Initiated Small Research Grants.
- **7 December** In Geneva, the 5th BWC Review Conference [see 19 Nov] is suspended without agreement on a final declaration. States parties agree by consensus to continue the session in a year's time, from 11–22 November 2002.
- **7 December** At OPCW headquarters, representatives of the United Kingdom and Norway sign a memorandum of understanding on cooperation to support chemdemil activities in Russia. Under the agreement, Norway will provide 9.2 million Krone (approximately £700,000) to the United Kingdom to pay for an electrical transformer at the Shchuch'ye destruction facility.
- **7 December** In the US Senate, the \$4 billion package for bioterrorism funding is passed as part of the FY02 Defense Appropriations bill.

- **8 December** In Germany, the Hamburg *Die Welt* publishes an interview with a German biochemist who has just spent four months at the Vector institute [see 27 Mar] in Novosibirsk in Russia.
- **8–12 December** In Washington, the American Society for Cell Biology convenes for its 41st annual meeting. On 9 December, there is a special symposium on *How Can Biomedical Research Contribute to the Fight Against Terrorism?* On the panel are: Matthew Meselson of Harvard University; John Collier of Harvard Medical School; and Tara O'Toole of the Johns Hopkins School of Public Health.
- **9 December** In Israel, police reveal that a Hamas suicide bomber who was killed after detonating a bomb in Haifa may also have been carrying a crude chemical weapon. This follows an earlier statement by a government official that a bomb which exploded in Jerusalem killing 11, had contained "traces of hazardous materials". According to reports, forensic experts believe that the bomb had been dipped in pesticides.
- **9 December** In the United States, *Newsweek* reports US intelligence officials that samples of substances found in the Kabul home of al-Qaeda leader Ayman al Zawahiri have tested positive for anthrax. The samples are to be retested. According to the magazine, US operatives in Afghanistan have also found evidence that one or more Russian scientists were helping al-Qaeda develop anthrax and the group may have stockpiled anthrax spores.
- **10 December** In Brussels, the Council of the European Union meeting at the level of foreign ministers adopts conclusions on non-proliferation, disarmament and arms control in the light of The conclusions read as follows: 11 September. "Non-proliferation, disarmament and arms control remain an indispensable element of cooperative security between States. They can also make an essential contribution in the global fight against terrorism by reducing the risk of non-state actors gaining access to weapons of mass destruction, radioactive materials and means of delivery as well as by preventing the spread of conventional weapons. The elimination, reduction or control of certain weapons, their means of delivery and relevant materials according to the relevant bilateral and multilateral instruments as well as national initiatives enforcing this goal, together with their effective national implementation significantly reduces the risk of proliferation to non-state actors. Furthermore, multilateral instruments and regimes for disarmament, arms control and non-proliferation as well as national initiatives enforcing this goal foster confidence between States and enhance security. They thereby contribute to the building and strengthening of the international coalition against terrorism. In conformity with the Plan of Action approved by the European Council to combat terrorism and the Union's determination to contribute to the global coalition against terrorism, the Council today decides to launch a targeted Initiative to respond effectively to the international threat of terrorism."

The initiative is to focus on the following four elements: "Multilateral instruments: In consistence with their ongoing review process, the Council sees an urgent need to strengthen relevant multilateral instruments in the field of non-proliferation, disarmament and arms control with a view to promoting their universalisation and ensuring their effective implementation. The Council shall continue to actively support the international

negotiation process to finalise the draft international code of conduct against ballistic missile proliferation. Export controls: The Council considers that the EU should focus on concrete measures to strengthen export controls to prevent terrorist groups and States which harbour them from acquiring materials relative to weapons of mass destruction. The Council notes that the full implementation by the Member States of the European Union Code of Conduct on export of military equipment will continue to minimise the risk of any diversion of weapons of European origin to terrorist organisations. The Council sees merit in targeted EU assistance to third countries to help strengthen export control and enforcement. International cooperation: The Council emphasises the importance of protection and assistance against the use or threat of chemical and biological weapons as well as measures to maintain physical control of nuclear material world-wide. The Council sees merit in sustaining and developing — where needed — assistance to States to eliminate or reduce as foreseen in the relevant treaties existing stocks of weapons of mass destruction, thereby reducing the risk of proliferation to non-state actors. Political dialogue: The Council decides to enhance the political dialogue with third countries in the field of non-proliferation, arms control and disarmament. In this context, the Union will continue to strengthen its partnership with the relevant countries and shall further develop an active dialogue with other countries to promote their support to non-proliferation, disarmament and arms control policies as a means of combating terrorism." The Council also notes that further work will continue towards the adoption of a list of concrete measures in the four abovementioned fields.

Also meeting in Brussels are the 15 EU research ministers as the Research Council [see 30 Oct]. The Council arrives at a political agreement on the next framework programme for research and adds civil protection, especially the issue of bio-response, to the list of research subjects to be dealt with under the anticipation of emerging needs. The main research subjects are: the development of tools for early detection and diagnosis as well as adequate surveillance of biological or chemical agents that could be used in terrorist attacks; the development of rapid mechanisms to produce and distribute new vaccines against emerging diseases; and studies on potential threats to the agri-food industry.

- **10–12 December** In Little Rock, Arkansas, the US Army Soldier and Biological Chemical Command and the National Defense Industrial Association arrange the *Chemical Biological Defense Industrial Base Symposium*.
- 11 December In Moscow, the Russian Security Council meets. On its agenda are preparations for the destruction of chemical weapons in Russia. Oleg Chernov, Deputy Secretary of the Security Council, tells journalists that Russia will need 10 years to destroy its 40,000 tons of chemical weapons. Chernov attributes the delay to a lack in much needed organizational and financial resources, stating that he hopes Western nations would contribute a third of the estimated \$3 billion needed for the project. The Council also approves the new chemdemil plan [see 14 Jun] which envisages the complete destruction of Russia's stockpile by April 2012.
- **11 December** In the United Kingdom, *The Organisation for the Prohibition of Chemical Weapons (Immunities and Privileges) Order 2001* receives royal approval. The order confers privileges and immunities upon the OPCW,

representatives of its members, its officials and experts, as required under Article VIII of the CWC.

- 11 December In Charleston, South Carolina, US President Bush says that stopping terrorists from obtaining and using weapons of mass destruction is the next priority in the "war on terrorism". The President says: "Rogue states are clearly the most likely sources of chemical and biological and nuclear weapons for terrorists. ... America's next priority to prevent mass terror is to protect against the proliferation of weapons of mass destruction and the means to deliver them. I wish I could report to the American people that this threat does not exist that our enemy is content with car bombs and box cutters - but I cannot. ... And almost every state that actively sponsors terror is known to be seeking weapons of mass destruction and the missiles to deliver them at longer and longer ranges. Their hope is to blackmail the United States into abandoning our war on terror, and forsaking our friends and allies and security commitments around the world. Our enemies are bound for disappointment. America will never be blackmailed, and we will never forsake our commitment to liberty. To meet our new threats, I have directed my National Security Advisor and my Homeland Security Director to develop a comprehensive strategy on proliferation. Working with other countries, we will strengthen nonproliferation treaties and toughen export controls. Together, we must keep the world's most dangerous technologies out of the hands of the world's most dangerous people."
- **11 December** In the US House of Representatives, Representative Billy Tauzin introduces bipartisan bioterrorism legislation, the *Public Health Security and Bioterrorism Response Act of 2001* (HR 3448). The bill is passed on 12 Dec and sent to the Senate where it is substituted with the *Bioterrorism Preparedness Act of 2001* [see 4 Dec].
- 11 December In Washington, there is a meeting of the National Research Council's committee established to review research proposals for cooperation with former Soviet biological weapons personnel and institutes. The meeting hears reports on exchange programmes with Obolensk and Vector and considers the exchange programme for the following year. Also discussed is the long-term strategy for bio-redirection projects in Russia.
- 11 December In the United States, officials at Aberdeen Proving Ground, one of the United States' chemical weapons storage facilities, announce that, in response to increased security concerns, reinforced steel "igloos" will be constructed to house the 1,815 canisters of mustard gas that are currently kept in the open. The \$40 billion emergency supplemental funding approved by Congress [see 14 Sep] will fund this \$9 million dollar initiative. The facility currently houses 5 per cent of the US chemical weapons stockpile, which is scheduled to begin destruction in 2004.
- 12 December In Brussels, there is the first meeting of the European Commission's group of scientific experts [see 30 Oct] on the fight against biological and chemical terrorism. The meeting has been organized on the initiative of the Commissioner for Research, Philippe Busquin. The members of the group are from the ministries of research and defence of the 15 EU member states and from the European Commission. The group of experts will first make a joint assessment of

knowledge and capacity regarding biodefence and what additional research is needed, in particular through better coordination of research activities within the member states and at Community level. According to a Commission press release: "The Group will look at questions of research linked to the detection and identification of biological and chemical agents and at the prevention and treatment of attacks from such agents. In this context it will: draw up an inventory of research activities currently in progress; examine how these activities can best be mobilised and co-ordinated; and identify what gaps there are and what additional research is needed in the short and long-term, taking account of the opportunities provided by the next framework programme for research, the activities and programmes of the Joint Research Centre, and initiatives taken by the Member States in this area."

The working party on bio-response [see 2–3 Dec] established by the Joint Research Centre (JRC) of the European Commission also reports to the group of experts. According to the working party, a terrorist attack using biological agents is a possibility and would be difficult to manage. The press release adds: "The Group therefore feels that a surveillance system and a global approach consisting of pooling multidisciplinary expertise and existing surveillance systems in Europe is what is needed. The best protection, in the Group's view, against the threat of bio-terrorism is to establish a system of prevention based on existing tools, to set up a bio-response network and to ensure efficient management of biological information in the EU." In addition, the JRC will undertake specific studies on the scientific aspects of biological and chemical terrorism and the economic, social and psychological impact of a chemical or biological attack.

- **12 December** In Decatur, Georgia, United States, a Canadian scientist details the results of a study to examine how anthrax spores contained in an envelope would be dispersed when opened. The study, undertaken prior to the anthrax cases in the United States, was conducted in response to an earlier anthrax hoax in Ottawa [see 30–31 Jan]. The experiment had used one gram of *Bacillus globigii* to simulate anthrax and had demonstrated that the spores would spread widely with little energy required to release a cloud. A CDC official is quoted describing the findings as "clearly concerning".
- **12-14 December** In Draguignan, France, the High French Committee for Civil Defence organizes an international symposium on *WMD Terrorism*.
- 13 December Two scientists detained by Pakistani officials have admitted to sharing biological and chemical secrets with Osama bin Laden, according to reports. Using a relief organization as cover, Sultan Bashiruddin Mahmood and Abdul Majid, both former members of the Pakistani nuclear programme, state that they spoke extensively with bin Laden in August during a three-day visit to Kabul. US investigators have inspected some of the 50 suspected chemical and biological sites in Afghanistan, including Tarnak Farms a facility located near Kandahar where US officials say that they discovered "significant", weapons-related documents, and are conducting further tests.
- **13 December** In the Bundestag in Berlin, the German government answers questions on the 'Colonia Dignidad' in Chile, an area inhabited by people of German origin. The questioner refers to allegations that, during the Pinochet

regime, the 'Colonia Dinnidad' cooperated with the Chilean authorities to produce the nerve gas sarin under the code-name 'Project Andrea'. The German government states that it has no knowledge of the allegations.

- 13 December In the UK House of Commons, a list of dumpsites of chemical and other munitions located in the coastal waters of the United Kingdom is placed in the Library of the House. Primarily, the list contains information compiled by the Hydrographic Office from that published in Admiralty Charts for known dumpsites in UK waters. In addition, the list contains the locations of the deepwater sites in the Atlantic used for the disposal of chemical weapons after World War Two. According to Under Secretary of State and Minister for Veterans' Affairs Lewis Moonie, detailed information of the inventories of chemical weapons and other munitions disposed of in the dumpsites is no longer available, as many records were destroyed after the disposal as a matter of routine practice. The minister adds that, as a signatory to the Oslo-Paris Convention, the United Kingdom ceased all dumping of munitions at sea in 1992 and continues to honour that commitment. The minister additionally states that: "There are no specific measures in place to manage chemical weapons and munition dumps on the seabed in the coastal waters of the United Kingdom, as the consensus of international scientific opinion is that munitions on the seabed present no significant risk to safety, human health or the marine environment. provided they remain undisturbed."
- 13 December In London, the British Association for the Advancement of Science and the Royal Society host a meeting on *Bioterrorism: Facts and Fictions*. On the panel are Prof. Harry Smith, chair of the Royal Society's report on biological weapons [see 6 Jul 00], Dr Patricia Troop, deputy chief medical officer and Prof. Malcolm Dando of the University of Bradford. Prof. Smith raises the lack of an informed debate on bioterrorism: "If the effects of biological agents are exaggerated beforehand, it is very likely that people will panic, regardless of whether they are directly affected. Therefore, it is essential that members of the public are provided with enough accurate information so that they can respond appropriately to the threat of bioterrorism."
- **13 December** From London, the journal *Nature* publishes an article on the transmission potential of smallpox in contemporary populations, written by researchers at the Centre for Applied Microbiology and Research in the United Kingdom. The paper concludes that smallpox would spread rapidly, with each infected individual passing the disease to between 6 and 12 others.
- **13 December** In Washington, US President Bush formally announces that the United States is withdrawing from the ABM Treaty. Formal notification is given to the Russian government by the US ambassador in Moscow, and to the governments of Ukraine, Kazakhstan and Belarus. The effective date of withdrawal will be in six months time.
- **13 December** In the United States, government officials acknowledge that the Dugway Proving Ground in Utah has produced weapons-grade anthrax over the past decade. This is the first such admission since the US offensive BW programme was cancelled in 1969. A spokesperson for Dugway states that all of the facility's anthrax is well protected

and accounted for. Officials claim that the small amounts of anthrax produced at Dugway are used for defensive research and that the research complies with all current treaty obligations. The Dugway facility is the only laboratory known to have recently produced anthrax in the finely processed powder form. Officials from the Dugway facility state that they are fully cooperating with the FBI and its ongoing investigation into the numerous anthrax cases.

- **14 December** In the US House of Representatives, the Subcommittee on Technology and Procurement Policy of the Committee on Government Reform conducts a hearing on the dissemination of information and bioterrorism.
- **14 December** In the United States, the *Federal Register* announces a series of meetings of the Defense Science Board's Task Force on Defense Against Terrorists' Use of Biological Weapons during the coming year.
- **14–15 December** In Laeken, Belgium, the 15 heads of state and government of the European Union meet as the European Council. Among the conclusions of the summit is the following: "The European Council invites the Council and the Commission to move swiftly towards finalising the programme to improve cooperation between Member States with regard to threats of the use of biological and chemical means; the work of the European Civil Protection Agency will provide the framework for such cooperation."
- **15 December** In Athens, the Greek government has ordered 150,000 doses of smallpox vaccine from the Danish biotech company, Bavarian Nordic.
- **15 December** In the United States, the third report of the Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction (also known as the Gilmore Commission) is released [see 31 Oct].
- 17–18 December In Brussels, the European Commission and Belgium, which currently holds the six-month rotating presidency of the European Union, convene a workshop on NBC terrorism. The meeting is attended by specialists from different fields, including civil protection and health, to discuss nuclear, biological and chemical threats. The goal of the meeting is to stimulate better collaboration and coordination between actors in the relevant fields. The Commission will subsequently organize and fund the most urgent actions necessary.
- 18 December In the UK House of Commons, the Foreign Affairs Select Committee's report on *British–US Relations* is published. Among its conclusions is the following: "We conclude that the only way to establish whether states are developing biological and toxin weapons is to establish a mandatory, on the ground challenge inspection system to verify compliance to the Biological and Toxin Weapons Convention. We recommend that the Government work with the US and other allies to agree such a verification regime, by which states' compliance with the BTWC can be established." Later, the report recommends "that the Government highlight to the US Government the value and importance of securing legally-binding multilateral agreements to control the proliferation of weapons of mass destruction.". The later response from the government includes the following: "The

Government is continuing to work with the United States and all other States Parties to the Biological and Toxin Weapons Convention in order to seek agreement on means to strengthen the Convention. We recognise the difficulty of this task given the decision by the United States in 2001 that the draft Protocol to the Convention did not meet their requirements. The UK remains committed to giving teeth to the Convention by a range of measures that include effective investigations of suspect activity. The Government will shortly be publishing a detailed paper setting out its views on countering the threat from biological weapons."

When giving evidence to the Committee on 20 November, the Foreign Secretary had said: "It happens that on the protocol for the Biological Weapons Convention we have a different view from the United States. That is well known and I have gone into great detail with colleagues in the United States to ascertain the strength of their concerns about this ... and to take them through our arguments against the position which they have adopted. It does illustrate the nature of the relationship that, notwithstanding the fact that there is this obvious difference of view about the protocol for the Biological Weapons Convention, we continue the discussions in a cooperative way and we hope to see some movement on this by the United States." He adds later: "I agree with you ... on the importance of this Convention and the fact that you can only prevent the spread of biological weapons by direct inspection."

Also published now is the report of the Defence Select Committee on The Threat from Terrorism. During the course of its inquiry, the committee had visited Dstl at Porton Down and had received evidence from Graham Pearson and Alastair Hay, Among the report's conclusions are the among others. following: "Although, under the Chemical Weapons Convention, declared stockpiles do not have to be destroyed until 2007, while Russia retains its large holdings other countries may feel let off the hook of destroying their own We are concerned also that expertise may stockpiles. proliferate, but our more immediate concern, is that the weapons themselves may find their way into the hands of terrorist groups. Although we have seen no evidence that either al Qaeda or other terrorist groups are actively planning to use chemical, biological and radiological weapons, we can see no reason to believe that people, who are prepared to fly passenger planes into tower blocks, would balk at using such weapons. The risk that they will do so cannot be ignored." The Committee also announces that it is commencing a new inquiry on Defence and Security in the UK Following the 11 September Terrorist Attacks.

18 December In the UK House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw responds as follows when asked which countries possess chemical and biological weapons: "There are four states parties to the Chemical Weapons Convention (the US, Russia, India and another state party) that have declared possession of chemical weapons, to the Organisation for the Prohibition of Chemical Weapons. They are currently in the process of destroying them, in accordance with their obligations under the Convention. Information received in confidence from foreign governments is exempt under Exemption 1c of the Code of Practice on Access to Government Information. The development, production and stockpiling of biological weapons was prohibited by the Biological Weapons Convention of 1972. ... It has been the

policy of successive Governments not to comment on specific intelligence matters or assessments."

Answering another question, Under Secretary of State and Minister for Veterans' Affairs Lewis Moonie declines to place in the Library of the House copies of reports produced by the Chemical Defence Establishment, Porton Down in 1973 and 1971, entitled "Wind speed and miosis from nerve agents" and "Estimation of the concentrations of nerve agent vapour required to produce measured degrees of miosis in rabbit and human eyes" respectively. The minister explains his decision thus: "This document is classified Confidential. It contains an assessment of the effectiveness of nerve agent in field situations and the release of this report would assist potential proliferators. I am therefore withholding this information in the interest of national security under category 1 of the Code of Practice on Access to Government Information."

- **18 December** In Ottawa, at an European Union–Canada summit, a joint statement is adopted which includes the following: "We will continue our effort to pursue the negotiations of an implementation and compliance mechanism for the Convention on Biological Weapons."
- 19 December In Washington, chairman of the Russian Comptroller's Office, Sergey Stepashin, meets with US Vice-President Dick Cheney to discuss the restructuring of Russia's Soviet-era debt to the United States by offsetting its expenditure on chemical weapons destruction. In a meeting with the head of the General Accounting Office, Stepashin agrees to a joint audit of the Russian chemdemil effort. The investigation will examine the efficiency of the equipment provided to destroy chemical weapon and into how US money for the programme is being spent.
- **19 December** In the United States, the Food and Drug Administration completes its pre-approval inspection of the BioPort anthrax vaccine facility. The inspection report issued to BioPort contains seven observations, many of which were satisfactorily addressed during the inspection. Based upon the firm's submissions, the observations during the inspection and pending an adequate response to the observations, the FDA will decide whether to license production of the anthrax vaccine. Before the vaccine can be released, the FDA also has to approve BioPort's contract filling facility, Hollister-Stier Laboratories.
- **19 December** In the United States, the National Academies announce the appointment of Richard D Klausner as special advisor to the presidents for counterterrorism. He will take up the position on 1 January 2002. Also today, the National Academies new Committee on Science and Technology for Countering Terrorism begins its first two-day meeting.
- **20 December** Libya has notified diplomats in the Netherlands that it is ready to accede to the Chemical Weapons Convention [see 19 Nov Libya], according to the *New York Times*. The OPCW Director-General is reported to have received a private commitment from Libya that it would accede in the coming weeks.
- **20 December** In London, the UK Defence Secretary, Geoff Hoon, and the director-general of the Russian Munitions Agency, Zinoviy Pak, sign a bilateral agreement on the provision of financial support to Russia's chemdemil efforts.

The UK contribution of £12 million over three years had been announced over a year ago [see 30 Oct 00] with the intervening months taken up with the negotiation of the agreement which provides the legal basis for the provision of assistance. As an initial project, the United Kingdom will fund construction of the water supply at the Shchuch'ye destruction facility which is essential for the operation of the facility.

- **20 December** In the UK House of Lords, the government responds as follows when asked for its evaluation of developments at the 5th BWC Review Conference [see 7 Dec]: "Her Majesty's Government regret that it was necessary to suspend the Biological Weapons Review Conference as it was not possible to reach a consensus on the continuation of a multilateral negotiating forum. The United Kingdom will use the intervening period to consult widely with all states parties in order to determine the best way forward. We remain committed to achieving a binding agreement that will reinforce the international norm against biological weapons."
- **20 December** The *New York Times* reports on the claims of an Iraqi defector that the Iraqi government has been working on at least 20 hidden sites for weapons of mass destruction. Adnan Ihsan Saeed al-Haideri, interviewed in Bangkok, was a civil engineer and had personally worked on the renovation of secret facilities hidden in underground wells, private villas and underneath the Saddam Hussain Hospital in Baghdad.
- 21 December In Berlin, the German government responds to a Bundestag question on arms control policy in new international situation. State secretary Gunter Pleuger says that the government regrets the suspension of the 5th BWC Review Conference [see 7 Dec] and particularly the failure of efforts to agree a verification protocol to the BWC. He goes on to say that Germany, along with its EU partners and other like-minded countries, will continue its efforts to prepare concrete proposals for strengthening the BWC and that such proposals should be negotiated multilaterally based upon the mandate of the Ad Hoc Group.
- 21 December In the English Channel, the Royal Navy, anti-terrorist forces and customs officers stop a cargo ship, the MV Nisha, which had been transporting 26,000 tons of raw sugar from Mauritius and was destined for London. The operation had apparently been ordered following intelligence reports linking the Nisha to international terrorism and suggesting that the ship could be carrying guns, explosives or biological weapons. An initial search failed to find any suspect material. The ship is then subjected to a thorough search which also reveals nothing suspicious and it is eventually allowed on its way.
- 22 December The Wall Street Journal reports that two computers containing numerous files related to al-Qaeda's pursuit of weapons of mass destruction have been discovered in Kabul. The paper claims that one of the computers, purchased from a local Afghan, contains an outline of the group's chemical and biological weapons programme. In addition, documents have been discovered which detail the terrorist network's efforts to produce botulinum toxin, ricin, and cyanide. Despite the discovery of the documents and computer files, US Secretary of Defense Donald Rumsfeld states that US forces have found no evidence of chemical or biological weapons after inspecting 37 of 48 suspected sites.

- **24 December** In Tokyo, the Japanese cabinet approves a record defence budget for FY 2002. Among the expenditure is ¥17.5 billion for countering chemical and biological weapons, almost triple the previous year's allocation. The money will cover the purchase of protective clothing and vehicles for military personnel.
- **26 December** In Tokyo, relatives of Chinese victims of Japanese biological weapons attacks during the 1930s and 1940s are testifying for the last time [see 28 Feb]. the eight plaintiffs represent 180 Chinese people who are suing the Japanese government for the activities of Unit 731. The court is due to deliver its verdict early in 2002.
- 27 December The US White House issues a fact sheet on the Administration's review of nonproliferation and threat reduction assistance to Russia. Among the areas identified for expansion is the Redirection of Scientists programme. The fact sheet adds that "the Department of Defense will seek to accelerate the Cooperative Threat Reduction project to construct a chemical weapons destruction facility at Shchuch'ye, to enable its earlier completion at no increased expense. We welcome the contributions that friends and allies have made to this project thus far, and will work for their enhancement."
- **27 December** At UN headquarters, the Counter-Terrorism Committee of the Security Council should by now have received national reports on the implementation of Resolution 1373 [see 28 Sep] from all UN member states.
- **27 December** In the United States, the Food and Drug Administration approves the BioPort anthrax vaccine production facility following its earlier inspection [see 19 Dec].
- 29 December From Vienna, the Iraqi opposition group, the Supreme Council for Islamic Revolution in Iraq, claims that the Iraqi government has hidden a large number of long-range surface-to-surface missiles in a lake in western Iraq. The group also claims that the Iraqi government has embarked on a project to reconstruct a chemical weapons plant in Al-Kut. Apparently, 100 military personnel were exposed to a leak from the plant during its initial operations in November and many have suffered permanent injuries.
- **29 December** The London *Times* reports that al-Qaeda had conducted preliminary tests with biological and chemical weapons on animals [see 17 Sep]. The revelation is based on a detailed examination of hundreds of pages of documents recovered from a house in Kabul. Besides documents on how to produce a 'dirty' nuclear bomb, are documents on producing botulinum toxin.
- **31 December** In the United Kingdom, Palgrave publishes From Biological Warfare to Healthcare, Porton Down, 1940–2000 by Peter Hammond of the Centre for Applied Microbiological Research and Gradon Carter now a consultant on historical matters to Porton.
- **3 January** From OPCW headquarters, the Director-General issues a note outlining adjustments to the organizational diagram of the Technical Secretariat's top structure. The note also announces the creation of the Division of Special Projects (replacing the former Office of Special Projects) to which the

- health and safety and confidentiality and security offices are moved from the Office of the Director-General. The Deputy Director-General is given special responsibility for overseeing the secretariat of the 1st CWC Review Conference as it prepares for the event in 2003.
- **3 January** The UN Security Council's Counter-Terrorism Committee [see 27 Dec 01] has now received information from 113 countries on the steps taken to implement anti-terrorist measures as required by Resolution 1373 [see 28 Sep 01]. The report submitted by Canada mentions the introduction of legislation implementing the BWC [see 22 Nov].
- **3 January** The US Department of Commerce Bureau of Export Administration publishes revisions to the Commerce Control List due to Wassenaar Arrangement changes.
- **4 January** The US Department of Veterans' Affairs publishes fact sheets on Project SHAD (Shipboard Hazard and Defense) [see 19 Oct 01]. The three fact sheets deal with three separate BW tests conducted by the Department of Defense in the 1960s: Autumn Gold, Copper Head and Shady Grove.
- **6 January** In Tehran, the Association for Victims of Weapons of Mass Destruction lodges a complaint with a UN representative and with foreign ambassadors in the city against the states which supplied Iraq with weapons of mass destruction during the 1980–88 war between the two countries. The association also says that 60 Iranian veterans died during 2001 as a result of chemical weapons injuries sustained during the war and that 12 others have died during the past week.
- **7 January** From Almaty, Kazakhstan, it is reported that Japan has agreed to provide financial aid for the destruction of biological weapons facilities in Kazakhstan.
- **7 January** In Gorny, Russia, the country's first chemical weapons destruction plant is undergoing a "dry run", testing its equipment without the actual presence of toxic chemicals. Officials are optimistic that the chemdemil facility, which was completed in late 2001, will meet testing specifications and begin operations by July 2002.
- 8 January In the UK House of Commons, there is a debate on weapons inspections in Iraq. Answering MPs questions is Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Denis MacShane. On the status of the BWC, MacShane says: "We regret the failure of the United States to ratify the latest protocol. We are looking forward to working with the US through to the next meeting on the convention in November to arrive at a satisfactory international agreement. The events of recent weeks and months have shown that we need the strongest national security arrangements in that area and the strongest international verification procedures." Speaking further on the US approach to the BWC, MacShane says: "It is no secret in the House that Her Majesty's Government do not share the approach of the United States when it comes to strengthening international conventions and agreements to reduce proliferation, but the dialogue must continue. We welcome the fact that, although it was not possible to reach a conclusion at the fifth review conference on the biological and toxin weapon convention in Geneva last year, we are engaged in a dialogue to achieve that final agreement. Events in the United States — not least the

anthrax scare — have reinforced public opinion in America as to the importance of national and international agreements in this important field."

In addition, Under Secretary of State and Minister for Veterans' Affairs Lewis Moonie provides a list of incapacitating chemicals which have been tested on volunteers at Porton Down. The minister lists the following sensory irritants: CS (orthochlorobenzylidine malononitrile) and its ortho-bromo ortho-nitro. ortho-hydroxy, ortho-cyano, meta-hvdroxv. di-chloro and di-ethyoxy derivatives; CN or CAP (chloroacetophenone) and its ortho-nitro, meta-fluoro, and 2-hydroxy-5-methyl derivatives; Benzyl bromide derivatives including para-bromo, para-nitro, para-cyano, ortho-cyano and bromo-cyano; para-nitro and para- bromo benzyl iodides; BBC (bromobenzlcyanide); ethyl bromoacetate; ortho-xylene bromo-p-toluamide; dibromide and derivatives; (dibenzoxazepine); methoxycycloheptatriene; fumaronitrile; ammonia; ethyl alcohol; tri-n-propyl lead beta chloropropionate; DA (diphenylchloroarsine); DM (diphenylamine chloroarsine) and a range of chloroarsine derivatives; Capsaicin. He also lists the following centrally acting agents: LSD (D-lyseric acid diethylamide); BZ (3-quinclidinyl benzoate) and a range of other glycollates; oripavine and its derivatives; and a range of morphine derivatives and Pyrexal.

8 January In the UK House of Lords, the government is asked to explain its priorities regarding Iraq. The minister responsible replies thus: "One of the absolute priorities is to secure the return of the inspectors looking for weapons of mass destruction. We know that the UN weapons inspectors were unable to account for some 4,000 tonnes of so-called precursor chemicals used in the production of weapons; 610 tonnes of precursor chemicals used in the production of VX gas; and 31,000 chemical weapons munitions. So, yes, there is a great deal to look for, not to mention the fact that we know that Iraq has been doing its best to secure some nuclear weaponry as well." In addition, the *Export Control Bill* receives its second reading in the House of Lords today.

9 January In the UK House of Commons, Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw tells MPs: "Since the withdrawal of United Nations weapons inspectors in December 1998 there have been no independent inspections of Iraq's weapons of mass destruction programmes. While we cannot therefore make any categorical assessment of current Iraqi capabilities, we judge that since 1999 Iraq has pressed ahead with its chemical, biological and nuclear weapons programmes. We continue to urge Iraq to allow UN weapons inspectors into Iraq to disarm and monitor its ballistic missile and other weapons of mass destruction programmes as required under UN Security Council resolution 1284."

9 January In the United States, the CIA posts on its website an unclassified summary of its latest National Intelligence Estimate of *Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015*, prepared under the auspices of the National Intelligence Officer for Strategic and Nuclear Programs. According to the summary: "Most Intelligence Community agencies project that before 2015 the United States most likely will face ICBM threats from North Korea and Iran, and possibly from Iraq — barring significant changes in their political orientations — in addition to the longstanding missile forces of Russia and China. One

agency assesses that the United States is unlikely to face an ICBM threat from Iran before 2015." The summary also alleges that North Korea, Iran, Iraq, Libya and Syria all have active chemical and biological weapons programmes.

On the subject of terrorist attacks, the summary states: "Foreign nonstate actors — including terrorist, insurgent, or extremist groups that have threatened or have the ability to attack the United States or its interests — have expressed an interest in chemical, biological, radiological, or nuclear (CBRN) materials." The summary also addresses the threat posed by non-missile attacks on the United States: "Nonmissile means of delivering weapons of mass destruction do not provide the same prestige or degree of deterrence and coercive diplomacy associated with ICBMs. Nevertheless, concern remains about options for delivering WMD to the United States without missiles by state and nonstate actors. Ships, trucks, airplanes, and other means may be used. In fact, the Intelligence Community judges that US territory is more likely to be attacked with WMD using nonmissile means".

10 January In Khartoum, where he is attending a meeting of the Inter-Governmental Authority on Development, the OPCW Director-General is reported as stating that, on the information which he has received, Sudan does not possess any chemical or biological weapons.

10 January In the United Kingdom, a new strategy for combating infectious diseases is proposed by the Chief Medical Officer, Liam Donaldson. His report, *Getting Ahead of the Curve: A Strategy for Combating Infectious Diseases (Including Other Aspects of Health Protection)*, is premised on the fact that "at the beginning of the 21st century, infectious diseases are a major global threat: to health, to prosperity, to social stability, to security." To tackle this threat, the report proposes the establishment of a new National Infection Control and Health Protection Agency which would subsume existing agencies such as the Public Health Laboratory Service, the Centre for Applied Microbiology and Research, the National Radiological Protection Board and the National Focus for Chemical Incidents.

10 January US President George Bush signs into law *the Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act of 2002* (PL 107-116) which provides funding for bioterrorism preparedness in FY 02.

He also signs into law the Department of Defense Appropriations Act of 2002 (PL 107-117). The act provides \$1.1 billion for the US chemdemil programme and \$333,000,000 for improving force protection and the chemical and biological defence capabilities of the Department of Defense. Section 8164 of the act requires that the Secretary of the Army submit to Congress by 15 March a report containing an assessment of current risks under, and various alternatives to, the current Army plan for the destruction of chemical weapons. The act provides for \$403,000,000 funding for cooperative threat reduction programmes in the former Soviet Union and that \$30,000,000 should be transferred to the Department of State for the purpose of supporting an expansion of the Biological Weapons Redirect and International Science and Technology Centers programmes, to prevent former Soviet biological weapons experts from emigrating to proliferant states and to reconfigure former Soviet biological weapons production facilities for peaceful uses.

Attached is the Emergency Supplemental Act of 2002 which allocates the remaining \$20 billion of emergency funding approved in the wake of the 11 September attacks [see 14 Sep]. Included therein, is \$2.5 billion for the Public Health and Social Services Emergency Fund. Of this amount: \$865,000,000 is for the Centers for Disease Control and Prevention for improving State and local capacity; \$135,000,000 is for grants to improve hospital capacity to respond to bioterrorism; \$100,000,000 is for upgrading capacity at the Centers for Disease Control and Prevention, including research; \$10,000,000 is for the tracking and control of biological pathogens; \$85,000,000 is for the National Institute of Allergy and Infectious Diseases for bioterrorism-related research and development and other related needs; \$70,000,000 is for the National Institute of Allergy and Infectious Diseases for the construction of a biosafety laboratory and related infrastructure costs; \$593,000,000 is for the National Pharmaceutical Stockpile; \$512,000,000 is for the purchase of smallpox vaccine; \$71,000,000 is for improving laboratory security at the National Institutes of Health and the Centers for Disease Control and Prevention; \$7,500,000 is for environmental hazard control activities conducted by the Centers for Disease Control and Prevention; \$10,000,000 is for Substance Abuse and Mental Health Services Administration; and \$55,814,000 is for bioterrorism preparedness and disaster response activities in the Office of the Secretary.

President Bush also signs the Foreign Operations, Export Financing and Related Programs Appropriations Act of 2002 (PL 107-115) which provides funding for the State Department. Included is a total of \$313,500,000 for nonproliferation, anti-terrorism and related programs and activities.

10 January Officials at Aberdeen Proving Ground in Maryland, one of the storage sites of the US chemical weapons stockpile, announce that the 1,621-ton stockpile of mustard agent will be destroyed more than three years ahead of schedule. The chemdemil programme has been accelerated in light of the risks posed by terrorism. The new plan calls for neutralizing the agent quickly and inexpensively and then recycling the end products. It will also save about \$200 million.

11 January The *Baltimore Sun* reports that Pentagon officials have delayed their decision on how to destroy the chemical weapons stockpile at Pueblo Army Depot. The choice regarding what kind of technology to utilize in the destruction of the 780,078 mustard gas munitions stored at the site was supposed to be announced on 1 February, but will now not be made until March.

11 January The US State Department applies further [see 18 Jun 01] trade sanctions under the Iran Nonproliferation Act on Chinese entities; two companies, Liyang Chemical Equipment and China Machinery and Electric Equipment Import and Export Company, and one individual, Q C Chen [see 21 May 97]. All three are alleged to have provided chemical or biological weapons technology to Iran. The sanctions are announced on 24 January in the *Federal Register* and on 25 January the State Department explains that "the penalties were imposed on the Chinese entities for the transfer to Iran since January 1, 1999, of sensitive equipment and technology controlled by the Australia Group". The sanctions are later denounced by China as "unreasonable". A foreign ministry statement says that "China is opposed to any country

developing chemical weapons, and furthermore does not help any country develop chemical weapons."

11 January In Washington, US Undersecretary for Arms Control and International Security, John Bolton speaks at a briefing hosted by the Center for Nonproliferation Studies on "The Biological Weapons Convention: Challenges and Opportunities". Bolton begins by explaining the renewed US focus on compliance: "In the specific area of what we do in terms of international cooperation on what you might call the traditional arms control front, it seems to me that given the failure of existing arms control agreements to stop the threat that we now see from terrorists, one has to ask what exactly is the central focus of our interests? On what should we be concentrating? I believe it is beyond dispute that the main area of concentration in this area for states is compliance with existing treaty obligations. ... What one does in the biological weapons area in terms of compliance is something we're working on as we come up to the next session of the review conference in November. It was a major step forward this past November to get people to begin to acknowledge that instead of the endless treadmill of negotiations on the draft protocol, it is time to recognize that process is finished, that protocol will never come into force, and that further negotiations on it are going to be fruitless. With that in mind, we can all turn our attention to working on the subject of compliance and what concrete steps we can take next. The first objective, which I believe was achieved, was to gain recognition that compliance is the central issue and that focusing on the non-compliance states is the most important step thereafter."

Addressing the US rejection of the draft BWC protocol [see 25 Jul], Bolton says: "So the timing of the announcement was really driven by the mechanistic calendar schedule of the work of the ad hoc group and the timing of the meeting of the five-year review conference. But what we did in considering what the United States position would be was to survey the views of every government agency and department that had equity in what the American position would be. And it was reviewed very extensively, as only bureaucratic interagency reviews of this kind can do, over a several month-long period through many, many meetings, the net of which was essentially the unanimous recommendation of every government department and agency involved that the United States should reject the protocol. And this was carried through to decisions up to and including the Cabinet level."

During the subsequent question and answer session, Bolton is asked why the United States has not yet used the CWC challenge inspection mechanism. He answers thus: "This is a legitimate question. There are a number of things that we are doing that I can't really get into today. I acknowledge what you say. There are things we should be doing with Iran. The subject of our own destruction of schedule, financing and management of the OPCW, all of these are things that do require more attention. I personally plan to focus more on the chemical weapons. Life in the government is never perfect in that there are always new things to deal with."

13 January The New York Times reports that the US government is still releasing formerly classified documents which describe the technical aspects of biological weapons production. Many of these papers were written between 1943 and 1969, the period when the United States maintained an offensive biological weapons programme, but have been declassified over the years in an attempt to enhance federal

government transparency. The Bush administration is currently considering whether or not to restrict public access to these documents.

- **14–25 January** In the United Kingdom, there is another UNMOVIC advanced training course, this time on chemical weapons. Attending are 22 experts from 15 countries.
- **16 January** From Prague, *Mlada Fronta Dnes* reports that the Czech army is building a secret facility near Hradec Kralove for the study of dangerous pathogens such as ebola, plague and anthrax.
- 16 January In the UK House of Commons, the Under Secretary of State and Minister for Veterans' Affairs Lewis Moonie answers questions on the origins of chemicals used at the former Chemical Defence Establishment at Nancekuke [see 7 May 00]. Although there are no surviving records, Moonie reveals that "It is known that some chemicals were transferred to Nancekuke from the Ministry of Defence facilities at Sutton Oak, which closed in 1953, and the War Department factories which were situated at Randle. Valley and Springfields. Also chemicals, such as CS, would have been transferred to Nancekuke from other military establishments for destruction." In answer to a further question, on 25 January Moonie says that "records summarising the technical programme undertaken at Nancekuke indicate that in 1959, CN (chloroacetophenone) of both Belgian and Italian origin was transferred to Nancekuke. Some of the CN of Belgian origin was returned to Belgium during 1962 to 1967. Additional anecdotal evidence also implies that some of the nerve agent production plant built at Nancekuke contained equipment originating from Germany."
- **16 January** In London, the European Agency for the Evaluation of Medicinal Products (EMEA) and its Committee for Proprietary Medicinal Products publish a *Guidance Document* on the Use of Medicinal Products for Treatment and Prophylaxis of Biological Agents That Might be Used as Weapons of Bioterrorism. The document has been produced at the request of the European Commission's Enterprise Directorate-General. The guidance covers those agents in category A of the US CDC's list of 'select agents'.
- 16 January In Washington, at a Pentagon press briefing, US Secretary of Defense Donald Rumsfeld says the following when asked whether he has information that al-Qaeda had been working on weapons of mass destruction in Afghanistan: "The number of facilities keeps going up that are targeted, and it's now somewhere in the low 50s. And somewhere in the low 40s have already been accessed, but the test results from materials and information that came out of them has not all been produced back. So we're at varying stages. There's still a few yet to explore, a handful, and there's still some information to come back. The short answer is, to my knowledge, we have found a number of things that show an appetite for weapons of mass destruction - diagrams, materials, reports that things were asked for, things were discussed at meetings, that type of thing. In terms of having hard evidence of actual possession of weapons of mass destruction, we have — I do not have that at this stage, except to say that I think I've mentioned that in one case there was a high radioactivity count and it looks as though that was probably the result of depleted uranium on some warheads. There were

— there are canisters that have been found that clearly are — I shouldn't say that. We've not been in them yet. But externally they appear to be weapons of mass destruction, but until we get into them, look at them, analyze it, find out what it was, we're not going to know. And as we do, obviously, we'll let folks know." Questioned further about the canisters, Rumsfeld adds: "I've seen pictures of them. Externally, they've got stuff on them that make reasonable people think there's something not good in there, and we're going to check them out." He also suggests that the canisters are more likely to contain chemical agent, rather than biological or radiological material.

A spokesman for US Central Command later reports that the canisters are empty: "there's nothing inside", Colonel Rick Thomas is quoted as saying. This is despite the fact that the containers had a skull and crossbones symbol and warnings in Russian on the outside.

- 17 January In Tel Aviv, US and Israeli officials hold further talks on Iran's alleged attempts to acquire nuclear technology and other proliferation issues in the Middle East. The US delegation is lead by Undersecretary of State for Arms Control and International Security John Bolton. According to an unidentified US official interviewed by the *Jerusalem Post*, Syria is "working on biological weapons, and chemical weapons, too".
- **17 January** In the United States, the Sentencing Commission publishes proposed amendments to the sentencing guidelines to reflect the new and revised offences relating to terrorism included in the USA PATRIOT Act [see 26 Oct 01].
- **18 January** In Washington, the Monterey Institute of International Studies Center for Nonproliferation Studies hosts another [see 11 Jan] briefing, this time on *Biological Decontamination of Vozrozhdeniye Island: The US-Uzbek Agreement*.
- **18-19 January** In London, there is the first meeting of the International Bar Association's task force on international terrorism.
- **21-27 January** On San Jose Island, Panama, a second inspection of the chemical weapons which Panama claims the US abandoned is conducted by a team from the OPCW. The first OPCW inspection in June 2001 reportedly found both US and UK chemical munitions. Panamanian Foreign Minister Jorge Miguel Aleman has formally asked the United States [see 6 Sep 01 and 3 Nov 01] to remove the weapons in accordance with its obligations under the CWC.
- 22 January In Brussels, Spain submits to the Council of the European Union its work plan on the implementation of the Common Strategy on Russia [see 3–4 Jun 99]. Spain is the current holder of the EU presidency. Under the heading of "cooperation on non-proliferation and disarmament", the work plan includes the following: "Cooperation on and support towards the conventions banning chemical and bacteriological weapons; specifically, concertation during the follow-up to the Fifth Review Conference of the Biological Weapons Convention. Information and cooperation for destruction of existing stocks, especially under the Joint Action [see 25–26 Jun 01] establishing a cooperation programme with the Russian Federation on non-proliferation and disarmament. Cooperation on security and the control of materials that could

be used in the manufacture of weapons of mass destruction. Analysis of ways of exchanging information on forms of terrorism which involve the use of such weapons. Examine the possibility of cooperation on the control of exports of material capable of being used for the development of weapons of mass destruction. The political dialogue will be used to emphasise the importance of this area in countering attempts to proliferate this type of weapon, in the light of the terrorist attacks on 11 September."

22 January In the UK House of Commons, the Parliamentary Under-Secretary of State for Foreign and Commonwealth Affairs Ben Bradshaw tells MPs: "The last UN inspection team left Iraq on 13 December 1998. There have been no independent weapons inspections since then. In the absence of any independent inspections, we cannot make any categorical assessment of current Iraqi capabilities. We do, however, judge that since 1999 Iraq has pressed ahead with its chemical, biological and nuclear weapons programmes."

23 January The UN committee charged with monitoring sanctions against the Taliban discloses that members and supporters of the deposed regime remaining at large may possess Scud missiles capable of delivering conventional or chemical weapons. A UK official for the UN Monitoring Committee on Afghanistan says that the Taliban had acquired no less than 100 Scud missiles and four mobile Scud launchers before it was driven from power.

24 January In Geneva, US Undersecretary for Arms Control and International Security, John Bolton addresses the Conference on Disarmament's first session of 2002. chemical weapons he says that the United States is "alarmed by the continuing spread of dangerous technology to countries pursuing illegal programs. The United States is a strong proponent of the Chemical Weapons Convention, which provides several useful tools to combat chemical warfare programs. The United States has made effective use of the consultation provision of Article IX of the Convention to address our questions and compliance concerns. To date, we have conducted several visits at the invitation of other States Parties in a cooperative effort to resolve these questions and compliance concerns. In many cases, this has proven to be highly successful. The United States will continue to use such consultation mechanisms to enhance verification and promote full compliance with the provisions of the Convention." He goes on to say that: "Although bilateral consultations are not a prerequisite for launching a challenge inspection, the United States believes that challenge inspections may in some cases be the most appropriate mechanism for resolving compliance concerns. Some States Parties have sought erroneously to characterize the challenge inspection process as tantamount to an abuse of political power. On the contrary, challenge inspections were included as a fundamental component of the CWC verification regime that benefits all States Parties, both as a deterrent to would-be violators and as a fact-finding tool to address compliance concerns. They are a flexible and indispensable tool that, if viewed realistically and used judiciously, can be instrumental in achieving the goals of the Chemical Weapons Convention. I caution those nations that are violating the Chemical Weapons Convention: You should not be smug in the assumption that your chemical warfare program will never be uncovered and exposed to the international community."

On biological weapons, Bolton says: "The United States made its position crystal clear at the Fifth Review Conference of the Biological Weapons Convention late last year: we will not condone violation of the BWC. We flatly oppose flawed diplomatic arrangements that purport to strengthen the BWC but actually increase the specter of biological warfare by not effectively confronting the serious problem of BWC noncompliance. It is for this reason that the United States rejected the draft protocol to the Biological Weapons Convention and the continuance of the BWC Ad Hoc Group and its mandate, and offered an alternate way ahead. Regarding the BWC protocol, the United States was urged to go along with this proposal because it was 'flawed, but better than nothing.' After an exhaustive evaluation within the US Government, we decided that the protocol was actually counterproductive. New approaches and new ways of thinking are needed to prevent the proliferation of biological weapons. The United States presented a number of new proposals to do just this, including tightened national export controls, fully implementing the BWC by nationally criminalizing activity that violates it, intensified non-proliferation activities, increased domestic preparedness and controls, enhanced biodefense and counter-bioterrorism capabilities, and innovative measures against disease outbreaks. Many, if not all of these measures can begin to be implemented now. We look forward to discussing and refining them with all of you and hope that you will join us in endorsing and beginning to implement them as we prepare for the resumption of the BWC Review Conference next November."

At a later press conference, Bolton elaborates on the connection between states violating the BWC and those identified as sponsors of terrorism: "And looking at the states that are in violation of the BWC and are seeking other forms of weapons of mass destruction, it is striking to see the coincidence between that list of nations and the list of nations that are states sponsors of terrorism in the more conventional sense. So I think we have a fairly discreet group of countries that are both pursuing weapons of mass destruction and have been aiding international terrorism and I think that as part of the global campaign against terrorism, as President Bush has made clear, we are going to be addressing that in the months and years ahead."

24 January US Secretary for Health and Human Services Tommy Thompson announces plans for the release of the first instalment of more than \$200 million in funds from the more than \$1 billion in bioterrorism money designated for states to help prepare their public health infrastructures to respond in the event of a bioterrorism attack. The funds come from the \$2.9 billion supplemental bioterrorism appropriations that President Bush recently signed into law [see 10 Jan]. The remaining 80 per cent of the \$1 billion in state funds will be awarded once the Department receives the state plans called for in the initial funding round. Plans are due no later than 15 May.

24 January In the US House of Representatives, the Health Subcommittee of the Committee on Veterans' Affairs conducts a hearing on *Operational and Medical Readiness in the Active Duty Force*.

In addition, the Subcommittee on National Security, Veterans' Affairs and International Relations of the Committee on Government Reform conducts a hearing on *Gulf War Veterans' Illnesses: Health of Coalition Forces*.

24 January From London, the journal *Nature* publishes research on the third anthrax toxin [see 8 Nov].

28 January In Washington, the chairman of the Russian State Commission on Chemical Disarmament Sergei Kiriyenko visits US Vice-President Dick Cheney to discuss Russia's chemdemil programme and US assistance to it. The next day, Kiriyenko meets with US Secretary of State Colin Powell. In a later interview, Kiriyenko says that the US administration has agreed, in principle, to release funding for the Shchuch'ye chemical weapons destruction facility which had been frozen for the past two years by Congress. Kiriyenko also attends the World Economic Forum in New York and travels on to Canada on 5 February.

29 January The Department of Peace Studies at the University of Bradford in the United Kingdom posts on its website another in its series of *Review Conference Papers*, No 4: The US Statement at the Fifth Review Conference: Compounding the Error in Rejecting the Composite Protocol.

29 January In Washington, US President George Bush delivers his State of the Union to the Congress. Much of the speech is given over to further developing the US response to the 11 September attacks. President Bush focuses much attention on the next phase of the campaign against international terrorism: "Our nation will continue to be steadfast and patient and persistent in the pursuit of two great objectives. First, we will shut down terrorist camps, disrupt terrorist plans, and bring terrorists to justice. And, second, we must prevent the terrorists and regimes who seek chemical, biological or nuclear weapons from threatening the United States and the world." He continues: "Our second goal is to prevent regimes that sponsor terror from threatening America or our friends and allies with weapons of mass destruction. Some of these regimes have been pretty quiet since September the 11th. But we know their true nature. North Korea is a regime arming with missiles and weapons of mass destruction, while starving its citizens. Iran aggressively pursues these weapons and exports terror, while an unelected few repress the Iranian people's hope for freedom. Iraq continues to flaunt its hostility toward America and to support terror. The Iraqi regime has plotted to develop anthrax, and nerve gas, and nuclear weapons for over a decade. This is a regime that has already used poison gas to murder thousands of its own citizens - leaving the bodies of mothers huddled over their dead children. This is a regime that agreed to international inspections — then kicked out the inspectors. This is a regime that has something to hide from the civilized world. Referring to Iran, Iraq and North Korea, Bush says: "States like these, and their terrorist allies, constitute an axis of evil, arming to threaten the peace of the By seeking weapons of mass destruction, these regimes pose a grave and growing danger. They could provide these arms to terrorists, giving them the means to match their hatred. They could attack our allies or attempt to blackmail the United States. In any of these cases, the price of indifference would be catastrophic. We will work closely with our coalition to deny terrorists and their state sponsors the materials, technology, and expertise to make and deliver weapons of mass destruction. ... The United States of America will not permit the world's most dangerous regimes to threaten us with the world's most destructive weapons."

Forthcoming events

27–29 April, Certosa di Pontigiano, Italy — XIV Amaldi Conference

28 April–3 May, Spiez, Switzerland — CBMTS IV, (fourth in series of Chemical and Biological Medical Treatment Symposia), details on www.asanltr.com

21–23 May, The Hague — The International CW Demil Conference (CWD2002), details from dmil@dstl.gov.uk

2–7 June, Hunt Valley, Maryland — *Bioscience*

Review 2002: Confronting Chemical Threats with Medical Research, details on www.bioscience2002.com

16–17 June, Oegstgeest, the Netherlands — 17th Workshop of the Pugwash Study Group on Implementation of the CBW Conventions, *The Impending First CWC Review*

25–28 June, The Hague — Twenty-ninth session, OPCW Executive Council. Further sessions: 10–13 September, and 10–13 December.

30 January–1 February At UN headquarters, the Secretary-General's Advisory Board on Disarmament Matters holds a meeting at which issues related to biological weapons and the BWC and weapons of mass destruction and terrorism are on the agenda. On 30 January, the Department for Disarmament Affairs hosts a symposium on *The Future of the Biological Weapons Convention*. On the panel are BWC Review Conference chairman Tibor Toth, *New York Times* journalist Judith Miller and Alfredo Labbe Ville from the Chilean mission in Geneva.

30 January In the United States, Washington File conducts an interview with recently-confirmed Assistance Secretary of State for Nonproliferation John Wolf. Asked about ongoing non-proliferation initiatives, Wolf replies: "We have an aggressive set of initiatives under way on export controls, including in Central Asia where we are using supplemental funds for individual country plans. We have a bio-warfare initiative that will complement those that we previewed at the fifth Biological Weapons Review Conference. We shortly will preview with allies a series of BW countermeasures dealing with some of the domestic and international trade issues both in terms of practices and equipment." Asked specifically about chemical and biological proliferation, Wolf responds thus: "We need to initiate and implement a rigorous set of measures aimed at biological and chemical weapons trafficking and capabilities. We need to pay close attention to issues in South Asia. We need to augment export controls. We need to strengthen some of the international regimes as well as measures that we do bilaterally." On the subject of the BWC and cooperation with allies, Wolf says: "We are going to work with them. And we have a number of ideas that we expect to discuss with our friends and others on things relating to trafficking — bilaterally and multilaterally. Some of those ideas will be a complement to the measures described at the BWC Review Conference in Geneva. So there is a whole package of ideas, and you may find that in all of that it creates a common international sense of purpose. ... Meanwhile, you've got to get the substance right. So we're working on substance. Form ought to derive from the substance and not the substance from the form. We have to organize to accomplish real things as

10 Years Ago

31 January 1992 In New York, the UN Security Council meets for the first time ever at the level of Heads of State and Government. It issues a communiqué which states "The proliferation of all weapons of mass destruction constitutes a threat to international peace and security."

The communiqué also states: "The members of the Council, while fully conscious of the responsibilities of other organs of the United Nations in the fields of disarmament, arms control and non-proliferation, reaffirm the crucial contribution which progress in these areas can make to the maintenance of international peace and security. They express their commitment to take concrete steps to enhance the effectiveness of the United Nations in these areas."

"The members of the Council underline the need for all Member States to fulfil their obligations in relation to arms control and disarmament; to prevent the proliferation in all its aspects of all weapons of mass destruction; ... and to resolve peacefully in accordance with the Charter any problems concerning these matters threatening or disrupting the maintenance of regional and global stability."

On chemical weapons, the members of the Council state that "they support the efforts of the Geneva Conference with a view to reaching agreement on the conclusion, by the end of 1992, of a universal convention, including a verification regime, to prohibit chemical weapons".

Speeches on the statement are made by each of the Permanent Members of the Council in the following order: France (President Mitterrand), Russia (President Yeltsin), United States of America (President Bush), China (Premier Li Peng) and United Kingdom (Prime Minister Major). The other members of the Council at this time are Austria, Belgium, Cape Verde, Ecuador, Hungary, India, Japan, Morocco, Venezuela and Zimbabwe.

opposed to meeting to meet. In this administration, we like to know we are doing something real that can be accomplished rather than just meeting to talk."

30 January The US Central Intelligence Agency posts on its website an unclassified version of its latest six-monthly Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, covering the period through 1 January-30 June 2001 [see 7 Sep 01]. The report had earlier been transmitted to Congress as required under Section 721 of the FY 1997 Intelligence Authorization Act. The report repeats much of what the previous report in the series had claimed with respect to which countries the CIA believes possess or are developing CBW capabilities. Those reported as possessing or developing chemical or biological capabilities include Iran, Iraq, Libya, North Korea, Syria and Sudan. This report includes an additional section on chemical, biological, radiological and nuclear terrorism, which states: "The threat of terrorists using chemical, biological, radiological, and nuclear (CBRN)

materials appears to be rising — particularly since the 11 September attacks. Several of the 30 designated foreign terrorist organizations and other non-state actors worldwide have expressed interest in CBRN — although terrorists probably will continue to favor proven conventional tactics such as bombings and shootings. ... Among CBRN materials, terrorist groups are most interested in chemicals such as cyanide salts to contaminate food and water supplies or to assassinate individuals. Terrorist groups also have expressed interest in many other toxic industrial chemicals — most of which are relatively easy to acquire and handle — and traditional chemical agents, including chlorine and phosgene and some groups have discussed nerve agents."

- **31 January** In Brussels, the Dutch delegation to the public international law working group (also known as COJUR) of the Council of the European Union tables a proposal based on the HSP international criminalization convention. Delegates agree to transmit the proposal back to their capitals and discuss it in more detail at a later meeting.
- 31 January US Secretary for Health and Human Services Tommy Thompson sends a letter to state governors detailing how much each state will receive of the \$1.1 billion to help them strengthen their capacity to respond to bioterrorism and other public health emergencies resulting from terrorism [see 24 Jan]. The funds will be used to develop comprehensive bioterrorism preparedness plans, upgrade infectious disease surveillance and investigation, enhance the readiness of hospital systems to deal with large numbers of casualties, expand public health laboratory and communications capacities, and improve connectivity between hospitals, and city, local and state health departments to enhance disease reporting. The funds come from the \$2.9 billion bioterrorism appropriations bill recently signed into law by President Bush.
- **31 January** In the United States, the Food and Drug Administration approves the license supplements necessary for BioPort Crop. To proceed with routine distribution of licensed anthrax vaccine from its renovated facility. The FDA is also allowing three lots of the vaccine manufactured in the renovated facility to be released, after thorough testing and review.
- 31 January–6 February NATO conducts CMX 2002, a classified command post exercise involving a WMD threat to NATO member Turkey. The threat comes from the CBW-tipped Scud missiles of imaginary neighbour 'Amberland' and from 'Amberland's' suspected links to terrorist attacks on other NATO countries, including a bioterrorist attack in the Netherlands. During the exercise, differences reportedly emerge between NATO countries over whether to launch a pre-emptive strike against 'Amberland' with conventional weapons or to embark on an active information policy warning 'Amberland' of a heavy and swift response if it attacks Turkey. The exercise ends before an attack is carried out or before Article V of the North Atlantic Treaty is invoked.

This Chronology was compiled by Daniel Feakes from information supplied through HSP's network of correspondents and literature scanners.

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About this Issue

Readers may notice that this issue of the *Bulletin* is shorter than usual.

One reason is that two of our regular series, *Progress in Geneva* and *Proceedings in South Africa*, have now come to an end, perhaps only temporarily. In Geneva, the BWC Ad Hoc Group has not met since last summer and, although its mandate remains, it has scheduled no sessions. In South Africa, the trial of Brigadier Dr Wouter Basson has reached the stage where its happenings can as well be reported in the *News Chronology*.

Readers may also notice that the *News Chronology* section of this *Bulletin* is less eclectic than usual, although it is no shorter than many of its recent predecessors. This is because there has been a great upsurge in CBW-related news and publication these past six months, and HSP has found itself too leanly staffed to process it all properly within the publication timeframe.

A year ago, new information was coming into HSP from its scanners and monitors in different countries at a rate averaging about 35,000 words per day. Now that rate is approaching 150,000 — the equivalent of a large book each day, whose novel information content must be identified and then registered within the HSP data-bases. Our intention is to complete *CBW Chronicle* 55 during the month of April and to post on the HSP website the full *News Chronology* derived from it that would otherwise have appeared in this issue of the *Bulletin*. We apologise for the inconvenience we know this will cause for many of our readers.

Our expectation is that our current fundraising efforts will enable HSP to take on an additional staffperson. Subsequent *Bulletins* will then come out on time, and with a properly comprehensive and systematic coverage of events bearing upon the norms that underlie the CBW conventions.

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

Editors
Matthew Meselson
Department of Molecular and Cellular Biology
Harvard University
7 Divinity Avenue
Cambridge, Massachusetts, 02138
United States of America
[Tel: 617-495-2264. Fax: 617-496-2444]

Julian Perry Robinson
SPRU — Science & Technology Policy Research
University of Sussex
Brighton, BN1 9RF
England
[Tel: 01273-678172. Fax: 01273-685865]

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