

THE CBW CONVENTIONS BULLETIN

News, Background and Comment on Chemical and Biological Weapons Issues

ISSUE NO. 53

SEPTEMBER 2001

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

STRENGTHENING THE BIOLOGICAL WEAPONS CONVENTION

What next for the Ad Hoc Group?

After seven years of negotiation in the Ad Hoc Group of the States Parties to the Biological Weapons Convention, the United States has withdrawn support for the creation of an international system of declarations, on-site visits and challenge investigations that is the central element in the current approach of the AHG to strengthening the Convention. Despite this setback, the AHG should certainly not abandon the pursuit of its mandate from the 1994 Special Conference of States Parties. That mandate, which is in full effect and is without limit of time, calls upon the Group to

consider appropriate measures, including possible verification measures, and draft proposals to strengthen the Convention, to be included, as appropriate, in a legally binding instrument, to be submitted for the consideration of the States Parties.

The deliberations of the Ad Hoc Group and the preceding study of potential verification measures by the VEREX group of governmental experts have significantly advanced international understanding of the possibilities, and their challenges, for strengthening the BWC with a legally binding instrument, or protocol. For the AHG to abandon its task would be to dissipate this collective fund of experience and knowledge and to forfeit a unique opportunity to strengthen the BWC. Quitting would further risk sending a signal that the international community has given up on creating a united front to suppress biological weapons and that hostile exploitation of biotechnology is now inevitable. Such a signal would lend support to arguments within governments for initiating or intensifying activities inimical to the objectives of the BWC — the very opposite of what the Special Conference intended.

So what is it that the Ad Hoc Group should now undertake to do? The answer must come from national capitals, discussions within regional groupings and informal consultations within the Group itself, initiated by its Chairman, Ambassador Tibor Tóth of Hungary. As these deliberations go forward, suggestions from outside government may be of use. We offer three, each intended to further the work of the AHG in the development of effective and acceptable international measures to be incorporated into a legally binding instrument:

(1) Promote the conduct of voluntary bilateral and multilateral field trials of transparency and compliance measures at biodefence and industrial facilities, both within

and between the three regional groups of nations. The provisions of the AHG Chairman's composite draft protocol (posted on www.opbw.org) could be used as a baseline in joint practice trials not only of declarations, transparency visits and clarification procedures but, in due course, of facility and field investigations. The objective would be to develop a common base of experience on which to evaluate the utility and acceptability of various modalities and procedures for declarations and on-site measures.

(2) Develop standards for the design and harmonization of national measures, including domestic criminal legislation, pursuant to the obligation of each state party under BWC Article IV to prevent violations of the Convention anywhere on its territory.

(3) Formulate options for aid and assistance to countries threatened or attacked with biological weapons, as required under BWC Article VII, and for facilitating the acquisition and use of equipment and materials for the diagnosis and treatment of prevalent infectious diseases, an activity in support of BWC Article X.

Meanwhile, in deciding what compliance measures it can accept, the United States needs to ask itself more carefully than it previously has just what biodefence activities make sense and are compatible with the spirit and the letter of the Biological Weapons Convention, and what information about them needs to be kept secret. The location and general nature of legitimate biodefence work, if routinely declared under the provisions of a protocol, would generally be considered by other states as confidence building. But the same information, coming to light only as a leak to the media, risks eroding the constraints on borderline activities and fueling arguments for provocative or prohibited BW activities within governments elsewhere.

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The deterrent core of the current protocol approach is a mutually reinforcing system of declarations, on-site visits and challenge investigations. The objective, while acceptably safeguarding legitimate biodefence and industrial secrets, is to increase uncertainty within any government weighing the pros and cons of conducting activities prohibited by the BWC that such activities could be kept hidden. A fuller explanation of this approach is set out in the March 1998 issue of this *Bulletin*, pages 1-3. A majority of states in the Ad Hoc Group appear to believe that the Chairman's composite draft protocol adequately accomplishes these objectives. The United States does not. We submit that a solution-orientated attack on the problem has yet to attract the talent and effort it merits.

Finally, one must wonder if the United States has adequately appreciated the downside of its recent action. Having rejected the current protocol approach after participating in it for seven years, how will the United States regain sufficient political credibility to win support for any new proposals it may advance? Without a mutually agreed verification arrangement, how will the United States resolve questions about the military biological facilities at Ekaterinburg, Kirov and Sergiyev Posad that were engaged in offensive work under the Soviet Union? More generally, without a protocol, how will the United States find an international forum to undertake action to clarify other present and future ambiguities? Without an internationally supported protocol, and short of peremptory acts of war, how will the United States deal with facilities it believes to be engaged in prohibited activities? Without having to contend with declarations, on-site visits and investigations, will not a government contemplating a biological-weapons programme be more confident of being able to keep it hidden and therefore be more likely to embark upon it? And, without the provisions of a protocol that build confidence between states parties, how will the United States persuade others of the fact that it is not itself developing biological weapons, a perception that would be directly contrary to the US interest in preventing the spread of biological weapons? The existence of US criminal law against BW activities, applicable to individual persons but of dubious applicability to acts of state, is not a sufficient answer.

This is not to say that partial answers to some of these questions cannot be devised. But as time passes, the drawbacks of having renounced the current approach to a protocol and the opportunity it offers for enhancing international unity in the effective prohibition of biological weapons will come to be more keenly felt. That will be the time the United States takes another look at ways to minimize the cost and maximize the utility of the triad of declarations, visits and investigations around which the current protocol approach is built. Meanwhile, the Ad Hoc Group, including the United States, has much to do.

And for the impending Review Conference?

The mandate of the Ad Hoc Group does not include review of the operation of the BWC. That is the responsibility of conferences of the states parties, a responsibility that derives from the requirement in Article XII of the Convention for an initial review conference and from the decisions of each

successive review conference to authorize another. The Fifth Review will open in Geneva on 19 November.

The Convention's review conferences serve the essential purposes of reaffirming the international norm against biological weapons; of keeping the consensus understanding of its terms and provisions abreast of any relevant new scientific and technological developments; and of authorizing continuation of the review process itself. Review conferences help keep the BWC alive and responsive to changes in its context. But they are not enough.

What is needed in addition is an international entity representing all the states parties to give practical implementation to the provisions of the Convention. The 1994 Special Conference mandated the drafting of a legally binding instrument, including possible verification measures, which would accomplish precisely that. It must remain the ultimate goal. Meanwhile, anguish over the July setback, after a decade of work in Geneva, first in VEREX and then in the Ad Hoc Group, must not be allowed to deflect the states parties from tending to the basic needs of the Convention. The upcoming review conference could be the last opportunity for a whole five-year cycle for the states parties acting together to take new practical steps.

One modest but important step forward would be for the Fifth Review Conference to create a Committee of Oversight to serve the agreed interim needs of the Convention until an Organization for the Prohibition of Biological Weapons can be put into operation. The Committee's tasks would include following up the decisions of the Fifth Review Conference; promoting universal adherence to the Convention; and managing the orderly operation of the confidence-building measures agreed at the Second and Third Review Conferences and any other such measures that may be decided by the states parties. The case for such an interim supportive institution, an outline of the general functions it might serve, and a draft mandate that would bring it into existence, are put forward by Nicholas Sims in this issue of the *Bulletin*.

Whether through this, or some other scheme or schemes, what is essential is that the Fifth Review Conference reaffirms the norm and the understandings achieved by the states parties thus far and that it sets out a practical way forward, even if modest. The world needs to see that governments can act together to combat the menace of biological weapons; now more than ever.

Forthcoming events

24–28 September, The Hague
— Twenty-sixth session,
OPCW Executive Council

11–16 November, Agra, India
— 51st Pugwash Conference
*Challenges for Peace in the
New Millennium*

19 Nov–7 Dec, Geneva — Fifth
BWC Review Conference

24–25 November, Geneva —
Pugwash Workshop
*Strengthening the Biological
Weapons Convention*

10–13 December, Wiston
House, Sussex — Wilton Park
conference *Non-Proliferation:
Meeting the Challenges*, details
on www.wiltonpark.org.uk

NURTURING THE BWC: AGENDA FOR THE FIFTH REVIEW CONFERENCE AND BEYOND

Nicholas A Sims
London School of Economics

Article XII provided only for one Review Conference, five years after the BWC's entry into force. In 1980 it was touch and go whether the First Review Conference would reach agreement on convening another; its timing remained contentious until late 1984. The review conferences of 1986, 1991 and 1996 generated expectations of a continuing series at 5-year intervals. This is the pattern into which the Fifth Review Conference fits. The Conference will take place in Geneva during 19 November–7 December 2001.

Formal functions

All five conferences are primarily governed by the Article XII mandate “to review the operation of the Convention, with a view to assuring that the purposes of the preamble and the provisions of the Convention...are being realized.” This includes taking into account the impact of “any new scientific and technological developments relevant to the Convention.” That is their common agenda.

Each conference's final declaration has supplemented the common agenda with specific tasks laid upon the next conference. The Fourth Review Conference asked the Fifth also to consider the relevance of the provisions and implementation of the Chemical Weapons Convention (CWC) on the effective implementation of the BWC (updating the original Article XII provision that “negotiations on chemical weapons” be given particular attention); the effectiveness of confidence-building measures agreed at the Second and Third Review Conferences; the conclusions of the expected (post-Ad Hoc Group) Special Conference “and further action as appropriate”; and the UN Secretary-General's provision of staff and other resources required to assist the effective implementation of Fourth Review Conference decisions.

Informal functions

In practice, the review conferences have acquired additional, informal functions. These are performed imperfectly and unevenly (as indeed are the formally stated functions). However, they are essential for the nurturing of the BWC treaty regime. In the absence of other institutions, the evolution of that regime has depended heavily upon the review conferences and their final declarations performing four, inter-connected, functions in particular:

- Registering consensus on definitions and extended understandings of specific terms used in the Convention, especially those which reinforce the general purpose criterion and comprehensive coverage of Article I.
- Identifying and elaborating procedures within the framework of the Convention, notably Article V, using the latent potential of the text as it stands together with

the definitions and extended understandings it has accumulated through this review process.

- Reaffirming the positions established at earlier review conferences (the *acquis*) and moving beyond them to the extent consensus allows.
- Steering the evolution of the BWC treaty regime through the next five years.

In 2001 the third of these functions is vitally important. The Fifth Review Conference will need to hold the line and stop the BWC's *acquis* unravelling, even if not much forward movement is possible on this occasion. There is value in the cumulative drafting process, in which the last review's final declaration is the starting point and new language is added. Such cumulation deepens and extends the common positions, agreed procedures and politically-binding commitments which the BWC states parties are willing to endow with their collective authority. This time, cumulation may be relatively slight, because of the effort required to stop the BWC going backwards. But every little helps, especially in a pervasive climate of demoralisation and distrust following the US statement of 25 July and the resulting failure of the Ad Hoc Group on 17 August even to agree a procedural report, let alone conclude a Protocol.

The Ad Hoc Group and its Mandate

With regard to the Ad Hoc Group, the 1994 Special Conference mandate remains intact and suffices to authorise the convening of a 25th session and, if need be, subsequent sessions of the Group when circumstances allow the ‘strengthening’ process to be resumed. It must be hoped that the US will eventually be persuaded, if not to join in a consensus in favour of a Protocol along the lines of the 30 March composite text, then at any rate not to block consensus. If the US were to stand aside, the Group could proceed to record consensus (with the US position footnoted as necessary, on the analogy of those NATO decisions of the early 1980s in respect of which Greece and Denmark were frequently ‘footnote states’), conclude the Protocol and transmit it to a second special conference for adoption and opening for signature. Better late than never.

The Fifth Review Conference does not need to renew the Group's 1994 mandate, and the US may not allow it to. But by the same token, any attempt to discontinue or even amend it is likely to be opposed by pro-Protocol states. The result may well be silence on the subject of the mandate, in the final declaration of 7 December, together with a liberal sprinkling elsewhere of clauses along the lines of “without prejudice to the positions of States Parties on matters under negotiation in the Ad Hoc Group” to enable a final declaration to be agreed at all.

The worst outcome would be deadlock: a conference swamped by the backwash from the Ad Hoc Group. It is

vital to protect it from being so entirely overshadowed by the events of 25 July–17 August, and by recriminations over who was to blame, that it fails to agree even a modest set of advances on the *acquis* of 1980–1996. There is no shortage of suggestions for what might usefully be agreed under most of the substantive Articles of the Convention, to take forward the review process. The need now is for political leadership and diplomatic skill to ensure that the conference does something like justice to its formal agenda (minus, perforce, consideration of the non-existent conclusions of a Special

Conference yet to take place) and its additional, informal functions.

Steering the treaty regime

There is a strong case for paying particular attention in 2001 to the fourth of the informal functions listed above: steering the evolution of the BWC treaty regime through the next five years. This is not something at which previous review conferences have excelled. They have left the BWC to

DRAFT MANDATE FOR INTERIM SUPPORTIVE INSTITUTIONS

Proposed for inclusion in the Final Declaration of the BWC Fifth Review Conference, in the Article XII section after the standard paragraphs on future review conferences.

1. The Conference, conscious of the need for interim institutions in support of the Convention to bridge the five years' interval between the Fifth and Sixth Review Conferences, and without prejudice to the positions of States Parties on the strengthening of the Convention through a legally-binding instrument, requests its General Committee [to constitute itself as a continuing body until the Sixth Review Conference] [to elect x of its members to constitute a continuing body until the Sixth Review Conference] under the name [Committee of Oversight] [Continuing Committee] [Interim Committee] [Representative Committee] and in that capacity, under the authority of this Conference and without detracting from the functions of the Depositary Governments designated under Article XIV:
 - (a) to follow up the Final Declaration and decisions of this Conference;
 - (b) to exercise a general oversight over the effective application of the provisions of, and the balanced operation of, the Convention, including its programme of CBMs established by the Second and Third Review Conferences, in the interests of the States Parties as a collectivity;
 - (c) to assist States Parties in fulfilling their obligations under the Convention and their politically binding commitments, including the programme of CBMs, under the final declarations of successive review conferences;
 - (d) to promote universal adherence to the Convention, including the organisation of demarches on its behalf to States Signatories which have yet to ratify their signatures, to encourage their ratification, and to non-signatories, to encourage their accession to the Convention;
 - (e) to represent the States Parties to the Convention as a collectivity in relations with the United Nations, and with other organizations as appropriate;
 - (f) to establish, as it finds necessary for the exercise of its functions, subsidiary organs such as a Legal Advisory Panel and a Scientific Advisory Panel with appropriate terms of reference;
 - (g) to establish, in consultation with the Secretary-General of the United Nations, a small secretariat dedicated exclusively to the service of the Convention including this Committee and its Panels;
 - (h) to report to the Sixth Review Conference, including a recommendation on whether this mandate should be extended, with or without amendment, under the authority of the Sixth Review Conference to bridge the interval between the Sixth and Seventh Review Conferences.
2. The Committee shall meet no less often than once a year between the Fifth and Sixth Review Conferences.
3. The Committee shall operate by consensus.
4. The Committee may be invited by any State Party to assist in undertaking consultation and cooperation pursuant to Article V, and may accede to such an invitation provided no State Party objects, without detracting from the right of any State Party to request that a Formal Consultative Meeting be convened in accordance with the decisions of successive review conferences and the procedures agreed by them, under Article V, or to lodge a complaint with the UN Security Council under Article VI.
5. The Committee shall issue interim reports on its work, in addition to the report to the Sixth Review Conference required under paragraph 1(h) above. Such reports shall be addressed to all States Parties and shall also be made available to States Signatories, the United Nations, and other organizations as appropriate.
6. The Committee shall be financed *pro rata* as an appendix of this Fifth Review Conference.

evolve in an uncoordinated fashion, divergent and unbalanced as between the different sectors into which its treaty regime can be divided for purposes of analysis. To achieve convergence and equilibrium in its constructive evolution will require deliberate steering. But in the absence of any other treaty institutions it is up to the review conference to undertake such steering or create the means by which a representative body may act on its behalf; or it will not be done at all.

The treaty regime does need steering: it will not flourish through neglect. And it must be steered by its states parties collectively. The BWC is a fully multilateral treaty, binding 143 sovereign states, and it needs institutions to match.

Interim supportive institutions

What should these institutions be? In the long run, no doubt, the Organization for the Prohibition of Bacteriological (Biological) and Toxin Weapons planned in the Protocol will suffice. But until there is an OPBW with the experience and capacity to serve the needs of the Convention as well as the Protocol, the Convention requires a modest set of interim supportive institutions to nurture its treaty regime and help it to flourish as, with careful steering, it starts to overcome its long-recognised fragility.

In 1990–91 several such initiatives were proposed, and the Third Review Conference gave serious consideration to setting up an inter-sessional body or at least a secretariat unit to help states maximise the value of their newly enhanced programme of confidence-building measures.

A representative Committee of Oversight would do much to remedy the BWC's chronic institutional deficit. It should be served by a small dedicated secretariat.

That opportunity was narrowly missed in 1991. Now the case has re-emerged with new urgency. If the Fifth Review Conference cannot expect in three weeks to register much more than a lowest common denominator of agreement, it can at least make possible some progress after 7 December, by addressing the problem of the continuing dearth of institutional capacity.

Almost every useful advance one could imagine coming out of the Fifth Review Conference, and the taking forward of the *acquis* from the earlier Review Conferences, would benefit from continuing institutional capacity. The simplest way to create this capacity is to give the General Committee of the conference (its office-holders and regional group coordinators, plus regionally representative vice-presidents) a continuing identity and a mandate, to act on the conference's behalf until the Sixth Review Conference. Then its mandate might be extended, with or without amendment, to cover the interval between the Sixth and Seventh Review Conferences. (The Seventh Review Conference, in 2011, is the earliest date at which even on the most optimistic assumptions a permanent OPBW might be ready to permit integration of the Convention and Protocol institutions.)

Advantages of simplicity argue in favour of extending the life of the General Committee through 2001-2006 in the first instance. Its chairmanship would be straightforward (the presidency of the conference) and its funding, as an

appendix of the conference, would be *pro rata* as for the conference itself, thereby avoiding argument over two issues which vitiated the institutional proposals at the Third Review Conference.

The alternative of a smaller *bureau*, elected by the General Committee from among its membership (for example, retaining the conference office-holders and regional coordinators but not the vice-presidents), has also had its advocates. In the draft mandate set out in the box on the page opposite, which proposes functions and methods of working for the representative body, both variants are offered and a range of possible titles suggested.

Conclusion

Two things must be re-emphasised. First, the case for a modest set of BWC institutions is a long-established one, developed and articulated since the 1980s: it is not to be misperceived as an alternative to the Protocol or as insurance against the eventuality of definitive failure in the quest for a Protocol. Second, they must be seen as interim institutions, pending eventual integration of Convention and Protocol institutions in a permanent OPBW. They are not a substitute for an OPBW, and their creation would not be an alternative to continued pursuit of a legally-binding Protocol, open to all to join.

Deliberately, this text has been developed for the Article XII section of the final declaration, and not under the rubric of "further action as appropriate" which would relate it to the 'strengthening' process identified with the Ad Hoc Group and might cause it to be misinterpreted as a substitute for the conclusion of a Protocol.

The Fifth Review Conference can put in place the institutional means to steer the BWC treaty regime into constructive channels and nurture its evolution, pending the arrival of a Protocol and an Organization (the OPBW) which remain vital to its strengthening.

Nicholas A Sims is a Senior Lecturer in International Relations at the London School of Economics and Political Science, University of London. His most recent book is The Evolution of Biological Disarmament (OUP/SIPRI, 2001).

This article was adapted in part from 'Interim supportive institutions for the Biological Weapons Convention: the case for a representative body and advisory panels, pending institutional integration with the eventual Protocol Organisation (OPBW)', paper presented to the 14th Workshop of the Pugwash Study Group on the Implementation of the Chemical and Biological Weapons Conventions, Geneva, 18–19 November 2000; and from a presentation to the Harvard Sussex Program Seminar at the Foreign and Commonwealth Office, London, 30 March 2001, published as 'The functions of the BTWC review conferences: maximising the benefits from the Fifth Review Conference', in Graham S Pearson & Malcolm R Dando (eds), Strengthening the Biological Weapons Convention: Review Conference Paper [University of Bradford, Department of Peace Studies] no 2, April 2001.

THE US REJECTION OF THE PROTOCOL AT THE ELEVENTH HOUR DAMAGES INTERNATIONAL SECURITY AGAINST BIOLOGICAL WEAPONS

Graham S Pearson
HSP Advisory Board

The twenty-fourth session of the Ad Hoc Group negotiating a protocol to strengthen the effectiveness and improve the implementation of the Biological and Toxin Weapons Convention (BWC) opened on 23 July (see *Report from Geneva* in this *Bulletin*). There had been broad support for the timely conclusion of the Protocol as emphasized, for example, in the final communiqué of the G8 after its summit meeting in Okinawa a year previously:

We commit ourselves to work with others to conclude the negotiations on the Verification Protocol to strengthen the Biological Weapons Convention as early as possible in 2001. [*News Chronology* 23 July 2000]

The breadth of this support for the Protocol was explicitly confirmed during the first two days of the session in plenary statements made by over 50 of the 55 or so states parties engaged in the negotiation of the Protocol who urged that the Chairman's composite text should form the basis for the political decisions to adopt the Protocol before the Fifth Review Conference later this year. Consequently, the contrast was all the more marked when on the third day, the United States delivered a 10-page statement in which it said:

After extensive deliberation, the United States has concluded that the current approach to a Protocol to the Biological Weapons Convention, ... is not, in our view, capable of achieving the mandate set forth for the Ad Hoc Group, strengthening confidence in compliance with the Biological Weapons Convention. ... We believe the objective of the mandate was and is important to international security, we will therefore be unable to support the current text, even with changes, as an appropriate outcome of the Ad Hoc Group efforts.

It is immediately apparent from the statement that the United States is rejecting the approach that it — together with other states, most notably its NATO allies — has pursued over the past decade and more.

Analysis

The US statement of 25 July makes a number of assertions which do not stand up to detailed analysis.¹ It is evident that the United States, in rejecting the Protocol, is making a huge mistake — and, more to the point, one that is based on illogical assessments. The United States is primarily evaluating the Protocol against new national standards and not against the Protocol mandate that it not only agreed to but was instrumental in drawing up, having proposed many of the elements including mandatory declarations and facility visits. The end result of this rejection of the Protocol is that the United States will not be trusted by other states parties as a nation that lives up to its earlier promises as set out in official statements at the highest level. The damage that this mistrust will cause to international security when it involves the world's leading power will be incalculable.

In the days following 25 July, a number of statements were made by very senior members of the US administration that indicate serious misunderstandings about the draft Protocol. For example, Deputy Secretary of Defense Paul Wolfowitz said on 28 July:

What is at issue is a 210-page document which I doubt any other head of state has even bothered reading which in the name of making the treaty more enforceable would actually allow Libyan and Iraqi inspectors to start poking around American pharmaceutical companies. It's ill conceived, and that's the problem.

Another example is a letter from the US Ambassador to the United Kingdom published in *The Independent*, a London daily newspaper, on 28 July:

After long analysis, we have concluded that the protocol will not do the intended job. We believe, in fact, that it will make the world a more dangerous place. People would labour under a false sense of security: our defences would be exposed. ... Many nations believe that the proposed protocol is badly flawed, but argue that a bad agreement is better than nothing at all.

These statements are both factually incorrect — there is no provision in the draft Protocol for national inspectors to carry out visits, and a state may exclude international inspectors of a particular nationality if it wishes: as in the Chemical Weapons Convention. As to many nations agreeing that the proposed protocol is badly flawed, this is not borne out by the statements by the overwhelming majority of the states parties engaged in the negotiations. Whilst many states parties would have liked to see differences in the compromises adopted in the Chairman's draft Protocol, these states parties realise that the composite text has been skillfully crafted so as to provide a Protocol that will achieve the objectives of the mandate — the effective strengthening and improved implementation of the Convention.

The nub of the US rejection of the Protocol appears to be encapsulated in the briefing of 25 July at which the State Department said:

The protocol which was proposed adds nothing new to our verification capabilities. And it was the unanimous view in the United States government that there were significant risks to US national interests and that is why we could not support the protocol. Implementation of such a protocol would have caused problems ... for our biological weapons defense programs, would have risked intellectual property problems for our pharmaceutical and biotech industries and risked the loss of integrity and utility to our very rigorous multilateral export control regimes.

These assertions are all incorrect.

First, that the composite Protocol adds “nothing new” to US verification capabilities is not true. The Protocol requires mandatory declarations of the activities and facilities of greatest relevance to the BWC; the declaration

follow-up procedures through the randomly-selected transparency visits promote the consistency of declarations and address any ambiguity, uncertainty, anomaly or omission through the tiered declaration clarification procedures; the Protocol has measures to ensure the submission of declarations; and it also provides for field and facility investigations of compliance concerns. To assert that these add “nothing new to our verification capabilities” fails to recognize that there are no such provisions under the BWC alone. The question that states parties need to address is whether the Protocol with its declarations, visits and investigations add significantly to the apprehension of a potential violator that he might be exposed. There is no doubt that elements of the Protocol would together provide information, pieces of the jigsaw, that together build a consistent picture — or raise questions, anomalies and ambiguities which other states parties will seek to clarify through the Protocol provisions thereby enabling them to gain a much clearer appreciation, and understanding, of countries’ activities and programmes. There is likewise no doubt that the Protocol provisions would help significantly to clarify any remaining ambiguities about military facilities such as the status of the former Soviet facilities at Kirov, Sergiyev Posad and Ekaterinburg.

Second, the assertion that the Protocol would cause problems for the biological defence programmes of the United States is notably at complete variance with the assessments of all the other states parties engaged in the negotiations who also have biodefence programmes. There is nothing in the Protocol that requires the provision of any national security information in the declarations of biological weapons defence programmes. It is clear that international security — and confidence between states parties — would have not been as shaken as they were when *The New York Times* on 4 September disclosed programmes to create an anthrax “superbug” (previously created openly in Russia), to build a germ factory from commercially available materials and to build and test a Soviet-designed germ bomb if these had been the subject of declarations under the Protocol. It is indeed worrying when *The New York Times* says that “Administration officials said the need to keep such projects secret was a significant reason behind President Bush’s recent rejection” of the Protocol. Moreover, Article 13 of the Protocol explicitly states:

Nothing in this Protocol shall be interpreted as impeding the right of any State Party to conduct research into, develop, produce, acquire, transfer or use means of protection against bacteriological (biological) and toxin weapons, for purposes not prohibited under the Convention.

This is language identical to that in the Chemical Weapons Convention — and the United States has not protested that the CWC would cause problems for its chemical weapons defence programmes.

Third, the assertion that the Protocol would have risked “intellectual property problems” for the US pharmaceutical and biotech industries ignores the fact that the Protocol contains stronger provisions for the protection of confidential proprietary information (CPI) than are within the Chemical Weapons Convention. Furthermore, there are no requirements for the provision of CPI in any of the mandatory declarations. To believe the assertion would be to forget that under the CWC these same pharmaceutical and

biotech industries may be subjected to inspections — recognising that there is a continuum between chemical and biological agents and that toxins are covered by both Conventions. The frequency of visits to such facilities in the US under the projected Protocol is necessarily seven or less per year — a minute fraction of the numbers of inspections carried out by regulatory agencies. In Europe, industry recognizes that such visits will be rare and will not be nearly as intrusive as the visits carried out much more frequently by international, national and regional regulatory agencies whether concerned with health and safety of employees or with the safety and quality of pharmaceutical products.

Fourth, the assertion that the Protocol would have risked the loss of integrity and utility to the “very rigorous” multilateral export control regimes is simply not true. A study of Article 7 of the Protocol would conclude that the very opposite is the case. That article requires:

each State Party ... to review and, if necessary, amend or establish any legislation, regulatory or administrative provisions to regulate the transfer of agents, toxins, equipment and technologies relevant to Article III of the Convention ...

There are thus clear benefits — both in deterring and countering proliferation and in limiting the availability of materials and equipment for bioterrorism — for the international community and the United States from this requirement for all states parties to establish the regulation of such transfers. The Protocol makes no provisions, one way or the other, requiring the coordination of these national export control systems through any multinational framework although there are provisions enabling states parties to consult directly on transfers and, should they so agree, to inform the Executive Council and the Director-General about the consultations.

Conclusions may be drawn from this analysis of the US statement of 25 July for the United States and for other states engaged in negotiation of the Protocol.

Conclusions for the United States

The analysis makes a clear case for urging the United States to reevaluate the gains and costs of signing the Protocol compared to the costs and gains of rejecting it. Such an evaluation should especially take note of the comparison between what the Protocol regime would provide and what is available under the Convention alone.

A tabulation of the principal measures in the proposed enhanced regime compared with the procedures of the BWC alone was published in the last *Bulletin* which clearly illustrates the significant benefits from the Protocol. Such comparisons show that the Protocol regime brings significant and worthwhile benefits to the United States and to all states parties — both developed and developing — over and above the provisions to uphold the basic prohibitions and obligations of the BWC. In addition, the Protocol will be effective, over time, in building confidence between states parties that other states parties are indeed in compliance with the Convention, thereby reinforcing the norm that work on biological weapons, whether directed against humans, animals or plants, is totally prohibited.

An evaluation² of the gains and costs of signing the Protocol compared with those of rejecting it has shown that:

- In adopting the Protocol, states parties will be seen to have taken all possible practicable multilateral steps to obstruct and deter the proliferation of biological weapons.
- Signing and ratifying the Protocol will reduce the risk of biological weapons proliferation and use. Rejection of the Protocol would send the opposite signal, and it can be argued that the risk of biological weapons proliferation and use will be increased.
- Signing and ratifying the Protocol will bring significant benefits to the infrastructure of states parties in the areas of combatting infectious disease, biosafety and good manufacturing practice and thereby benefits in health, safety and prosperity for all states parties, both developing and developed.
- Overall, the adoption of the Protocol enhances the security of all. It provides a net gain to collective security. Rejection of the Protocol misses this opportunity and decreases collective security.

Conclusions for other states parties

The other states parties engaged in the Protocol negotiations should recognize that the product of their work over a decade of negotiations embodied in the Chairman's text would indeed provide an effective strengthening of the BWC. They should also recognize that the basis for the rejection of the Protocol by the United States at the eleventh hour is unsound. Consequently, the rejection by the United States should not be seen as providing a basis for the other states parties to abandon the negotiations.

Although, following the US statement of 25 July, there have been some suggestions that the composite Protocol text should be put onto the shelf for the time being, one has to ask the question — for what purpose? It is very clear that if at some future time, a couple of months, a couple of years or a decade or more hence, the United States indicates that it is ready to give further consideration to a Protocol to strengthen the Convention, it would be unrealistic not to expect the other states parties at that time not to want to reexamine the provisions in the composite Protocol text and there will then be extensive unravelling of what is an excellent package of measures in the Chairman's text resulting in a net loss of the benefits for security, safety, health and prosperity that are available from the Protocol. The United States statement that it intends to develop other ideas and different approaches to effectively strengthen the Convention ignores the reality that by having withdrawn from the Protocol at the eleventh hour, the United States has effectively killed any favourable multilateral consideration of any ideas, however meritorious, that it may now bring forward. There is simply no prospect of any strengthening of the biological weapons multilateral prohibition regime by any means other than the Protocol in the foreseeable future.

The other states parties should explore ways of taking the Chairman's text forward, perhaps in a resolution of the United Nations General Assembly, and start to bring the Protocol into force. After all, given that 65 states parties have to ratify to achieve entry into force and that it took the Chemical Weapons Convention, which had a similar requirement, four years to enter into force, the Protocol is likely to require at least four years. This provides time for

both the states parties and for the Provisional Technical Secretariat to work on persuading the United States that the Protocol is indeed in the best interests of both the United States and international collective security:

The Ad Hoc Group has essentially three options.

- To abandon the decade of effort to strengthen the BWC through a Protocol and send the message to the world that the other states parties do not have the political will and conviction to help themselves make a significant step forward by adopting the Protocol to strengthen the norm against biological weapons.
- To suspend negotiations for a period — which might be two months, two years or a decade. Realistically, this option is likely to result in unravelling of the Protocol text, achieving the same overall result of abandoning the effort to strengthen the BWC through a Protocol.
- To recognize that, in the Chairman's text, the Ad Hoc Group has crafted a Protocol that will successfully strengthen the effectiveness and improve the implementation of the BWC and to take this forward through a resolution to the General Assembly co-sponsored by all those states parties who spoke on 23, 24 and 25 July in favour of the early completion of the Protocol.

It is the last of these options that provides real benefits for all states parties — both developing and developed — and which would enhance global security. In parallel, the United States should be encouraged to reconsider its position and join the Protocol — but, if the United States does not, then the rest of the world should not miss the opportunity that the Protocol provides for a safer, more secure world.

It has long been recognized that there is a window of opportunity now for the completion and adoption of the Protocol to the BWC. Although the United States regrettably is failing to see the benefits of the Protocol for either itself or for global security, the other states parties should have the courage of their convictions and take the Chairman's composite Protocol text forward. History will show that in so doing the other states parties have taken a significant step forward to make the world a safer more secure place for all mankind.

Postscript

In the days following 11 September, UK Prime Minister Blair said: "We know that they would, if they could, go further and use chemical, biological, or even nuclear weapons of mass destruction"; UK Foreign Secretary Straw, also addressing Parliament, said: "We must therefore redouble our efforts to stop the proliferation and the availability of such weapons"; and President Bush, in his address to the US Congress, said: "We will direct every resource at our command — every means of diplomacy, every tool of intelligence, every instrument of law enforcement, every financial influence, and every necessary weapon of war — to the disruption and defeat of the global terror network". Here is case for further urging the United States to reconsider its rejection of the Protocol.

Notes

1. Graham Pearson, Malcolm Dando and Nicholas Sims. "The US rejection of the Composite Protocol: a huge mistake based on illogical assessments", in Graham S Pearson and Malcolm R

Developments in the Organization for the Prohibition of Chemical Weapons

The period under review, from early June until the first week of September, saw the OPCW reach the notable benchmark of having completed 1000 inspections. The 1000th inspection was concluded at an industrial site in Iran on 20 June. Of the inspections completed by 24 August, 649 were related to chemical weapons — conducted at chemical weapons production, destruction, or storage facilities or in relation to stockpiles of old or abandoned chemical weapons — and 397 inspections were carried out under the Article VI regime for chemical industry. Forty-nine states parties and 479 facilities and/or sites had received inspections during the first four years and four months of CWC implementation.

Other notable events included a planning meeting with the President of the International Union of Pure and Applied Chemistry (IUPAC). IUPAC has proposed to undertake a review of scientific and technological developments relevant to the implementation of the Convention — in preparation for the First Review Conference. Furthermore, the Secretariat completed a simulated challenge inspection in the United States and kicked-off the OPCW Associate Programme 2001 — now a key component of the Secretariat's efforts to promote scientific and technological development for the peaceful uses of chemistry, increase transparency in the chemical activities of member states, and improve the quality of national implementation.

The ongoing financial crisis at the OPCW continued to impair the ability of the Organization to implement its full programme of work for 2001, and all states parties in arrears to the Organization, including those who owe reimbursements under Articles IV or V, were encouraged to pay their outstanding amounts as soon as possible.

Executive Council

The Executive Council convened its twenty-fifth session during 27–28 June. This was the first regular session of the Council chaired by its new chairman Dr Abdel Babu Fatih of Sudan. As this session was convened to discuss mostly administrative issues, the agenda did not include items relating to industry verification and the unresolved issues under Article VI.

The Council also met informally on 26 June and on 30 August. On the first occasion, it discussed the 2000 *Verification Implementation Report*. The later meeting provided an opportunity for the Director-General to brief the permanent representatives on the current financial situation of the OPCW. During the period under review, informal consultations were held only once, on 14 June, to discuss sampling procedures. Additional informal consultations on

various issues under Article VI were scheduled to be conducted in early September, prior to the opening of the twenty-sixth session of the Council, scheduled to be held during 25–28 September.

The fourteenth meeting of the Council was convened on 15 August at the behest of Director-General and the permanent representation of the United States. The impetus for this meeting was the US plans for destruction and verification of the chemical weapons production facility (GB production and filling) at the Rocky Mountain Arsenal in Colorado. The Council would continue to examine the plans for destruction and verification of the CWPf at its next session in September.

New coordinators were appointed for the various clusters of issues under discussion by the Council: Santiago Onate Laborde (Mexico) on chemical weapons issues, Yong-kyoo Kim (Republic of Korea) on administrative and financial issues, Alexander Georgievich Khodakov (Russia) on legal, organizational, and other issues, and Richard Ekwall (Sweden) on chemical industry and other Article VI issues.

In his opening statement to the Council at its twenty-fifth session, the Director-General issued a call for states parties to demonstrate the political and financial will to support the full implementation of the Convention, and thus the work of the OPCW. In this context, he outlined for the Council members the current financial situation of the Organization.

The Director-General went on to emphasise that the Secretariat was conducting an ongoing analysis of the results of the industry verification regime. Through the end of 2000, 342 inspections had been completed under Article VI. As of 1 June 2001, 15 Schedule 1 facility agreements had been approved by the Council, and all but two of the states parties in which Schedule 1 facilities were located were actively working toward the completion of such agreements. The unresolved issues with respect to Schedule 2 facilities, such as the frequency of inspections and the declaration of imports and exports, had so far prevented meaningful progress on the conclusion of facility agreements for the majority of Schedule 2 facilities.

In pursuit of the fundamental goal of universality, the attention of the Council was brought to the impending visit of the Chairman to the Organization of African Unity (OAU) meetings in Lusaka, Zambia, as well as regional seminars in both the Republic of Korea and Jamaica, planned for October and November 2001, respectively. The Director-General proposed the convening of an "OPCW internal seminar" on universality in the Middle East before the end of the year. The Council noted both this proposal in particular and the Director-General's statement as a whole.

Verification Implementation Report 2000 At its twenty-fifth session, the Council noted the first part of the *Verification Implementation Report* for 2000, which covers the inspection and verification regime for both CW-related and industrial facilities. Under this agenda item, the Council also received a note submitted by the Director-General on the provision of annual information on national programmes related to protective purposes under Article X. The Council reminded member states of their obligation to submit such information annually and urged all those who had yet to do so, to make their declarations as soon as possible. As of 15 June, only 21 states parties had informed the Secretariat of their protective programmes; however, the Secretariat had calculated that based on declarations and data on transfers of Schedule 1 chemicals, at least eight additional states parties may have had such programmes to declare.

Also under this agenda item, the Council received a note from the Secretariat on verification at Schedule 1 facilities. This note addressed variations in the access accorded OPCW inspection teams at Schedule 1 facilities, and was the result of a review undertaken by the Secretariat of its procedures for systematic verification at such facilities, begun after the twenty-second session of the Council in December 2000. The review found that nearly all Schedule 1 facilities could be divided into three areas: production, support, and consumption. The Secretariat held the view that in order to fulfil its mandate, unrestricted access to all three areas of a Schedule 1 facility was required. In inspections of all 28 Schedule 1 facilities declared by the states parties, the degree of access granted to consumption areas of the three categories of facility: single small scale facilities (SSSFs), other facilities for protective purposes (OFPPs), and other facilities for research, medical, and pharmaceutical purposes (OFRMPhPs) had ranged from full to none. The Secretariat was of the opinion that unimpeded access to the consumption areas of OFPPs and OFRMPhPs was necessary in order to verify that the quantities of Schedule 1 chemicals handled by the facility were indeed consistent with the declared purpose of such a facility. The Council decided that a further session was needed for discussion on this issue, thus it will be revisited at the twenty-sixth session of the Council in September.

The Secretariat also presented the Council with a note regarding the declaration requirements for direct import and export by a Schedule 2 plant site. In a review of the situation, the Secretariat concluded that while a plant site becomes declarable based upon its activities relating to Schedule 2 chemicals above the relevant thresholds, a state party must, for each declared site, make an annual declaration indicating the total amount of such chemicals transferred by the relevant site in the course of the calendar year. This element of the annual declaration was not subject to any threshold. Some states parties were of the opinion that declarations of imports and exports by a Schedule 2 plant site were only necessary for amounts exceeding the relevant thresholds for Schedule 2 chemicals, while the Secretariat took the view that complete information with regard to imports and exports of scheduled chemicals by such plant sites was an important factor enabling the Secretariat to verify the non-diversion of Schedule 2 chemicals. The Council received this note from the Secretariat and will return to this issue at its next session.

Destruction of Chemical Weapons With regard to the repeatedly postponed decision on plans for verification of the destruction of Category 2 chemical weapons at a CWDF in Shchuch'ye in Russia, the Council again took up the issue, yet decided to return to it at its next session in September.

Plans for the verification of Category 3 destruction at Leonidovka, Seltso, and Pochep, all in Russia, were also considered, and the Council decided to return to these issues at its next session. The plan for destruction at Leonidovka was an amended version of the plan previously approved by the Council at its twenty-first session in May 2000.

Destruction & Conversion ofCWPFs The Russian conversion plans for two facilities at Novocheboksarsk, one which was previously used for the production of amino-mercaptan and the other for the production of chloroether, were considered by the Council at its twenty-fourth session, and twelfth and thirteenth meetings, but no recommendation was made to the Conference. The Council considered these requests again at its twenty-fifth session, but decided to return to both items at its next session. The Council was also scheduled to take up at its twenty-sixth session newly-submitted requests for the conversion of two production facilities at Volgograd — one used to produce sarin, and the other soman.

The Council recommended approval of the Russian request for the conversion of a facility previously used for filling mustard gas and lewisite mixture into munitions at Volgograd, as well as the conversion of a facility at Novocheboksarsk formerly involved in the loading of chemical sub-munitions into munitions. These recommendations would be considered by the Conference of the States Parties meeting in its seventh session in 2002.

Privileges and Immunities The Council approved privileges and immunities agreements with Austria, Belarus, and Philippines. Eleven such agreements have been concluded to date between the OPCW and its member states. The agreement between Austria and the OPCW was signed on 10 July during an official visit of the Director-General to Austria.

Amendment of Staff Regulations Under this agenda item, the Council addressed the issue of refunding national income taxes to staff members. Immunity from such taxation has been the norm within all intergovernmental organizations for much of the last century. However, current staff regulations in the OPCW provide for this refund only in the amount that the Organization was in turn reimbursed by the state party levying the tax. The International Labour Organization (ILO) had recently warned the OPCW that this policy was inconsistent with international law. To remedy this situation, an amendment was necessary to staff regulation 3.3. The Director-General proposed assessing states parties on the basis of gross and not net staff salaries (after the staff assessment), thereby creating a fund from which staff members could be reimbursed. The balance of these funds would be credited back to the states parties at the end of the financial year. Alternatively, this fund could be created via an assessment to states parties designed to raise EUR 1 million. Again the balance, with interest, would be credited back to the states parties at the end of the year. States

parties were urged to honour the obligation to reimburse national taxes paid on exempt income, and as an interim measure, the Director-General would be authorised to make such reimbursements to staff members. Decisive action in this matter would pre-empt any future, costly, ILO rulings against the OPCW. The Council decided to conduct informal consultations on this issue during the intersessional period and resume discussion at its next session in September.

Financial Matters On two occasions during the period under review the Director-General informed the Council of the status of OPCW finances and the implementation of the 2001 austerity measures. He stated that the austerity measures in place for much of the year had resulted in savings of EUR 5.4 million, but income for 2001 still stood at 10 per cent less than the required amount. This situation could be attributed to EUR 1.3 million in irrecoverable funds caused by the overestimation of income under Articles IV and V, higher than projected salaries and common staff costs, and the failure of nearly half the states parties to pay on time their 2001 annual assessments or their reimbursements under Articles IV and V. As of 30 August, EUR 15 million remained in the regular budget fund for the remainder of the year. If verification activities for 2001 were to continue apace, the Council would need to authorise a transfer of funds between budgetary chapters at its next session, or additional funds would need to be received from the states parties.

In early July, consultations were begun on the 2003 budget, with the expectation that it would represent a significant increase over the 2001 and 2002 austerity budgets — due to the acceleration in destruction activities and, consequently, verification activities. There is also a subsequent need for more inspector posts, as well as the necessity of new IT equipment and increases in other common staff costs. The expectation that new destruction facilities would be operating in both the United States and Russia in 2003 was partly responsible for the projected increases. The Secretariat would present a paper to the Council at its twenty-sixth session detailing the need for a budgetary increase of EUR 14 million, or more than 23 per cent.

The Secretariat had also prepared a note to be formally submitted to the Council at its twenty-sixth session on the possible options for recouping from states parties the inspection costs incurred under Articles IV and V. Of the numerous options explored, the solution favoured by the Secretariat was a process in which states parties subject to inspections under Article IV or V would pay a proportion of the anticipated inspection costs in advance, while the balance of the costs, plus an additional amount to compensate for the uncertainty inherent in such estimations, would be included in the regular assessment to all states parties. The balance would then be invoiced to the inspected states parties, and after they had paid in full, the monies would be reimbursed to the other states parties. This option would provide the Secretariat with enough cash on hand to complete a full programme of inspections for a given year, without creating a cash flow problem at the end of the year.

At its twenty-third session the Council had requested that the External Auditor perform a special examination of certain budgetary procedures and the interpretation of financial regulations relating to budgeting and invoicing

under Articles IV and V and the handling of cash surpluses/deficits. However, at its twenty-fifth session the Council decided that the need for such an examination no longer existed given the clarifications submitted, by the Secretariat, of many issues related to the OPCW budgetary process. The Council would instead make a request at its December session that the External Auditor include in his annual audit any of the issues originally intended for the special examination that remained outstanding.

The Advisory Body on Administration and Financial matters would meet in the third quarter of 2001, during 29–31 October, in order to provide a mid-term review of the finances of the Organization.

Both the states parties and the Director-General expressed their concern and dismay over the 2001 assessments stilled owed to the Organization, and the outstanding balances under Articles IV and V held mostly by three states parties (India, Russia, and the United States). The Director-General warned the states parties at both the Council session in June and at the informal meeting in August that further cuts to operational programmes would need to be made in 2001 if the monies due under the annual assessment and under Articles IV and V, totalling EUR 6.5 million as of 30 August, were not paid as soon as possible.

In his opening statement to the Council at its twenty-fifth session, the Director-General thanked both Germany and Portugal for paying their 2001 assessments in full. It should further be noted that on 12 July the United States paid its 2001 outstanding balance of about EUR 4.6 million, and five additional states parties paid the balance of their 2001 contributions prior to 30 August (Kenya, Mexico, Ukraine, United Arab Emirates, and the Federal Republic of Yugoslavia). However, the situation in relation to payments of assessed contributions remained unsatisfactory. As of 30 August, 64 states parties owed EUR 1.8 million under the 2001 budget; EUR 1.3 million of this sum was owed by three major contributors: Argentina, Indonesia, and Russia. The Organization was also owed EUR 3.4 million in assessed contributions for the period 1993–2000.

The outstanding balance of reimbursements under Articles IV and V stood at EUR 3 million on 30 August. During the period under review, Russia made a partial payment to the OPCW of the amount it owed under Articles IV and V. Of the major states parties that remained in arrears, India owed less than EUR 200,000, while Russia still owed about EUR 500,000, and the United States owed about EUR 2.2 million. These monies would need to be received by the OPCW before the end of September in order to ensure continuation of minimal programming and activities through the end of the year.

Thirty-one 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 OPCW.

Implementation of the planned programme of work for the remainder of 2001 was dependent upon receiving at least EUR 6.5 million of the 2001 annual assessment to the states parties, including EUR 3 million in Article IV and V reimbursements and EUR 0.23 million under the US–OPCW Tax Reimbursement Agreement. Without this income, more extreme austerity measures, which could effect verification and international cooperation and assistance activities, would become necessary.

The Director-General also emphasised to the states parties the importance of paying their 2002 assessed contributions — letters indicating the amounts due were sent out on 21 June — by the deadline of 1 January 2002.

Other Business The Council agreed to an upward adjustment in the annual salary of the Director-General of 5.1 per cent. Such action was called for by changes in the salary structures of the UN. This amount was, however, offset by an equal increase in the post adjustment, resulting in no real change in the amount received.

In accordance with the decision of the Conference of the States Parties at its sixth session, the Council requested that preparations for the establishment of an open-ended working group on the First Review Conference for the CWC, to be convened in 2003, begin at the earliest possible date. The Chairman would subsequently conduct informal consultations on the subject, and draft a relevant decision for the Council to adopt at its next session.

Other issues raised during the 2000 and 2001 Council sessions but not up for discussion during the most recent session included: challenge inspections, guidelines for determining the usability of old chemical weapons produced between 1925 and 1946, facility agreements, the scale of assessments, the classification of posts within the Secretariat, the classification and over-classification of confidential documents, and declaration requirements for adamsite.

The Council was scheduled to convene its twenty-sixth session during 25-28 September.

Actions by Member States

No signatory states or states not party to the Convention ratified or acceded to the Convention during the period under review.

Secretariat

Declaration Processing As of 1 August, initial declarations had been received from 140 states parties. Three initial declarations were still outstanding, all from those states that most recently became members of the Organization — Kiribati, Mozambique, and Zambia. However, 13 states parties had been informed that their initial declarations were incomplete (i.e., missing declarations under Articles III or VI).

With regard to annual declarations, as of 1 August, 56 states parties had declared their past activities for 2000 and 38 states parties had submitted their annual declaration on anticipated activities in 2001.

In his opening statement to the Council in its twenty-fifth session, the Director-General recalled his request at the twenty-fourth session of the Council for states parties to respond to any request from the Secretariat for clarification of declarations in a timely fashion, as so far the Secretariat had observed a very low level of response. Between 1 January 2000 and 31 May 2001, the Secretariat had made 240 requests for clarification, directed to 109 states parties. In all, only 26 per cent of these requests had been fully clarified. Those remaining were either partially clarified or no response was received at all. The fact that the majority of states parties submitted their declarations as classified

documents led to over 60 per cent of the requests for clarification being classified; they therefore took more time to process and deliver. A note on the status of such requests would be formally presented to the Council's twenty-sixth session along with a draft decision urging states parties to respond to such requests within 60 days, and making this topic a subject of regular review by the Council.

Inspections and Verification As of 24 August, 1,056 inspections had been completed or were ongoing. These activities took place at 481 sites in 49 states parties, including inspections of chemical weapons and chemical weapons-related facilities in Bosnia and Herzegovina, China, France, India, Iran, Japan, Russia, the UK, the United States, the Federal Republic of Yugoslavia, and another state party. The breakdown of inspections was as follows: 17 to ACW sites; 233 to CWDFs; 222 to CWPfFs; 140 to CWSFs; 58 to DOC plant sites; 37 to OCW sites; 97 to Schedule 1 facilities; 173 to Schedule 2 plant sites; 69 to Schedule 3 plant sites. Two additional inspections were conducted under special circumstances. OPCW inspectors had spent a total of 61,946 days on mission.

It was announced by the Director-General in his opening statement to the Council in its twenty-fifth session that, funds permitting, the Organization planned to carry out approximately 102 of the 132 budgeted industrial inspections in 2001, including 100 per cent of the Schedule 1 and DOC/PPSF inspections, 80 per cent of the Schedule 2 inspections and only 48 per cent of the budgeted Schedule 3 inspections. All CWDFs and CWSFs would be inspected, and there would be an undisclosed number of OCW and ACW inspections as well in the remainder of the year. As of 24 August, 58 inspections had been completed under Article VI in 2001.

On 27 July, the Organization successfully completed a week-long simulated challenge inspection in the United States. Ten OPCW inspectors, plus US personnel and international observers, took part in this exercise at a US facility in Maryland, supported by a specially formed mission support group at OPCW headquarters in The Hague.

In October 2001, the Secretariat would undertake an audit of the secure critical network, the network used to process and store any verification-related data held in electronic format by the Secretariat. During the period under review, the Secretariat received nominations from the states parties of national experts to participate in this process. Seven experts from five states parties (from Canada, France, Germany, Japan, and the United States) were selected to conduct the audit.

Destruction/Conversion As of 1 August the OPCW had overseen the destruction of 5,854 metric tons of chemical agent (Category 1) and 1.7 million munitions or containers — out of a declared total of 69,863 metric tons of chemical agent and 8.6 million munitions or containers.

In June and July Russia reportedly made significant revisions to its 1996 plan for the destruction of its chemical weapons stockpile. It was hoped that the revised plan would be approved by the Russian government and submitted to the OPCW at the September session of the Executive Council. The key points of the plan include a reduction of the number of full-scale destruction facilities from seven to

three (Shchuch'ye, Kambarka, and Gorny), in addition to three smaller-scale neutralisation facilities (Pochep, Leonidovka, and Maradykovsky). After neutralisation, the reaction products would be transported to the facility at Shchuch'ye for final destruction. Russian budgetary allocations for the destruction programme would increase from less than \$20 million to \$310 million. The timelines set out in the revised plan reportedly provided for the destruction of one per cent of Russia's chemical weapons stockpile by 2003, 20 per cent by 2007, and 45 per cent by 2008. It aimed for complete destruction of 100 per cent of the stockpile by 2012. This would require the extension of the timelines established under the Convention, which obliged possessor states to completely destroy their chemical weapons stockpiles by 2007. The Conference of the States Parties previously (in 2000) extended the first intermediate deadline by which Russia was to have destroyed one per cent of its stockpile of Category 1 chemical weapons from 29 April 1999 to 29 April 2002. The OPCW called upon Russia to officially submit its revised destruction plan, for approval by the Executive Council, as soon as possible.

The United States, the EU, and the rest of the international community were encouraged to contribute financially toward the destruction effort in Russia.

In his opening statement to the Council's twenty-fifth session the Director-General reminded states parties of their obligation to inform the Secretariat eight months in advance of when they intend to start operations at CWDFs. Recently, states parties had been providing less than adequate notice of such actions, which impacted the Secretariat's ability to complete the initial visit within the specified time frames and had budgetary considerations as well.

During the period under review, the Secretariat released a note on the calculation of residual production capacity of CWPFFs, with respect to their destruction or conversion for peaceful purposes. The methodology used takes two separate questions into account: how to measure destroyed production capacity in cases when the Secretariat and the declaring state party disagree whether certain items are specialised, as opposed to standard, equipment, and how to measure destroyed capacity when a facility is being converted for legitimate purposes.

Implementation of Article X While no activities under Article X took place during the period under review, much time was devoted to devising a strategic concept for the coordination and delivery of assistance, to be presented to the Council before the end of the year. In the fourth quarter of 2001 numerous activities, workshops, and training seminars would be undertaken in this area, dependent upon receiving adequate funding from the member states.

The Secretariat and the government of Austria are due to jointly host the Fifth Annual Assistance Coordination Workshop in Vienna, Austria during 15–19 October. The Workshop would enable states parties to review the recently-developed strategic concept for Article X implementation as well as share their own experiences with the provision of assistance. Austria would also demonstrate its offer of assistance under Article X.

The CWC Protection Network is scheduled to hold its second meeting during 19–20 November. The Protection Network was established under Article X of the Convention

to enable the Secretariat to react to requests by states parties for expert advice on their programmes for the development and improvement of a protective capacity against chemical weapons. The first meeting of this body — comprised of 18 technical experts from 16 countries — occurred in October 1999. A second annual meeting of the Protection Network, initially scheduled for October 2000, had to be postponed, and it will now immediately precede a workshop on "chemical alarms for civil protection", taking place from 21 to 22 November at OPCW headquarters.

Following up on the successful Swiss Emergency Field Laboratory Training Course (SEF-LAB IV) in May/June, the fifth SEF-LAB course would be offered during 2–7 December at the Swiss NBC Training Centre in Spiez. SEF-LAB VI is due to be held during 7–14 April 2002 in the same location.

Due to financial constraints within the Organization, the planned civil protection course in the Czech Republic and the medical defence course in Iran had to be rescheduled.

Implementation of Article XI A key component of the OPCW's activities in the area of international cooperation and assistance, the OPCW Associate Programme, began its ten-week course on 6 August. This was run for the first time in 2000, proved a great success, and has become a key component of the Secretariat's activities under Article XI. In its second year, 12 participants from the developing world or states with economies in transition will benefit from the Associate Programme's curriculum of practical and theoretical training in both CWC implementation and modern chemical industry operations. Canada and the United Kingdom provide financial support for this programme. The Secretariat plans to expand the programme and incorporate it into the annual schedule of Article XI activities.

During 5–9 November, the Secretariat will host a thematic workshop on strengthening national capacities for chemical analysis and monitoring for the sound management of chemicals. The workshop is intended to provide policy guidance to countries that intend to integrate their activities related to the establishment of an adequate infrastructure for soundly managing chemicals with their obligations under the CWC. Additionally, during this same time span, both basic and advanced national authority training courses will be held concurrently at OPCW Headquarters. The basic course, originally scheduled for February/March 2001, had been postponed due to the financial crisis of the OPCW.

The Secretariat also launched an ethics project, related to the work of a UN group of experts on disarmament and non-proliferation education, in which the OPCW is taking an active role. The project is intended to highlight the ethical dimensions of the CWC for chemists and chemical engineers, and to encourage the incorporation of issues related to chemical weapons disarmament into the academic curricula of these professions. To begin, a survey was posted on the OPCW Web site to gauge involvement in disarmament issues among the scientific community.

Owing to the financial situation on 2001, other activities under Articles X and XI planned for the fourth quarter of 2001 will be delayed until 2002.

Validation Group After its ninth meeting, 13–14 March, the Validation Group forwarded a list of validated analytical

data to the Director-General, which will be considered for inclusion in the Central OPCW Analytical Database by the Council at its twenty-sixth session in September. The Validation Group conducted its tenth meeting during 17–18 July and forwarded the list of validated analytical data to the Director-General for appropriate action. The Group suggested that an indication of those states parties who contributed to the lists of new validated data be submitted to the Council. Also discussed were the naming rules and the shift toward submitting data in electronic format as opposed to hard copy. Contributing laboratories were requested to make their submissions in one of a selection of electronic formats. The eleventh meeting of the Validation Group will be held during 13–14 December.

During the period under review, the CD-ROM version of the Central OPCW Analytical Database was made available to states parties. This certified electronic version contained 521 mass spectra adopted by both the first and second sessions of the Conference of the States Parties. A second version of the electronic database, containing 534 mass spectra, will be released before the end of the year.

Proficiency Testing The ninth proficiency test began on 2 April with 16 laboratories participating. In order to minimise the costs incurred by the Secretariat, a laboratory in Germany prepared the samples and they were evaluated by the UK facility at Porton Down, at no expense to the Organization. A meeting was held on 19 July to discuss the results of the ninth proficiency test, which will be presented to the Executive Council in September. The tenth official proficiency test will take place in early November — Finland has offered to evaluate the results and the Netherlands has made a similar offer to prepare the samples.

Legal Issues As of 15 August, 86 states parties had yet to respond to the legislative questionnaire first distributed in July 2000. The results of the questionnaire should prove integral to the work of the Secretariat in supporting implementation of the Convention, as well as in preparing for the 2003 review conference.

In June, the Secretariat released a two volume *Survey of National Implementing Legislation*. This survey covered 18 separate topics of relevance to implementing the Convention at the national level: prohibitions; penal provisions; extraterritorial application; legal assistance; definition of “chemical weapons”; declaration obligations; the regime for scheduled chemicals; inspections and access; inspection equipment; samples; privileges and immunities of inspectors; confidentiality; liability; composition, mandate, and enforcement powers of the National Authority; environmental measures; and primacy of the Convention. The survey was based on information provided by 53 states parties on or before 15 May 2001.

The Latin American network of legal experts would not hold a second meeting until 2002.

Fifty-five states parties had passed implementing legislation as of 1 September.

Official Visits On 27 June, a delegation from the Committee for Defence and Security of the Parliament of the Slovak Republic visited the OPCW. They were led by the Chairman of the Committee, Mr Vladimir Palko.

On 5 July the Director-General received the President of the Inter-American Development Bank, Mr Enrique Iglesias.

The Director-General made a two-day visit to Vienna during 9–11 July. He met separately with the Minister of Foreign Affairs, the Minister of Defence, and the Minister of Economics and Labour, as well as the Director-General of the International Atomic Energy Agency and the Executive Secretary of the Preparatory Commission for the Comprehensive Test Ban Treaty Organization Provisional Technical Secretariat. During the visit, the Director-General and the Austrian Minister of Foreign Affairs signed the privileges and immunities agreement between the OPCW and Austria. Important issues discussed during the meetings with Austrian ministers included universality of the Convention in the Middle East, the harmonisation of industry-related regulations under the Convention, opportunities for the EU to advance CWC implementation, and the timely destruction of the Russian chemical weapons stockpile.

The Director-General is scheduled to make a trip to UN headquarters in New York, in order to address the fifty-sixth session of the UN General Assembly (UNGA), set to open on 11 September. In this session, the UNGA is expected to formally adopt the UN–OPCW relationship agreement. The Secretariat has conducted a review, or preview, of the implementation of this agreement, which covered issues such as contacts and cooperation with other UN and UN-affiliated agencies, written and oral communication between the OPCW and the UNGA, use of the UN *laissez passer*, and implementation of the UN common system. While at the UN, the Director-General will also meet with representatives of states not party to the Convention in pursuit of CWC universality.

Outreach Activities The OPCW was represented by Executive Council Chairman Ambassador Babu Fatih at the Organization of African Unity (OAU) ministerial meeting in Lusaka, Zambia during 5–7 July. While there, the Chairman stressed the importance of universality of the CWC on the African continent, and the benefits of the CWC for international development and trade, in bilateral meetings with the foreign ministers of 16 African states not party to the Convention — eleven signatory states (Cape Verde, the Central African Republic, Chad, the Congo, the Democratic Republic of the Congo, Djibouti, Guinea-Bissau, Madagascar, Rwanda, Sierra Leone, and Uganda) and five non-signatory states (Angola, Egypt, Libya, Sao Tome and Principe, and Somalia). He delivered a personal message to the Foreign Ministers of these countries from the Director-General.

The Secretariat and the government of the Republic of Korea are due to co-host a seminar on universality and the destruction of chemical weapons in Seoul during 17–19 October. This seminar will focus on universality, CW-destruction, non-proliferation, Article XI, and regional security.

A regional seminar focusing on universality in the Caribbean region and Central America will take place in Jamaica in November 2001. This meeting will receive financial support from Canada.

Staffing In mid-August, Mr Herbert Schulz (USA) took up the position of Director of Administration. On 22 August,

Mr Gordon Vachon (Canada), was appointed Special Assistant to the Director-General (External Relations). He will officially take up the post in mid-October.

As of 31 August, 473 of the allotted 507 fixed-term posts in the Secretariat were occupied. Of these, 331 were in the professional and higher category and 142 were in the general service category. Including staff on short-term and temporary assistance contracts and others the total personnel strength was 522 from around 66 different nationalities. Following a decision by the Conference at its sixth session, the Secretariat continued to keep 30 fixed-term positions unfilled.

Subsidiary Bodies

Confidentiality Commission The changes to the Policy on Confidentiality that were suggested by the Confidentiality Commission when it met for its special session during 17–18 January were in the process of being formulated into a draft decision for consideration at the seventh session of the Conference in 2002. However, a date had yet to be set for the next regular session of the Commission, since its fifth session (planned for 18–20 April) was cancelled as part of the Organization's austerity measures.

Scientific Advisory Board (SAB) The SAB was actively preparing for the 2003 review conference. In pursuit of this, some members of the SAB, in their private capacities, attended the IUPAC planning meeting during 23–24 July to discuss the proposed review of the scientific and technological developments relevant to the Convention being undertaken by that organization, with the participation of its national constituent academies and societies. This review will focus on two areas: synthetic organic chemistry and how advances may effect the Convention, its

implementation, and the General Purpose Criterion, and analytical chemistry and how that field can contribute to the technologies and methods used in verification of the CWC. In July 2002, IUPAC are to convene a workshop at which the findings would be presented and discussed. IUPAC will involve the worldwide chemical industry in this review.

The SAB will hold its own discussions on scientific and technological developments and their relevance to the Convention in 2002.

Future Work

At its twenty-sixth session at the end of September the Council is expected to formally establish a working group on the First Review Conference, and provide this body with a mandate and terms of reference. Much work continues to be undertaken within all bodies of the OPCW — the SAB, the Secretariat including the Inspectorate, and the Council — with respect to the Review Conference and the identification of key issues and/or aspects of the CWC's implementation that merit discussion and debate.

Discussion of the 2000–03 budgets will also continue to figure prominently in the daily work of the OPCW and the 2001/2002 Council sessions. The twenty-sixth session of the Council will have numerous budgetary issues to address — related to the current austerity measures, the payment by states parties of their 2001 annual assessments and reimbursements under Articles IV and V, and programme delivery and daily operations in the fourth quarter of 2001. The budgetary deficiencies faced by the Organization are not likely to be resolved prior to the seventh Conference of the States Parties, now planned for 7–11 October 2002.

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

Strengthening the Biological and Toxin Weapons Convention

A four week session, the twenty-fourth, of the Ad Hoc Group to consider a legally binding instrument to strengthen the Biological and Toxin Weapons Convention (BWC) were held in Geneva from Monday 23 July to Friday 17 August. The previous Ad Hoc Group session held in April/May 2001 (see *Quarterly Review* no 15) had seen a significant step forward with the introduction of the Chairman's composite text and the recognition by the states parties that while the rolling text was the underlying basis for the negotiations, delegations expressed their views with regard to the composite text. There was consequently a real expectation that the negotiations of the Protocol could be completed prior to the Fifth Review Conference in November/December 2001 coupled with a recognition that the Chairman's composite text could provide the basis to achieve this. Although during the April/May session, the United States had spoken on the final morning to say that, although its position on the substance of this Protocol were well known

and many of those points were not reflected in the Chairman's text, the United States was carefully studying the text as a whole. Other states parties noted that, although the interventions made by a number of delegations on the composite text showed that views still differed on a limited number of issues, this should not allow the Ad Hoc Group to lose sight of the fact that there was a strong collective will to overcome such differences and to conclude the negotiations by the time line set out by the mandate. There had been appeals by some states parties to all participating governments to demonstrate the political will to achieve agreement of the Protocol.

Although the July/August session began promisingly with over 50 of the 55 or so states parties engaged in the Ad Hoc Group negotiations speaking on the first two days in favour of the Chairman's text being used as the basis for the political decisions needed to complete the Protocol prior to the Fifth Review Conference in November, the mood was

sharply changed on 25 July when the United States delivered a 10-page statement rejecting both the composite Protocol and the approach adopted in the Protocol. This effectively stalled the Ad Hoc Group negotiations — and certainly contributed to the failure to agree a procedural report on the July/August session. This failure in the early hours of Saturday 18 August has to be primarily attributed to the United States rejection at the eleventh hour of the Protocol when it was evident that many delegations had come to the July/August session expecting hard negotiations resulting in successful agreement of an agreed Protocol.

As there is no agreed procedural report of the July/August session, there is no formal statement as to which states parties and signatory states had participated. There is, however, information that can be gleaned from drafts of the procedural report which had to a large extent been agreed when the session ended — the nub of the disagreement related to how the report should deal with the rejection by the United States as that country was not prepared to agree any procedural report in which it was named or one in which there was reference to ‘one delegation’ or to ‘a delegation’. In the July/August session, 60 states parties and 3 signatory states participated; 4 more states parties than in the April/May session as 8 (Albania, Bosnia and Herzegovina, Cyprus, Ethiopia, Luxembourg, Malta, Venezuela and Viet Nam) participated in July/August whilst 4 (Bangladesh, Jordan, Philippines and Tunisia) did not. One more signatory state (Myanmar) participated than in April/May.

As, following the US rejection, there was much confusion in the Ad Hoc Group before the Group decided to work on the language of a report to the Fifth Review Conference which would have been incorporated in the draft procedural report, it was not surprising that in the draft procedural report, there was no listing of either Friends of the Chair or of the Facilitators to assist the Ad Hoc Group. There was a single working paper (WP.455) providing a statement by Cuba on the twenty-fourth session which Cuba had drawn to the attention of delegations in the last few hours of the session when there was no longer any translation facilities. Since there was no procedural report, there are no annexes containing either the composite Protocol or of the rolling text. However, a technical correction of the Chairman’s composite Protocol text had been issued to delegations prior to the July/August session as CRP.8 (Technically corrected version) dated 30 May 2001; this is simply an editorially corrected version.

The July/August session had some 17 AHG meetings with 12 of these being plenary; 7 were in the first week, 2 in the second, 3 in the third; and the remaining 5 in the final week. The distribution of meetings shows how the Ad Hoc Group had to take time for reflection and consideration following the United States rejection on the third day before engaging on the preparation of a draft procedural report in the third and final week. Most of the meetings opened as a plenary meeting when Ambassador Tóth asked if any delegation wished to make a statement. After any statement, or if there were no statement, the meeting would then become informal. The remainder of the time available was used for informal consultations primarily between the Chairman and delegations and regional groups.

The July/August session as usual saw a number of associated events involving NGOs. On 24 July there was an

EU/NGO meeting. Belgium, who have the current EU Presidency, distributed copies of the EU statement presented to the Ad Hoc Group on the previous day and statements were made by the University of Bradford Department of Peace Studies (“The Composite Protocol Text: A Net Gain for All States Parties”), VERTIC (“Reaching an Agreement on a BWC Protocol: Laying the foundation for a strong verification regime”), INES (“Concerning the Protocol to the Biological Weapons Convention”) and the Federation of American Scientists (“Cost-Benefit Analysis of the Chairman’s Text of the BWC Protocol”). These were then followed by a very lively debate and discussion between the representatives of the EU delegations and the NGOs.

A press release was issued on 24 July in which nine NGOs called on the Ad Hoc group to conclude a Protocol to the BWC before the Fifth Review Conference, saying:

The Protocol negotiations are the sole ongoing multilateral disarmament negotiations so their outcome will be of great importance to international security and non-proliferation. We urge the AHG to send the right message and bring the negotiations to a successful conclusion. The Protocol will be an important tool to help prevent the spread of biological weapons and fill a gap in the network of international disarmament and non-proliferation treaties.

On 25 July the Department of Peace Studies of the University of Bradford, UK presented and distributed to an audience of 60 individuals from 26 Ad Hoc Group delegations copies of Review Conference Paper No 3, *New Scientific and Technological Developments of Relevance to the Fifth BTWC Review Conference*, July 2001 and of Evaluation Paper No 21, *The Composite Protocol Text: An Evaluation of the Costs and Benefits to States Parties*, July 2001 (both available at <http://www.brad.ac.uk/acad/sbtwc>).

Later the same day an NGO seminar was opened by Ambassador Jayantha Dhanapala, the UN Under-Secretary-General for Disarmament Affairs. Other contributions were made by the University of Bradford Department of Peace Studies (“Why the Composite Protocol Needs to be Adopted Now: A Net Gain for All States Parties”), the Sunshine Project (“Bioweapons Negotiators Urged to Press Ahead: Spies and High Explosives are No Recipe for Security”) and the Federation of American Scientists (“Comments on the US Rejection of the BWC Protocol”).

In addition, in the final week of the session, on 15 August, the Department of Peace Studies of the University of Bradford, presented and distributed to an audience of 65 individuals from 22 delegations copies of Evaluation Paper No 22, “The US Rejection of the Composite Protocol: A Huge Mistake based on Illogical Assessments”, August 2001 (available at www.brad.ac.uk/acad/sbtwc). A video was also shown of the BBC World *Hard Talk* programme which had addressed the US rejection of the Protocol and had been transmitted worldwide on 30 July.

Political Developments

The Ad Hoc Group was poised at the start of its twenty-fourth session to move forward to successfully finalise the negotiation of almost seven years for a Protocol to strengthen the effectiveness and improve the implementation of the Biological and Toxin Weapons Convention. In his opening

remarks, Ambassador Tibor Tóth said that first, the session was about developing a Protocol and thus strengthening the Convention. Second, that the Ad Hoc Group must consolidate the composite Text at this session. Third, that the Ad Hoc Group must continue to negotiate based on the reality before it. In the nine-week period between the twenty-third and twenty-fourth sessions Ambassador Tóth hoped that every delegation had undertaken a long and detailed study of the composite Text and examined what it contains for each state party and what it contains for other states parties as well as what it does not contain for each state party and equally what it does not contain for others. In addition, delegations should have analyzed how the composite Text fulfils the mandate of the Ad Hoc Group and how it balances the existing mutually exclusive parts of the rolling text and the different objectives of all states parties into a coherent, workable and meaningful Protocol. He concluded by noting that negotiating the Protocol has been an act of co-operation among the states parties to the Convention and, as happens in most areas of co-operation, there has to be compromise in order to gain in the long run collectively. Ambassador Tóth said that now is the time for compromise and now is the time to really deliver on those promises of negotiation in the spirit of co-operation. He went on to say that whilst it would be necessary to make some changes to the composite Text, any such change must move the Ad Hoc Group forward in a consensus way, and changes must not move the Ad Hoc Group backward towards the rolling text notion of alternatives. In order to move forward, Ambassador Tóth said that the inconsistencies and omissions identified in the last session have been taken up by the editorial facilitators who had provided him with a new Technically Corrected Version of CRP.8 and delegations have been provided with copies of that document.

During the first two days of the session, over 50 of the 55 or so states parties engaged in the negotiation of the Protocol spoke in favour of completing the negotiation on the basis of the Chairman's composite Protocol text.

Iran said that it was determined to work towards a successful conclusion, and was ready to discuss the composite Text, with the expectation of the full and active participation of all delegations ready for trade-off, and for give and take. It was ready to achieve a common goal — the successful conclusion within the deadline.

China said it firmly believed more than ever in the successful conclusion of the Protocol — the only multilateral arms control treaty now under negotiation — will be not only conducive to strengthening the non-proliferation regime in the biological field but also beneficial to the international security system constructed on the basis of multilateral arms control treaties. This is exactly the time when the political will, sense of responsibility and spirit of compromise of all sides are put to the test.

The Russian Federation said that the Ad Hoc Group had an historic opportunity to strengthen considerably the BWC regime, prohibiting an extremely dangerous type of weapons of mass destruction, that it was important not to lose this opportunity, and resolute steps should be taken in order to successfully complete the important work of the past six years. Russia believed that a legally binding Protocol to the Convention had to be drawn up this year, in keeping with

decisions taken earlier by states parties. Russia is prepared to do this.

South Africa then spoke to emphasise that it is the task of the Ad Hoc Group, at this last session, to do two things — to complete its work, and to adopt a report, by consensus, to be considered by a Special Conference of States Parties to be held before the commencement of the Review Conference. South Africa went on to say that if opposition to biological weapons is to be sustainable in the long term, it is necessary that the international community as a whole take action and commit themselves to strengthening the norm against the development, production, stockpiling and use of these reprehensible weapons. South Africa saw a Protocol strengthening the implementation of the Biological Weapons Convention as a core element of the international security architecture. Moreover, this Protocol would not only provide a means to strengthen security, but would also provide important technical cooperation and assistance provisions that would enhance the international community's fight against the debilitating impact of disease on our peoples and on socio-economic development. The Protocol and the provisions contained in Article 14 would provide further tools in the fight against disease. South Africa placed an emphasis on the benefits that would be achieved for the continent of Africa and for the countries of the South as a whole, noting, however, that disease knows no boundaries — especially in the modern world with its advanced systems of communication and travel — and the countries of the developed world will also derive full benefit from the fight against disease, which will be assisted by the provisions of Article 14.

Belgium, speaking on behalf of the European Union and the associated states (totalling 28 countries) said that the EU reiterated its determination to respect the decision of the Fourth Review Conference to complete the negotiation of the Protocol prior to the Fifth Review Conference. The statement went on to say:

the European Union reaffirms that even if on certain points the Composite Text does not fully correspond to what we would like to see, nevertheless we think that it is a basis on which political decisions could be taken. Indeed a Protocol based on the Composite Text and which would respect the general balance of it could certainly consolidate the Convention and would be a useful supplement to existing multilateral regimes in the field of disarmament and non-proliferation and therefore would enhance everyone's security.

Pakistan, Japan and Chile spoke in favour of completing the Protocol negotiation before the Fifth Review Conference. As Chile said, it was necessary to cross the Rubicon at this session and there was just one bridge — the composite Protocol text — to cross the Rubicon even though there might be differences of opinion in respect of the characteristics of that bridge. There is no alternative.

On the second day, Cuba said that after carefully examining the Chairman's text, they could say that although not all their concerns had been taken into consideration, some of them of major importance have been and consequently Cuba, in the spirit of the greatest flexibility, would be ready to participate in a negotiating process that should be carried on a responsible basis on the text that you submitted. Cuba emphasised the importance of the Ad Hoc

Group mandate agreed in 1994 and noted that it cannot be manipulated either in its contents and/or date.

Brazil then spoke on behalf of 36 states (Argentina, Australia, Austria, Belize, Brazil, Bulgaria, Canada, Chile, Croatia, Cyprus, the Czech Republic, Denmark, Ecuador, Greece, Guatemala, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Mexico, the Netherlands, New Zealand, Nicaragua, Norway, Peru, Republic of Korea, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, Turkey and Ukraine) including some of those who had been associated with the EU statement, saying:

the Ad Hoc Group has entered the last round of negotiations on the Protocol to strengthen the implementation of the Biological Weapons Convention. At this crucial juncture it is of utmost importance that all delegations demonstrate the necessary political will to bring these negotiations to a successful conclusion before the forthcoming Review Conference. We continue to believe that your Composite Text (CRP.8) provides the basis to conclude our work expeditiously in accordance with the mandate of the Ad Hoc Group and the undertakings regarding the conclusion of the negotiations as agreed by consensus at the 1996 Review Conference. We consider that CRP.8 reflects a careful and sustained endeavour to reach comprehensive and balanced compromises. We believe that a Protocol based on your text would enhance international confidence that the prohibitions of the Convention are being upheld and that its provisions are being implemented.

Brazil concluded by saying:

this statement demonstrates that there is much common ground as well as a strong and widely-shared political will amongst the States Parties to the BWC to conclude successfully these negotiations before the Fifth Review Conference.

On the morning of the third day, Switzerland said that it emphasised three principles:

- that the threat of biological weapons remains the key problem to international security against the background of the enormous progress made in biological research. No effort should be spared to set aside the danger of abuse of such progress. All legitimate measures must be used to reduce and set aside the threat of biological weapons. Verification of the Convention on Biological Weapons is one of the problems that has been awaiting solution for years and a convincing response from the Ad Hoc Group;
- an agreement to strengthen the Convention should be based on a fair balance between verification, disarmament, development, legitimate participation in the fruits of scientific research in the interests of humanity as a whole and world health; and
- the fight against biological weapons should bring together all key actors and calls for global and consolidated effort. That is why a universal approach should be adopted as had been done in the BWC itself.

India said:

Our challenge during these negotiations is to reach a shared understanding of new developments relevant to the Convention and transform it into a legally binding instrument that maintains a balance between transparency, non-intrusiveness, non-discrimination and effectiveness. ... Your Composite Text, Mr. Chairman, has been a timely initiative Your text has brought us close to what could

well be the final solution. Therefore, at this stage, what is needed is limited adjustments and not large-scale revisions. To conclude our exercise successfully and iron out some of the anomalies, we need to keep our sights fixed on the basic principles that I just identified: transparency, non-intrusiveness, non-discrimination and effectiveness. Declarations, visits and investigations form the verification core of the Protocol.

India concluded by saying:

we are all aware that we have reached a decisive point in our work. This has already been highlighted by other speakers. Therefore I have deliberately chosen to focus on specifics for two reasons. First, to emphasize that there are only limited issues that need to be fixed; and secondly, that the 'fix' can be found within the overall framework and thrust of the Composite Text.

The United States Rejection

Despite such an overwhelming positive response to the composite text by a significant majority of the states parties participating in the work of the Ad Hoc Group, the United States then delivered a 10-page detailed statement rejecting not only the Chairman's text but also the approach to the Protocol saying:

After extensive deliberation, the United States has concluded that the current approach to a Protocol to the Biological Weapons Convention, an approach most directly embodied in CRP.8, known as the 'Composite Text', is not, in our view, capable of achieving the mandate set forth for the Ad Hoc Group of strengthening confidence and compliance with the Biological Weapons Convention.

The statement went on to say:

One overarching concern is the inherent difficulty of crafting a mechanism suitable to address the unique biological weapons threat. The traditional approach that has worked well for many other types of weapons is not a workable structure for biological weapons. We believe the objective of the mandate was and is important to international security. We will therefore be unable to support the current text — even with changes — as an appropriate outcome of the Ad Hoc Group efforts.

The rejection by the United States of the Protocol and its consequences are addressed in the second invited article of this *Bulletin*. The details and various elements of the 10-page statement have been examined and analyzed in Bradford Evaluation Paper No 22, noted above.

Reactions to the United States Rejection

This US rejection of both the composite Protocol and the approach to the Protocol at the eleventh hour caused much disappointment for the other delegations as it is evident that many states parties had come to this session expecting hard negotiations leading to acceptance of a Protocol. Somewhat incongruously, the first to speak on the afternoon of 25 July after the US rejection that morning, was Ambassador Dhanapala who had come to bring a message from the Secretary-General to the Ad Hoc Group. This message said:

After 25 years without a system of formal verification, it is now widely believed that the Convention should be

strengthened through an international instrument establishing measures to monitor its implementation and verify compliance. Strong commitment to the Convention led this Ad Hoc Group to be established in 1994. Since then, you have made remarkable progress in negotiating a Protocol aimed at bolstering the Convention's effectiveness and improving its implementation. A verification regime would facilitate a State Party's compliance with the Convention and provide accountability among its parties. Progress in reinforcing the international norm established by the Biological Weapons Convention has another tremendous advantage. It substantially improves the prospects for expanded international cooperation involving the peaceful uses of biological materials and technology and the exchange of scientific and technological information, which is a legal right of all Parties to the Convention. It offers the prospect of opening a major new global market, while lessening the risk that the pursuit of profits for some will destroy the hopes of peace for all.

The statement continued:

This Protocol, when endorsed by the world community, will significantly reduce the global threat of biological weapons. It will increase the value of the Biological Weapons Convention as an instrument of international peace and security — a fundamental concern of the United Nations. The United Nations stands ready to provide all necessary assistance to facilitate these negotiations. I strongly encourage you to redouble your efforts to ensure that the negotiation process succeeds.

Thailand then spoke to say that it endorsed the statement of the like-minded group as expressed in the joint statement delivered by Brazil on 24 July and urged the Ad Hoc Group to together conclude the Protocol prior to the Fifth Review Conference so as to make the world a safer place for the succeeding generations.

Cuba expressed concern about the United States rejection of the Protocol as well as concern that such a powerful and hostile neighbour had never spared any efforts in expressing its aggressive attitudes, especially in connection with its biological programme, was not in a position or wishing to compromise with regard to verification and comply with the requirements of the Convention.

Japan took the floor to express disappointment about the conclusion of the US policy review on the Chairman's text, as it considered that the text, while insufficient and needing improvement, still presented the most realistic way to strengthen the BWC under the given conditions. Japan regarded this text as a basis for further work in order to reach an agreement by the next Review Conference and pointed out that the Ad Hoc Group was confronted with very difficult questions: firstly, how should it evaluate its joint and cumulative efforts for many years, which had produced the composite text; and second, how could it accommodate this new United States approach to the process. However, Japan firmly believed that US participation was imperative in the task of setting up stringent compliance measures.

Canada then spoke to say that it regretted the announcement made that the United States had decided that it cannot support the Chairman's text and expressed the view that the Protocol, if implemented, would strengthen global norms against the possession of biological weapons, provide machinery to investigate allegations of non-compliance,

complicate and deter biological weapons proliferation and reduce the likelihood that deliberate disease will be used as a weapon in the future. Canada concluded by sustaining the active hope that a Protocol based on the Chairman's text can be successfully completed before the BWC Review Conference late this year.

South Africa then spoke to join the views of Japan and Canada and to say that South Africa also regretted the content of the United States statement. South Africa remained convinced that the endeavour which this Ad Hoc Group is working on is important and essential to continue to strengthen international peace and security.

The next morning, 26 July, South Africa spoke on behalf of the Non-Aligned Movement and other States to say that the group regretted the conclusion which was announced by a major negotiating partner, namely that the Ad Hoc Group's efforts have simply not yielded an outcome that would be acceptable and that even further drafting and modification of the text would not yield an acceptable result for it. The NAM and other States wished to assure the Chairman of their full and continued cooperation in the difficult task that confronts the Ad Hoc Group and called on all states parties, the major negotiating partner in particular, to continue to work so as to achieve the objectives that were set forth by the Fourth Review Conference.

On the afternoon of 26 July, Belgium (on behalf of the European Union and the associated states) said:

We noted with concern that the United States are of the view that the costs related to the Protocol would outweigh the benefit thereof. This is one of the conclusions that we do not share. We regret that after six years of joint work on the basis of terms of reference accepted by all, the United States are of the view that nothing could make the Composite Text submitted by President Tóth acceptable. We do not share the conclusion either. The European Union is of the view that we should reserve the achievement of many years of negotiation.

The European Union went on to say that they wished that a multilateral negotiating forum would be maintained in the context of this Convention and that:

At this stage of the negotiation, we must maintain the chances of arriving at a multilateral agreement on biological weapons involving all concerned States. We are considering all possible options. In any event it cannot be business as usual.

Russia expressed disappointment and anxiety in connection with the approach set forth by the United States and went on to say that obviously this is a full rejection of the results of six years of work of the multilateral forum. However, the position of Russia with respect to the development of a Protocol remained unchanged and Russia determinedly supports fulfilment of the terms of reference of the Ad Hoc Group and development of the Protocol before the Fifth Review Conference. Russia concluded that it must not be allowed for work to be broken off and for six years of efforts by the states participating in the Ad Hoc Group on the Protocol to be laid to waste. The Ad Hoc Group must not miss the chance to solve a problem which has needed to be solved for a long time.

Brazil said that it had listened with great attention to the statements made during the previous two days and had

identified in them both disappointment and the willingness to proceed with the efforts to work toward the strengthening of the BWC. The Brazilian delegation shared those views. Brazil regretted the decision by the United States to reject the draft Protocol prior to the conclusion of the negotiations. For Brazil, the provisions contained in the Protocol would doubtless contribute to strengthen international security in the biological field — there is not and neither can there be an international disarmament and non-proliferation treaty absolutely fool-proof, but true political will to engage in disarmament and prevent proliferation has to be embodied in multilateral agreements if they are to have international legitimacy and become politically viable. Brazil concluded by saying it believed that the Ad Hoc Group has a mandate to fulfil and that its task should be accomplished. Brazil has been fully participating in these negotiations with that objective in mind and is ready to continue to work to attain the objectives that were set forth by the states parties in the Fourth Review Conference.

Australia noted that its Foreign Minister had said that Australia was very disappointed by the US decision to reject the composite text. Australia believed:

we will lose a valuable opportunity to step up our fight against the biological weapons if the Protocol negotiations fail. We have long believed that such threats are best met with a range of measures, including multilateral instruments. ... Australia maintains that failure to achieve a Protocol could amount to a setback for multilateral arms control and send the wrong message to potential proliferators. Australia believes that after seven years of hard work we have brought ourselves within reach of achieving an acceptable result by the November Review Conference and that this is still possible with the right political will.

Australia believed that the composite text would offer all states parties, including those in the Asia-Pacific region, real security benefits by raising the bar against biological weapons proliferation and by making it more difficult for countries to cheat on their Biological Weapons Convention commitments. The Protocol would also increase transparency in the booming biotechnology sector, allowing companies to trade with greater confidence. Australia does not share the US assessment that the draft Protocol would put national security and confidential business information at risk. The Composite text allows states parties to take sensible and effective measures to protect this kind of information, not least by managing access and sharing equipment and so on.

Iran spoke noting that in the statements at this session a consensus had been emerging that a Protocol could indeed be agreed prior to the Fifth Review Conference. Iran said:

At the peak of satisfaction for the creation of a new cooperative atmosphere and momentum, all of the sudden we face a totally unjustified statement, with its main message that even the Protocol concept is questioned and there is no necessity to work on a protocol for the BWC.

Iran went on to note:

Detailed scrutiny of the said statement would lead us to the following conclusions: in spite of the fact that the US has been fully involved in all stages of negotiation, in many cases created obstacles to consensus, imposed its position through introducing square brackets in the Rolling Text,

claims in the said statement that its serious concerns have been ignored during past years. This statement for the first time, surprisingly and with unjustified explanation, questioned the very concept and the necessity of the Protocol. Had the US made this position years ago, energy and thousands of man days spent by all other countries had not been wasted. Such decisions, neglecting already undertaken international obligations, shall undoubtedly put the credibility of any country in question.

Iran concluded by reiterating their commitment to complete the negotiations of the Protocol.

On 30 July, Argentina spoke to say that it had listened carefully to the difficulties which the composite text gives rise for the United States. Argentina regretted the fact that the United States found it impossible to continue negotiations on the basis of that text, and concluded:

We shall work and we shall support initiatives, which make it possible to get out of the impasse where the Ad Hoc Group finds itself now. We consider it opportune to begin the work of drafting the report, which will be presented to the Review Conference for the Biological Weapons Convention. A freeze on the work of this Ad Hoc Group would send a negative signal to the international community and its failure would add one further factor for concern to the somewhat discouraging situation in recent years for the disarmament and non-proliferation regime.

Picking up the Pieces

The Ad Hoc Group next met in plenary session on 3 August when Ambassador Tibor Tóth outlined some of the indications that he had gained from informal consultations both with delegations and with the regional groups. He reported that he had addressed two key issues — first, whether the efforts related to the consolidation and finalisation of the Protocol could be continued, and second, if not, then what other action would be appropriate and how should the situation be reported. Ambassador Tóth reported that the overwhelming majority of those delegations to whom he had talked had reconfirmed their support for the composite text or for the composite text being used for the basis of negotiations to complete the Protocol. However, concern was expressed over the fact that in the current circumstances it is not possible to do that.

Ambassador Tóth then went on to consider various aspects relating to the writing of a report of the work of the Ad Hoc Group noting that whilst there was not yet clarity as to the recipient of the report, it might be possible to commence work on some of the building blocks to be incorporated into the report.

New Zealand recalled the statement made on the second day of the session by Brazil on behalf of 38 states and then spoke on behalf of Brazil, Chile, the Netherlands, New Zealand, Norway, Peru, South Africa, the Czech Republic, Romania, Ireland, Croatia and Ukraine. New Zealand said:

While it is very regrettable that a consensus has not emerged on the Chair's package of compromises in CRP.8, we are at least encouraged about the confirmation we have had in statements this session for the ongoing value and importance of multilateral endeavours in the context of the Convention. Despite recent setbacks, it is imperative that the Ad Hoc Group does not become paralyzed into inactivity. The first

order of business will be for the Ad Hoc Group as a whole to begin working on its report.

New Zealand then set out some of the elements that they considered should be included in the report which, they argued, should be addressed to a Special Conference to be held in the week prior to the Fifth Review Conference.

Mexico then spoke to deeply regret the announcement made on 25 July by the United States. Mexico wished to repeat its conviction that it is through multilateral negotiations, undertaken in the framework of the BWC and not through unilateral or partial regimes, that the prohibition of biological weapons will be preserved and strengthened. Mexico urged that the Ad Hoc Group must explore every possibility for reaching agreement to fulfil its mandate. However, Mexico wanted to underscore that, in order to have a meaningful outcome to the negotiations, the commitment and support of all the participating states was essential.

France spoke to say that France had come to this session ready to conclude an agreement on the basis of the Chairman's composite text. On the third day, however, it was evident that these prospects — in the short term anyway — had become impossible. It emerged clearly that no discussion on the content of a possible Protocol was possible in the immediate circumstances and that the work of the Ad Hoc Group could not be continued as usual. Since 25 July, this session of the Ad Hoc Group had been *de facto* in suspension. In these circumstances France considered that the only task incumbent on the Ad Hoc Group was to draft its report and put an end to the session. France considered that this report should be short and that its formulation should be modelled on the report of the Ad Hoc Group following its fifth session in September 1996 and that of the twenty-third session in May 2001. France called on the Chairman to provide an early draft report and concluded by saying that France was convinced that the abrupt stop that was put to our work is not definitive and all states parties to the Convention will wish to pursue and complete the work started in 1994.

Interventions were then made by Germany, Japan, Russia, Pakistan, Australia, India, Canada, Libya, Switzerland, Iran, Cuba, and the Republic of Korea addressing various points relating to the report of the Ad Hoc Group. Points that emerged were that the mandate of the Ad Hoc Group was not challenged and remained in force, that the process of the Ad Hoc Group should be preserved and that both the rolling text and the Chairman's composite text were important products of the Ad Hoc Group and should be attached to the report. There was disagreement about the proposal made by New Zealand on behalf of 12 states that the report should go to a 'Special Conference' as it was argued that a special conference should only be called to consider a successful outcome of the Ad Hoc Group even though it was recognized that reporting to a special conference separate from the Fifth Review Conference might have some advantage.

Ambassador Tibor Tóth then spoke to note that none of the statements had disagreed with his perception that important work remains to be done by the Ad Hoc Group as the task given to the Ad Hoc Group remains to be fulfilled and the mandate remains to be completed. Insofar as the report is concerned, Ambassador Tóth recognized that more consultation would be needed on the recipient of the report

as well as on the description of the developments in this session and the description of the situation being faced by the Ad Hoc Group. However, he would make available to delegations at the beginning of the next week those ingredients related to the more procedural and descriptive parts of the information to be included in the procedural report. These ingredients would be based as far as possible on already existing consensus language.

South Africa then spoke saying that they were being overwhelmed by a sense of surrealism as South Africa had had the sense a week ago and again today that a large number of states parties in the room were like-minded in their support for the Protocol and in their support for strengthening the BWC. South Africa urged that the Ad Hoc Group should not let the divisions which are becoming apparent on what is a procedural issue undermine the unity that existed among the supporters of the Protocol and our endeavours to strengthen the Convention. South Africa considered that the focus of the work of the Ad Hoc Group should be how to take those who have either explicitly rejected the Protocol or who continue to maintain silent reservations forward with the overwhelming majority of countries represented in the room who support the Protocol and who support strengthening the Convention. It concluded by welcoming the fact that there was no indication of anybody questioning the validity of the mandate and urging that the report should focus on the agreements in the Ad Hoc Group.

Interventions were then made by Iran, the United Kingdom, South Africa and Pakistan before the Chairman closed the meeting agreeing to continue consultations in informal meetings early the third week of the session with a view to moving to consideration of the more procedural ingredients for the report early in that week.

Drafting the Report of the Ad Hoc Group

After the US statement many delegations made their disappointment clear and during the second week there was much informal consultation in which the Ad Hoc Group sought to find a way forward. These informal consultations led the Ad Hoc Group to reaffirm the validity of the mandate and turned to drafting the report of the Ad Hoc Group and considering how to report the twenty-fourth session and what might be done in the future. The drafting during the third and fourth weeks was difficult — there were diverging views, for example, as to whether this should be a report to a Special Conference, given that the Ad Hoc Group had been established by a Special Conference, or to the Review Conference; what reference should be made to the mandate of the Ad Hoc Group; how the events at this, the twenty-fourth, session should be reported; and what should be included on future activity. Nevertheless, by early in the fourth week, agreement had been reached on a number of paragraphs for the report which was modelled on the previous procedural reports of the Ad Hoc Group and on the report of the fifth session in September 1996 (prior to the Fourth Review Conference). The first five of these agreed paragraphs closely paralleled the corresponding introductory paragraphs of the twenty-third session. The sixth paragraph — which included a number of subparagraphs — addressed the substance of the report. The following elements were included and agreed:

- The Ad Hoc Group had decided to inform the states parties to the BWC of the progress it had made since the Fourth Review Conference in fulfilling its mandate;
- The mandate for the Ad Hoc Group reproduced from paragraph 36 of page 10 of BWC/SPCONF.1
- Language noting that the Ad Hoc Group was building on the work of VEREX, that the Ad Hoc Group had reported to the Fourth Review Conference, that a further 19 substantive sessions had been held since the Fourth Review Conference and the documents of those 19 sessions
- Language noting the introduction of the rolling text at the seventh session in July 1997, the production of a further 16 versions of the rolling text since then, the introduction of “Part II” text from the twelfth session (September 1998) through to the twentieth session (July 2000), the Chairman’s informal consultations at the twentieth, twenty-first and twenty-second sessions and the introduction of the Chairman’s composite text (CRP.8) at the twenty-third session.

The outstanding issues in later half of the fourth week related to first, how to report events at the twenty-fourth session, and second, what should be said about the future activity of the Ad Hoc Group. Agreement was eventually reached for language along the lines of:

The Ad Hoc Group has not been able to fulfil its mandate, since by the end of the twenty-fourth session it was not able to complete its work and submit its report, to be adopted by consensus, including a draft of a legally-binding instrument to the States Parties to the Convention. This mandate, as agreed by the Special Conference in 1994 and set out in paragraph 6.1 remains in force and determines future work of the Ad Hoc Group.

It was expected that this paragraph would be preceded by a paragraph addressing the developments of the twenty-fourth session in more detail and that further paragraphs would consider future action.

On the final day, 17 August, the negotiations of the procedural report continued. Agreement was reached on language that the rolling text and the composite text should be annexed to the procedural report as two texts that have emerged as a result of the negotiations. There was close to agreement on language relating to future activity of the Ad Hoc Group that would invite the Fifth Review Conference to consider the work of the Ad Hoc Group including this report and how the Ad Hoc Group can fulfil its mandate.

The nub of the disagreement related to how to report the events at the twenty-fourth session, with the United States making it clear during the third week that they would block any report which named the United States as being the reason for the Ad Hoc Group being unable to complete its work — and indeed that references to “one delegation” or to “a delegation” would not be accepted. It became clear that naming names was not appropriate and an alternative formulation was sought. Although there appeared to be acceptance of a possible solution in which language along the lines of:

During the plenary meetings at the twenty-fourth session delegations expressed their views in national and group statements on the work of the Ad Hoc group and its completion as soon as possible before the commencement of the Fifth Review Conference. After undertaking

intensive consultations, the Chairman informed the Ad Hoc Group that there was no consensus for continuing substantial negotiations to that effect at the twenty-fourth session. The Ad Hoc Group proceeded to drafting its procedural report.

It was clear that something was missing between the first and second sentences because as the European Union had said in their response to the US statement that “it cannot be business as usual.” Although a proposal was made on the final day to fill this gap by annexing the statements made by all states parties in plenary meetings of the twenty-fourth session being attached as a separate annex appeared to attract support, this was not acceptable to the Western Group because of the precedent that this would establish even though such a solution had been adopted during the VEREX process at a difficult session when a statement had been annexed to the report. However, the Western Group appeared not to have any proposal to solve the difficulty. In the end in the early hours of the morning of 18 August the delegations in the Ad Hoc Group were unable to agree even on a single paragraph report.

Reflections

In retrospect, it is clear that despite the negative indications regarding the United States, many of the delegations came to the twenty-fourth session with high expectations that a Protocol would be completed or at least further progress would be made possibly with some sort of accommodation to allow more time to persuade the United States to join the Protocol. In the event, the United States rejection at the eleventh hour of the Protocol and of the approach to the Protocol was much more absolute than had been anticipated. Consequently, a number of delegations were understandably upset that, despite the United States rejection being based on illogical assessments and not standing up to detailed examination, the work of almost seven years of negotiation was coming to naught.

The overall tone of the reactions to the US rejection was in general moderate as there had been press reports prior to the session indicating that the US was likely to reject the Protocol although testimony on 10 July to the House Subcommittee in the US Congress by Ambassador Don Mahley had not indicated which way the US would finally go. It seems clear from the way in which the session developed that many of the states parties in Geneva had not developed a clear strategy as to how to proceed if the US were indeed to reject the Protocol. Consequently, when that rejection came on the third day of a four week session — and the completeness of the rejection — it apparently caught delegations on the hop without political guidance as to whether the other States Parties would be better off with a Protocol without United States participation or with staying with the Convention alone until some uncertain later date — which might be some years ahead — when the US was prepared to reengage. This was probably compounded by the presence of the principal policy makers at the negotiation in Geneva and the difficulty of obtaining new political direction long range during what is the holiday season in many countries. It is, however, evident that the delegations which had hitherto been strong supporters of the Protocol

did not press strongly for the report — and it is noteworthy that neither the Belgian Ambassador nor the Australian Ambassador played any part as spokesperson for the European Union or for the Western Group.

This US rejection of the Protocol at the eleventh hour has directly contributed to the failure of the Ad Hoc Group to even agree a report and has put the Fifth Review Conference in November at serious risk of failure. This failure to agree a report was, however, compounded by a lack of leadership by the European Union or the Western Group who might have been expected to have pressed strongly for the Protocol — although the Western Group has rarely been evident as a group in the Ad Hoc Group negotiations. The US position is

a complete U-turn to the approach consistently taken by the United States over the past decade during which every approach to counter the threat of biological weapons and their proliferation has been pursued. The end result of the rejection of the Protocol by the United States is that it will not be trusted by other states parties as a state that lives up to its earlier promises and official statements at the highest level. The damage that this mistrust — as it involves the world's leading power — will cause to international security will be incalculable.

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

Proceedings in South Africa

Quarterly Review no 6

The Continuing Trial of Wouter Basson

This report covers the period 1 July through 21 September 2001. A detailed account is posted on the HSP website.

The court was in recess for the first three weeks in July. The trial resumed on 23 July to hear the evidence in chief, followed by the cross-examination of Dr Wouter Basson. Basson was the only witness to testify during the period under review.

Basson's testimony, both during the presentation of his evidence-in-chief and during cross-examination, was characterised by claims made for the first time during the trial. He began by providing an overview of his employment record in the South African Defence Force (SADF) saying that he had joined as a permanent force member in 1975. He graduated as a specialist physician in 1980, a year before being instructed to initiate the chemical and biological warfare programme. Basson claimed not to have taken part in any military operations until 1980, except for having undertaken a short trip into the operational area to medically examine Angolan prisoners of war.

It was in 1981, he told the court, that the Surgeon General, Nicol Nieuwoudt, called him into a meeting in which he was told of the SADF's need for research to be done into chemical and biological warfare, based on the threat that chemical weapons could be used against SADF troops in Angola. Basson was instructed by the Chief of the Defence Force, Gen Constant Viljoen, the Chief of Staff Intelligence, Peter van der Westhuizen and the Commanding Officer of Special Forces, Fritz Loots, to gather intelligence internationally on chemical and biological warfare.

Basson claimed that he had been involved in two related incidents during the mid-1970s (before qualifying as a physician). He said that he had travelled to Iran after potato crops on the northern border of Iran had been affected by a mycotoxin which resulted in the deaths of Iranians from necrotizing enterocolitis. Basson said he had been called in to assist because the fungus which had affected the crop only appeared in two parts of the world, in Iran and in a remote area of South Africa. He failed to explain why he, as a junior medical practitioner who had no expertise in the particular

area in question would have been consulted, and his claims have been disputed by CBW experts consulted by the author.

Basson also said that in the 1970s he was collected in South Africa by a US Air Force aircraft to assist after scientists at a secret US laboratory in Zaire (now the Democratic Republic of Congo) had contracted haemorrhagic fever. These scientists, he claimed, were treated in Zaire before being flown to 1 Military Hospital in South Africa where they recovered. These claims to have been disputed by South African scientists who were involved in treating patients suffering from haemorrhagic fever during the period in question.

Basson said that shortly after having been instructed to gather intelligence on chemical and biological warfare he realised that the SADF 'knew nothing' about the subject. He also claimed that the CBW programme had been established in such a way as to ensure plausible deniability to ensure that the SADF could not be linked to the programme. The initial process of gathering intelligence, he said, took six months whereafter he reported his findings to the Chief of the Defence force and some selected senior officers.

Whilst still involved in the development of a chemical and biological warfare programme, Basson said that he was also instructed to establish a medical unit to provide specialized support to Special Forces operators. For this purpose he was placed under the direct command of the Commanding Officer of Special Forces, and therefore no longer reported directly to the Surgeon General. The chain of command, as described by Basson, is highly irregular, not only was he reporting to the Commanding Officer of Special Forces but he also claimed to have offices at Military Intelligence's Directorate of Special Tasks, and at "certain South African Police murder and robbery units."

Project Coast, code-name for the CBW programme, was officially launched in July 1981, for which purposes he reported to the Surgeon General and a special Co-ordinating Management Committee, established for this purpose, under the chairmanship of the Chief of the Defence Force. This

appears to have resulted in Basson having at least two separate chains of command.

The CBW programme, Basson told the court, was established with the intention of doing research on chemical and biological agents and weapons. Asked whether the programme was offensive or defensive in nature, Basson said that there was a fine line to be drawn between the two concepts and that “strategically ... the only way to level the playing field [in the case of a chemical attack] is to retaliate with equal force.” Although Basson said that the doctrine followed by the SADF was at all times defensive, he qualified this by saying that he, “always had difficulty drawing a line between offensive and defensive because you cannot have one without the other.” On the basis of this evidence it can be assumed that the SADF intended developing an offensive chemical warfare capability.

Basson described the South African chemical and biological warfare programme as having been developed on three levels: front companies which did research but which could not be linked to the SADF; private companies which undertook research and development of defensive measures; and the development of tactics, doctrine and weapons production which was entirely under military command and undertaken through the parastatal arms manufacturer, Armscor and at a special laboratory at the Special Forces Headquarters.

Despite Armscor’s nominal involvement at the third level, Basson said when the arms manufacturer had been approached about being involved in the programme at an early stage, Armscor managers said they would have nothing to do with the project, citing moral and ethical reasons for the decision.

As Project Officer for Project Coast, Basson said that the only restriction placed on him by the Co-ordinating Management Committee was that if issues of national security came into question he was to inform them. Aside from that requirement, he said that he had a free hand to do whatever was necessary to get the programme off the ground. The nominal restriction was nullified by Basson saying that he “never figured out what actually constitutes national security”.

Basson said that Delta G Scientific, the chemical warfare facility of Project Coast, was chiefly involved in research and production, its main products being CS and CR tear gas. In explaining this Basson made the startling claim that he had visited an Iraqi mustard gas factory, but gave no details of the visit. Basson said that until 1986 Delta G Scientific concentrated on the production of CR but after 1986 the facility began manufacturing new variants and substances (which remained unnamed in court). Basson said that by 1986 “Project Coast had just about all the CBW substances needed, but no delivery systems”. He said he consulted the Co-ordinating Management Committee who in turn consulted the SADF’s Ammunition Director who said he could not provide the necessary assistance. Basson claimed that this resulted in him being sent to the School of Engineers to do a course on ammunition and explosives. Basson said that the CR produced at Delta G was sold through a front company to the Armscor subsidiary, Swartklip Products, where it is used to fill “thousands of projectiles”. He claimed the Chief of the Defence Force ordered the filling of 81mm

mortars with CR which were used by SADF troops in Tunqua in Angola.

He said that in 1983 the Co-ordinating Management Committee authorised the establishment of Roodeplaat Research Laboratories to do animal tests on the substances manufactured at Delta G. This facility, he said, also had a tissue culture laboratory which did work on viruses. This has been repeatedly denied by the scientists who worked at the facility. He said the microbiology department of the facility was responsible for enhancing and changing benign cultures into lethal pathogens. The only known work of this nature which was done was the genetic modification of *E coli* to produce the epsilon toxin of *Clostridium perfringens* for purposes of developing a sheep vaccine.

During 1984 Basson said that he travelled extensively during which time he met the Belgian toxicologist Aubin Heyndrickx and Blucher, a German industrialist involved in the production of CBW defensive equipment. He said that during that year he attended a conference organised by Aubin Heyndrickx where he met a former British military officer by the name of Derek Griffiths, since deceased. Basson described Griffiths as “one of those retired military men who had been cast aside by his government and was eager to share his knowledge”. It was Griffiths whom Basson claimed introduced him to Blucher. Basson told the court that Blucher had a CBW “mafia” which was a group of CBW experts who met on a monthly basis to exchange information and discuss the latest developments in the field. Basson said that the group included Russians, Libyans, East Germans, Chinese, Americans and Swiss. He claimed to have informed the Surgeon General and the Military Intelligence’s Director of Counter Intelligence of his contact with the group. The Surgeon General and Director of Counter Intelligence, he said, gave him the authority to establish an on-going relationship with the group. Once again demonstrating an unusual chain of command.

Basson said that the group included Dieter Dreier and a Libyan by the name of Abdul Razak. Basson said that the East Germans, Russians and Libyans became his foreign principals. The group, said Basson, was both a source of information and equipment. Dreier, he claimed, worked closely with Swiss arms dealer, Jurg Jacomet, who is now deceased. Basson testified that the needs of these principals frequently coincided with the needs of Project Coast and that he had purchased properties around the world on behalf of the group.

Basson explained that when, in 1986, the focus of Project Coast was on weaponization of chemical agents, the project had found it necessary to procure a pyrotechnical capability. To this end he sought the assistance of Dieter Dreyer and Roger Buffham to design and equip a laboratory. He said that components for the laboratory were procured in East Germany and England, while glass reactors were obtained in Russia. One of the substances which needed to be weaponized, Basson said, was methaqualone. He said that hundreds methaqualone-filled models had been produced and that evidence to the contrary presented earlier in the trial by the Surgeon General, Niel Knobel, showed that Knobel did not understand the production process.

With regard to his foreign principals, Basson said that the SADF derived the greatest benefit from the arrangement but confirmed that he had passed the results of research

conducted at the defensive facility, Protechnik, to the group. Basson said that the leader of the group, was a Libyan intelligence agent named as Abdul Razak.

Basson provided a complicated explanation for the procurement of a sophisticated peptide synthesizer. The synthesizer he said had been hidden in a deal involving the sale of NBC suits to Iran. He said that although qualified Delta G Scientists had been involved in the manufacture of peptides using a peptide synthesizer at Delta G, they were not sufficiently competent to conduct the advanced research required. A second peptide synthesizer was therefore purchased and placed at the laboratory at the Special Forces headquarters. During the cross-examination of Basson the prosecutor said that the State did not believe Basson's claim that a sophisticated laboratory had existed at Special Forces Headquarters.

Basson said that between 1990 and 1992 work was done using this new peptide synthesizer and that brain peptides had been made. The State disputes the existence of the peptide synthesizer. Basson said that in 1992 the priorities of Project Coast changed and the development of incapacitants became a priority. As a result he swapped the peptide synthesizer for 500kg of methaqualone which he obtained with the assistance of Jurg Jacomet. He said an additional 500kg of methaqualone was also procured, through Jacomet and the Swiss intelligence services, from Croatia.

Basson asserted that both methaqualone and BZ were intended for use inside South Africa as crowd control agents; MDMA was considered for the same purpose. He said he had procured 5 tonnes of BZ through Abdul Razak who obtained the raw materials from Pharma 150 in Hong Kong. According to Basson all except 980kg of BZ was weaponized by the SADF between June and December 1992.

Basson's claims about the purchase of methaqualone, which he said was done with the assistance of Swiss intelligence chief Peter Regli, was part of a larger Swiss deal to procure enriched uranium. These claims, made in court, caused the Swiss defence ministry decided to launch an internal investigation into Basson's allegations in August. The inquiry will also try to establish whether any documents relating to Swiss-South African intelligence co-operation might be missing. An interim report, due on October 31, may lead to an external and more thorough investigation.

The South African prosecutors in the Basson trial disputed Basson's claims, putting it to him that there was no such deal and that Basson had invented the deal to hide fraudulent activities.

With regard to the human rights violation charges he is facing, Basson denied all allegations of his involvement. He also denied conspiring with anyone to eliminate enemies of the apartheid state. He said that the charges of drug trafficking were also untrue, that he had never been involved in the sale of MDMA capsules. He said that the capsules containing MDMA found in his possession at the time of his arrest in 1997 had come into his possession as the result of an error. The capsules, he claimed, were in a box of wine mistakenly given to him.

At the time of going to press the prosecutor on the human rights violation charges had closed his case. Cross-examination continues on the fraud charges.

This review was written by Chandré Gould and Marlene Burger of The Chemical and Biological Warfare Research Project at the Centre for Conflict Resolution, an independent institute associated with the University of Cape Town. Detailed weekly reports on proceedings can be found on the CCR web site: www.ccr.uct.ac.za

News Chronology

May through July 2001

What follows is taken from issue 53 of the Harvard Sussex Program CBW Chronicle, which provides a fuller coverage of events during the period under report here and also identifies the sources of information used for each record. All such sources are held in hard copy in the Sussex Harvard Information Bank, which is open to visitors by prior arrangement. For access to the Chronicle, or to the electronic CBW Events Database compiled from it, please apply to Julian Perry Robinson.

1 May In Burma, government forces have been using chemical weapons during artillery strikes against rebel Shan State Army (SSA) forces in Fang district on the Thai border, according to an SSA statement. As reported next day in the *Bangkok Post*, the statement says that SSA troops had developed rashes and breathing difficulties after being exposed to smoke and dust from air-burst shells. The government subsequently dismisses the report as "sensational accusations". Later, *BurmaNet News* quotes an SSA leader saying the weapons were "tear-gas bombs".

1 May At OPCW headquarters in The Hague, Director-General José Bustani convenes a meeting of permanent representatives to brief them on the financial situation of the Organization. He reports that the 2000 budget ended 11 million guilders in deficit and that the current year's cash flow is expected to show a seven million Euro shortfall. [For further details see *Progress in The Hague* in *Bulletin* 52.]

1 May The UK Ministry of Defence announces that it will be conducting a comprehensive historical survey of the Porton Down volunteer programme [see 9 Nov 00]. Announcing the survey in the House of Commons, the Minister for Veterans, Dr Lewis Moonie, says that it will "be conducted by MOD officials and will be supervised by Professor Ian Kennedy, an external appointee from the School of Public Policy, University College, London. Cover the period 1939 to 1989 because this is the period of most concern to surviving volunteers, and is the period of highest volunteer throughput. Attempt to give a full description of the size and shape of the trials programme listing what exposures took place, and how many volunteers were exposed to particular substances, in what manner. The survey will seek, record and analyse all original documentation available relating to the way in which volunteers were recruited; the terms in which the programme was described to them; protocols for informing volunteers of the individual experiments; evidence of how risks were assessed and communicated to participants;

evidence of whether and how consent was obtained. The survey will also look at how the relevant internal and external supervision of the programme developed together with evidence of how the practices in the trials reflected contemporary international and national ethical guidelines. The findings of the Survey will be published.”

1 May In the US Senate, the Subcommittee on Emerging Threats and Capabilities of the Committee on Armed Services holds a hearing on *US Military Capabilities to Respond to Domestic Terrorist Attacks Involving the Use of Weapons of Mass Destruction*. The hearings are intended to consider an earlier report from the Department of Defense Inspector-General [see 6 Feb] on the management of the National Guard Weapons of Mass Destruction – Civil Support Teams. Testifying are: Robert Liebermann, the DoD Deputy Inspector-General; Lt-Gen Russell Davies, chief of the USAF National Guard Bureau; Maj-Gen Michael Maples, Director of Military Support, Office of the Army Chief of Staff; and Maj-Gen Bruce Lawlor, commander of the Joint Task Force Civil Support.

1 May In the US House of Representatives, the National Security, Veterans Affairs and International Relations Subcommittee of the Committee on Government Reform holds a hearing on *Combating Terrorism: Management of Medical Stockpiles*. The hearings follow up a GAO report requested by subcommittee chairman Christopher Shays. Testifying to the subcommittee are two panels of witnesses. The first panel comprises Linda Calbom and Alena Stanfield from the GAO Financial Management and Assurance team. The second panel is made up of Susan Mather, Kristi Koenig and John Ogden from the Department of Veterans’ Affairs; Robert Knouss and Stephen Bice from the Department of Health and Human Services; James Hughes from the Centers for Disease Control and Prevention; and Colonel Carlos Hollifield, the commanding officer of the USMC Chemical Biological Incident Response Force (CBIRF).

1 May The American Public Health Association devotes much of the May issue of its *American Journal of Public Health* to papers on biological and chemical terrorism. One presents findings from a survey of the preparedness for such a contingency at hospital emergency departments around the country. Survey responses were received from 186 hospitals of which fewer than 20 per cent had plans for chemical or biological incidents. Only six per cent had the minimum recommended physical resources for a hypothetical sarin incident. The article concludes that “hospital emergency departments generally are not prepared in an organized fashion to treat victims of chemical or biological terrorism. The planned federal efforts to improve domestic preparedness will require substantial additional resources at the local level to be truly effective.” Commenting on the findings of the survey, an editorial contains the following: “The aspect of bioterrorism preparedness that Wetter *et al* analyze — the level of preparedness of hospital emergency departments to deal effectively with terrorist incidents involving chemical or biological weapons, is a narrow one — but it illustrates the weakness of the broader arguments for preparations for bioterrorism. Their position uses hypothetical scenarios, lacks explicit data on the nature of the risk, and ignores the dangers inherent in the proposed approaches.” The editorial concludes: “The road to bioterrorism preparedness may be paved with good intentions, but traveling down that road may be a disastrous detour for public health.”

1 May In Washington, Milton Leitenberg of the Center for International and Security Studies at the University of Maryland addresses the Carnegie Endowment’s Proliferation Roundtable

on the subject of “Biological Weapons in the 20th Century”. He presents a historical survey of national BW programmes during the first and second world wars and in the years since 1945. The presentation also examines the rare occurrences of biological weapons use, the history of efforts to control biological weapons and the problem of proliferation since the BWC entered into force.

3 May Ethiopia, in a government statement, announces that Italy has refused to disclose the location of chemical weapons abandoned by Italian forces after their departure from the country in 1941. The CWC implementing department of the Ministry of Trade and Industry is said to have evidence of some 80,000 tons of chemical weapons having been brought into the country by Italian forces from 1935 onwards. The department has told *Efoita* that construction work at Ambalgie Woreda, in Tigray State, had recently been halted for fear that an unearthed cache of old ammunition and gunpowder also contained chemical munitions.

3 May In Cotonou, an official ceremony marks the establishment of the Benin CWC National Authority, which is chaired by the Foreign and Cooperation Ministry, and has twelve other ministries as members.

4 May In Iraq, the Information Ministry official spokesman describes as rumour and fabrication the statement that pharmaceutical industries in Samarra are manufacturing chemical weapons. The statement had recently been made to reporters by the head of the Federal German intelligence service, the BND, which has issued an alert to German companies, some of which are reportedly engaged in supplying Iraq.

4 May In Russia, President Putin establishes the State Commission on Chemical Disarmament [see 26 Apr]. The Commission is to be chaired by Sergei Kiriyenko, the President’s plenipotentiary for the Volga region and a former prime minister. The director-general of the Russian Munitions Agency, Zinoviy Pak, is the deputy chairman. The remaining 20 members of the commission are governmental and parliamentary officials, the leaders of the seven regions which have chemical weapons on their territory, and the president of Green Cross Russia, Sergei Baranovsky.

5–10 May In India, there are corps-level military manoeuvres — Operation *Poorna Vijay* (Complete Victory) — over wide areas of the Thar Desert in Rajasthan involving 40–60,000 troops, 500 tanks and around a thousand sorties by 120 IAF aircraft. For the first time an enemy NBC (nuclear, biological, chemical) strike is incorporated into such an exercise.

7 May In Geneva, during the twenty-third session of the BWC Ad Hoc Group in Geneva, Amy Smithson of the Stimson Center presents a new report, *House of Cards: The Pivotal Importance of a Technically Sound BWC Monitoring Protocol*. Smithson is accompanied by two experts from industry: George Pierce, former manager of technology development and engineering at Cytec, and Steven Projan, director of antibacterial research at Wyeth-Ayerst Research. The report is to be officially released the following week.

The 107-page report is described as a “joint research report of academic and research institute, pharmaceutical and biotechnology industry, defense contractor, and inspection veteran brainstorming groups”. The methodology of the report involved bringing together each of the four groups for ‘brainstorming’ sessions and also a one-day trial inspection of a BL-3 laboratory, at the Public Health Research Institute in New York. One of the report’s main conclusions is that “additional

technical research and field trials, if well designed, would greatly serve the purposes of an eventual BWC protocol. ... While no one aspires to duplicate the two-decades plus marathon that generated the CWC, a fully developed, technically sound product that has widespread political support is far preferable to an immature one viewed tepidly in various capitals."

On the US position in the Ad Hoc Group, the report says: "Over the years, the US governments has spoken perhaps loudest about the seriousness of the biological weapons threat. ... Therefore, the United States bears a special responsibility to see that all possible efforts are made to secure a technically sound BWC monitoring protocol. For the past several years, the US role in the BWC protocol negotiations has been anything but distinguished, not approaching the technical prowess and political determination that the United States displayed in the later stages of the CWC's negotiations. ... The time has come for the US government to put resources behind its rhetoric. The administration of President George W. Bush needs to do more than just carry out an interagency review of the draft BWC protocol text. What is called for is a technical research and field testing program worthy of the momentous proliferation problem that is being addressed."

The report concludes as follows: "After more than five years at the negotiating table, the effort to reach a BWC compliance protocol appears to be at the proverbial crossroads. Some participating governments seem poised to drive for the approval of a technically weak agreement. Others seem content to make such a superficial show of participation in the talks that the process could wander fruitlessly for years on end. Either outcome risks consigning the BWC to a house of cards existence. An impotent monitoring protocol would implode sooner or later, and absent the political will to conduct the requisite research, field trials, and tough negotiation, the BWC would remain a nice international behavioral norm, violated at will and possibly with impunity. One need only scan international newspapers and official government reports worldwide to see germ weapons repeatedly depicted as one of the most colossal threats facing mankind now and in the future. If that is indeed so, then the governments negotiating a BWC monitoring protocol surely owe their citizens better outcomes than those that destine the international community's principal mechanism for biological weapons nonproliferation and arms control for insolvency."

8 May In The Hague, the OPCW Technical Secretariat hosts a number of representatives of the global chemical industry. On 4 May, the International Council of Chemical Associations had sent a letter to OPCW Director-General José Bustani. While stressing the industry's unwavering "support for the eradication of chemical weapons and a prohibition on future production", the letter raises concerns over the balance in OPCW verification activities. It states: "The chemical industry always understood and still understands that the destruction of chemical weapons and related facilities and the systematic verification thereof is at the heart of the Convention. ... The verification regime for the chemical industry, on the other hand, was and continues to be regarded as an important tool to achieve the object and purpose of the Convention. Although certain aspects of non-proliferation cannot be ignored, the industrial verification regime is of a co-operative nature and serves mainly as a confidence-building measure". The letter goes on to note the problems currently being faced with respect to the destruction of chemical weapons, particularly in Russia. Then it continues: "On the other hand we cannot but notice that efforts in The Hague are mainly concentrated on private industry. Peaceful chemical companies are facing attempts by TS-inspection teams to indiscriminately expand the scope of access to plant sites and records; access which if not provided, has resulted in 'uncertainty' about the site's compliance. Companies are also

confronted with attempts to increase the intrusiveness of industry inspections, at DOC inspections in particular, going far beyond what was assured industry at the Geneva negotiations and what was ultimately laid down in the Convention."

8 May The US Senate, in a floor vote, confirms President Bush's nomination of John Bolton as Under Secretary of State for Arms Control and International Security. Following a lengthy and sometimes acrimonious debate, the Senate votes in favour of Bolton. The vote however, is a fairly close one, 57 to 43.

8 May President Bush announces measures to coordinate all federal programmes dealing with domestic preparedness against an attack with weapons of mass destruction. Announcing the changes, Bush says: "Protecting America's homeland and our citizens from the threat of weapons of mass destruction is one of our Nation's important national security challenges. Today, more nations possess chemical, biological, or nuclear weapons than ever before. Still others seek to join them. Most troubling of all, the list of these countries includes some of the world's least responsible states — states for whom terror and blackmail are a way of life. Some non-state terrorist groups have also demonstrated an interest in acquiring weapons of mass destruction." Vice President Dick Cheney will oversee the development of a coordinated national effort and is expected to submit a report to Congress by 1 October. In addition, an Office of National Preparedness will be established within the Federal Emergency Management Agency to implement those parts of the national effort dealing with WMD consequence management. The Office will be responsible for coordinating programmes within the Departments of Defense, Health and Human Services, Justice and Energy and other federal agencies. President Bush will periodically chair a meeting of the NSC to review activities.

8-9 May At UN headquarters in New York, representatives of member states and UNMOVIC staff hold further [see 13-14 Feb] consultations on UNMOVIC's suggested revisions to the lists of chemical and biological equipment and materials to which the export/import monitoring mechanism applies. In accordance with Security Council resolution 1330 (2000) [see 5 Dec 00], the review must be completed by 5 June.

8-10 May In the US Senate, the Commerce, Justice, State and Judiciary Subcommittee of the Appropriations Committee joins with the chairmen of the Appropriations Committee, the Armed Services Committee, the Select Committee on Intelligence and the Subcommittee on Emerging Threats and Capabilities of the Armed Services Committee to convene a series of high-level hearings on *Terrorism and US Federal Government Capabilities*. Announcing the joint hearings a week earlier, Senator Judd Gregg had said that "there are 46 different agencies involved in the issue of protecting this country from the threat of terrorism. We've come to the conclusion as members of the Senate that there needs to be a comprehensive hearing to determine who is responsible for what, where and when. ... It's really an attempt, in an institution which is inherently divided into fiefdoms, to try to bring everybody together and work coherently on an issue that is so important that we can't afford the fiefdoms."

Testifying on the first day are: Treasury Secretary Paul O'Neill; Deputy Secretary of Defense Paul Wolfowitz; Secretary of State Colin Powell; Secretary of Transportation Norman Mineta; FEMA director Joe Allbaugh; and the administrator of the National Nuclear Security Administration John Gordon. On the second day, witnesses include: Attorney General John Ashcroft; Health and Human Services Secretary Tommy Thompson; Jerry Hauer, the director of the New York City Office of

Emergency Management; Commerce Secretary Donald Evans; John Tritak, the director of the Critical Infrastructure Assurance Office; Agriculture Secretary Ann Veneman; and Interior Secretary Gale Norton. The third day sees testimony by local officials, first responders and the president of the American Red Cross, some of whom testify on their experience of the TOPOFF exercise [see 20–30 May 00]. Also on the third day is a closed session at which testimony is received from: CIA director George Tenet; FBI director Louis Freeh; and DIA director Vice Admiral Thomas Wilson.

FEMA director Joe Allbaugh announces that a new Office of National Preparedness [see 8 May] will be created within his agency to coordinate the federal response to the domestic use of a weapon of mass destruction. Secretary of Health and Human Services Tommy Thompson devotes most of his testimony to bioterrorism and his Department's response to the threat. He also announces that he will soon be appointing a Special Assistant to coordinate all of the Department's bioterrorism initiatives: "This person will report to me directly. I plan to call a national meeting of HHS agencies to evaluate the status of bioterrorism activities and report back to Congress on our efforts. In addition, the new special assistant will support the Surgeon General's efforts to revitalize the Public Health Service Commissioned Corps and its Readiness Force. Let me assure you that this is going to become a top priority for me and my entire department."

9 May In Berlin, the Federal German cabinet adopts the *Jahresabrüstungsbericht 2000*, the annual disarmament report for the year 2000. Included are details of the nine CWC inspections conducted in Germany in 2000, including eight to industrial facilities and one concerning old chemical weapons. The report also notes German work in the BWC Ad Hoc Group, particularly the German role as friend of the chair for confidentiality provisions and Germany's provision of equipment to the pilot chemical weapons destruction facility at Gorny in Russia.

9 May In the UK House of Commons, the Quadripartite Select Committee publishes its report on the government's draft *Export Control and Non-Proliferation Bill* [see 29 Mar]. On the subject of WMD-related technology transfers, the report states: "The proposed controls on the passage of technology relevant to weapons of mass destruction are profoundly significant. The Government's proposals are, we believe, ground-breaking in some respects. They deserve support for bringing them forward. It is an area of policy crying out for more effective international agreement. There would also be benefit in close analysis of the experience of other countries and of the measures they are taking, faced with similar challenges. Given the complexity and sensitivity of the issues, it is also particularly important that there be wide and detailed consultation in drawing up the secondary legislation. Non-proliferation is arguably the most important single issue in strategic export control."

The Government issues its response to the Committee's report on 9 July. The Government responds as follows on WMD-related technology transfers: "The Government welcomes the Committee's support for its proposals on the transfer of technology relevant to weapons of mass destruction. We agree with the Committee's views on effective international agreement. For that reason, we welcomed the agreement of the EU Joint Action of June 2000 [see 22 Jun 00] which requires Member States to bring forward legislation imposing controls on technical assistance provided outside the EU which it is known is intended for use in connection with weapons of mass destruction and missiles capable of their delivery. It should be noted that while the Joint Action uses the term 'technical assistance' this is defined in the Joint Action in such away as to include also the transfer of technology by any means including oral forms of as-

sistance. The introduction of controls on the electronic transfer of dual-use technology (which includes technology relevant to weapons of mass destruction) in the Dual-Use Items Regulation also represents an important step on the part of the European Union in tackling this issue. More generally, ideas and experience continue to be shared on this and other export control issues within the international export control regimes. The Government has undertaken to submit dummy orders to Parliament as soon as possible, and this will provide an opportunity for interested organisations to comment on the detailed proposals."

9 May In the US House of Representatives, the Subcommittee on Economic Development, Public Buildings and Emergency Management of the Committee on Transportation and Infrastructure holds hearings on *The Preparedness Against Domestic Terrorism Act of 2001*, HR 525 [see 8 Feb and 24 Apr]. Testimony is received from, among others: FEMA director Joe Allbaugh; Acting Assistant Attorney General Mary Lou Leary; and Acting Assistant to Secretary of Defense for Civil Support Charles Cragin. Also testifying are representatives of first responder organizations. HR 525 is one of a number of proposals for creating a single focal point to address domestic terrorism [see 15 Dec 00, 31 Jan, 21 Mar and 29 Mar].

10 May The Russian Federation government, by resolution no 356, *On the financing of measures linked with international inspection activity to verify fulfilment of the [CWC]*, confirms that the Russian Federation will fund these activities from the state budget through the Munitions Agency, which it charges with payment of OPCW invoices for inspections carried out in the period 1998-2000 from budget funds for 2001.

10 May In Moscow, AVN Military News Agency reports that during the impending Sixth Session of the OPCW Conference of the States Parties the Russian delegation will seek "more active participation of foreign countries in financing" the Russian chemical-weapons destruction programme. AVN quotes delegation member Maj-Gen Nikolay Bezborodov, who is deputy chairman of the Duma Defence Committee, as saying that, if further foreign chemdemil funding is not provided, "Russia will have to stop fulfilling its obligations".

10 May In Austria, parliament adopts new legislation on war materiel that permits the temporary presence of foreign troops on Austrian soil and the use of its airspace by troops participating in NATO peacekeeping operations. The law does not, however, permit the transit of CBW or nuclear weapons. Nor does it permit the transit of landmines or directed-energy weapons.

10 May In France, Defence Minister Alain Richard tells the Senate that the chemdemil facility that is to be built at Suippes to destroy the weapons that had been taken there a month previously from Vimy [see 13 Apr] should be in operation in 2005.

10 May The US General Accounting Office transmits to the Subcommittee on Foreign Operations of the Senate Committee on Appropriations a report on *Weapons of Mass Destruction: State Department Oversight of Science Centers Program*. The report assesses State Department oversight of US funds provided to the International Science and Technology Center in Moscow and the Science and Technology Center in Ukraine in Kiev. Besides talking to officials in Washington and at the two centres, GAO investigators had also visited 35 projects based at nine research institutes in Russia and Ukraine. Of these, three are in the chemical and biological fields: the State Scientific Research Institute of Organic Chemistry and Technology in Moscow; the State Scientific Institute of Immunological Engineering in Lyubuchany; and the State Research Centre for Ap-

plied Microbiology in Obolensk [see 22–24 May 00]. However, the report also notes that “four biological weapons institutes under the Russian Ministry of Defense have not submitted project proposals to the science center in Russia. This effectively denies the State Department access to the senior scientists at these institutes, an issue of potential concern, since Russia’s intentions regarding its inherited biological weapons capability remain unclear.” In its response to the report (included as an appendix), the State Department addresses this comment as follows: “While the Russian Ministry of Defense (MOD) has not yet granted access to the cited biological institutes, the US Department of Defense has the lead on this issue, engaging the Russian MOD in a series of exchanges and site visits. Should DOD succeed in gaining US access to the MOD biological institutes, the ISTC is in a good position to exploit that achievement by providing a platform for cooperative research relationships in these MOD biological institutes.”

11 May In Geneva, the twenty-third session of the BWC Ad Hoc Group comes to an end [see 4 May]. Following much debate on the status of the composite text vis-à-vis the rolling text, the agreed procedural report includes both documents as annexes. The report emphasises that the composite text was “prepared on the basis of the Rolling Text” and refers to both texts as follows: “While recognizing the Rolling Text as the underlying basis for negotiations, the delegations expressed their views with regard to the compromise proposals contained in the Composite Text, both in formal and informal sessions.”

11 May Johan Santesson of Sweden, prominent in chemical-warfare defence research and in both the negotiation and the implementation of the Chemical Weapons Convention, dies in the Netherlands after a long battle against cancer.

11–12 May In California, at Stanford University, an invitation-only conference on *International Disease Surveillance and Global Security* is convened by the Institute for International Studies Center for International Security and Cooperation. One of the participants, Al Zelicoff of Sandia National Laboratory, presents the Rapid Syndrome Validation Project (RSVP). This government-funded project aims to provide early warning of disease outbreaks by looking for patterns of symptoms which could indicate an epidemic and has already been used successfully in the University of New Mexico hospital.

On 12 May there is a public panel discussion on *International Disease Surveillance, Bioterrorism and Global Security*, moderated by former Secretary of Defense William Perry. The panelists are: George Fidas, Deputy National Intelligence Officer for Global and Multilateral Issues, National Intelligence Council; James Hughes, director of the National Center for Infectious Diseases; and Margaret Hamburg, the former Assistant Secretary of Health, now with the Nuclear Threat Initiative.

11–13 May In The Hague, there is the third [see 12-14 May 00] annual meeting of CWC National Authorities. The meeting is attended by over 100 representatives of 79 National Authorities. The meeting opens with a one-day workshop on the role of legislation in the implementation of the Convention. This is followed by an information update by the Technical Secretariat and an exchange of experiences amongst National Authorities, both as a whole and within regional contexts. Taking advantage of the significant number of National Authority personnel present for this meeting, the third day is devoted to 60 bilateral consultations between individual National Authorities and the Technical Secretariat on issues of national implementation.

13–18 May In Spiez, Switzerland, the government and the OPCW Secretariat co-host the fourth [see 14-19 May 00] Swiss

Emergency Field Laboratory training programme (SEF-LAB IV). The course is funded by the Swiss government as part of its offer under CWC Article X.

13–18 May In Orlando, Florida, the Edgewood Chemical Biological Center of the US Army Soldier and Biological Chemical Command sponsors the first *International Symposium on Enzyme Technology to Aid in Chemical and Biological Defense*. A keynote speech is given by John Deutch, a former CIA director and now, once again, a professor of chemistry at MIT. He warns that “the use of chemical and biological warfare is widely recognized as a viable threat to the United States and other nations.” He goes on to discuss the new features of chemical and biological agents that make them a growing threat, including the proliferation of production technology, international terrorist organizations and the potential for new chemical and biological agents to be manufactured. Topics addressed during the conference include detection, protection, decontamination, prophylaxis and therapy.

14 May In Cambridge, Massachusetts, the management consultancy firm Arthur D Little announces that it has signed a 5-year multimillion-dollar contract with the US Army to provide programme management and technical support for the US chemdemil programme. Vice-President Armand Balasco says: “Our extensive hands-on experience in the chemical weapons demilitarization area and our understanding of the technical operations at demilitarization sites will help to assure that the program is completed in the most expeditious manner as possible without posing harm to citizens or the environment”.

14–18 May In The Hague, the OPCW Conference of the States Parties reconvenes [see 15 May 00] for its sixth session. Participating are delegates from 108 of the 143 states parties, from 1 of the 31 signatory states, from 2 non-signatory states, from 3 international organizations and from 8 NGOs. [For further details, see *Progress in the Hague* in *Bulletin* 52.]

15 May In the US Senate, the Subcommittee on Emerging Threats and Capabilities of the Armed Services Committee hears testimony from John Gordon, the Administrator of the National Nuclear Security Administration on its FY 2002 budget request. In his written statement, Gordon reports on the Department of Energy’s Initiatives for Proliferation Prevention (IPP) programme. He states that eight IPP projects are now commercially successful, providing 300 long-term private sector jobs in Russia and more than \$17 million in annual sales revenue. Another 20 IPP projects are poised for commercialization over the coming year.

16 May In Beijing, a senior Japanese diplomat is summoned to the Foreign Ministry to receive a list of demands that Japan change the contents of a junior high school history textbook regarded by the Chinese government as misrepresenting the Sino-Japanese War of 1931–45 [see also 29 Aug 97]. Eight issues are specified in the list, among them the omission of any reference in the text to biological experiments conducted by the Imperial Japanese Army on live Chinese prisoners [see 2 Aug 99].

16 May The OPCW Technical Secretariat circulates an updated version of its *Survey of National Implementing Legislation* [see 17 Nov 98], compiled by the Office of the Legal Adviser. The compilation runs to a total of 314 pages. The survey examines the different mechanisms that the states parties have established in order to implement the Convention nationally—comprehensive legislation, integrated legislation, amendments to existing laws or statutes, etc. The survey also addresses the

issue of legal assistance, which may be required of states parties under Article VII, paragraph 2. The provision of legal assistance is facilitated by the existence of appropriate national legislation that implements all aspects of the Convention. This compilation covers 18 separate topics of relevance to implementing the Convention at the national level: prohibitions; penal provisions; extraterritorial application; legal assistance; definition of "chemical weapons"; declaration obligations; the regime for scheduled chemicals; inspections and access; inspection equipment; samples; privileges and immunities of inspectors; confidentiality; liability; composition; mandate; enforcement powers of the National Authority; environmental measures; and primacy of the Convention. The survey is based on information provided by 53 states parties on or before 15 May.

17 May The Russian State Duma approves draft legislation that would amend Article 355 of the Criminal Code to specify, for the crime of developing or stockpiling chemical weapons, a term of imprisonment of between five and ten years. The legislation now passes to the Federal Council.

17 May In Moscow, there is an EU–Russia summit between President Putin and Prime Minister Goran Persson of Sweden (Sweden currently holds the six-monthly rotating presidency of the EU). The joint statement from the meeting includes the following: "We have emphasised mutual interest in further developing our dialogue and interaction on non-proliferation, disarmament and arms control, and pointed out the significance of realising our commitments and obligations in this field. The European Union and Russia have strengthened their cooperation in support of destruction of chemical weapons and disposition of weapons grade plutonium, implemented in the Russian Federation. The EU Joint Action establishing a Co-operation Programme for non-proliferation and Disarmament in Russia has proposed expanding to new project sites, including the Shchuchye chemical weapons destruction site."

17 May In The Hague, the ongoing sixth session of the OPCW Conference of the States Parties [see 14 May] adopts the *Report of the Organization on the Implementation of the Chemical Weapons Convention in the Year 2000*. The report provides some information which had not previously been in the public domain. For example, an annex gives a list of all chemical agents declared by states parties and quantities declared and destroyed as of 31 December 2000. This indicates that the chemical agent most heavily stockpiled by member states is the nerve gas VR (which the report calls "VX"), of which 15,558 tonnes were declared. It is followed by sarin at 15,048 tonnes, soman at 9175 tonnes and VX at 4032 tonnes.

The report also reveals that 99 states parties have declared the possession of riot control agents with 55, 82 and 8 declaring possession of CN, CS and CR respectively. Other riot control agents declared are stated to be: OC, DM, chloropicrin, ethyl bromoacetate, MPA [*sic*], pelargonic acid vanillylamide, pepper spray [*sic*], phenyl chloride [*sic*] and OC/CS mixture.

For the first time, the report also gives information on declarations received under Article III.1(d) concerning facilities "primarily for development of chemical weapons". By 31 December 2000, eight states parties had declared 23 such facilities: 12 proving/testing grounds; and 11 research/defence establishments and laboratories. 16 of the 23 facilities had either been destroyed or closed by the end of 2000 while the remainder were being used as research centres for protective purposes or for the destruction of old chemical weapons.

A table provides the following breakdown, by possessor state, of the 61 chemical weapons production facilities declared to the OPCW: Bosnia and Herzegovina (1); China (2); Federal Republic of Yugoslavia (1); France (6); India (3); Iran (2); Japan

(1); Russia (24); UK (8); USA (13); and "a state party [presumably South Korea {see 8 May 00}]" (1).

17 May In London, today's issue of the scientific weekly *Nature* has an emphasis on biological warfare. It includes: a long feature article on BW applications, both offensive and defensive, of genetic engineering; a news item on disease-surveillance applications of a system designed to detect biological-warfare attack, the Rapid Syndrome Validation Project [see 11-12 May]; and a strong editorial calling upon biologists to "involve themselves in the debate over biological weapons – both to ensure that we have the means to counter the threats that such weapons pose and to help keep those threats in perspective". The editorial closes thus: "if biologists stick their heads in the sand and pretend that their work has nothing to do with warfare, they will be doing the world a disservice".

17 May In Washington, Charles Duelfer, formerly Deputy Executive Chairman of UNSCOM and now a guest scholar at the Center for Strategic and International Studies, speaks in interview of Iraqi attitudes towards chemical weapons. He says that Iraqi defence officials believe that Iraq was saved by its use of chemical weapons against Iranian troops during the 1980-88 war. Further, he says they believe their possession of chemical weapons discouraged Coalition forces from advancing upon Baghdad during the 1991 Gulf war. He continues: "I think they can look at these capabilities and say that the survival of their government depends on them. And from that perspective you can see where they would probably pay a pretty high price to retain some amount of them."

18 May In London, GeneWatch hosts a meeting on *Biological Weapons and the New Genetics: Avoiding the Threat*.

20 May In Italy, the Milan *Corriere della Sera* reports that, for the July G8 summit, a contingency plans now exist for moving the venue from Genoa to the Royal Palace at Monza, which offers better prospects for security. This planning has been motivated in part, so the newspaper says, by warnings from German and other intelligence services that demonstrators plan to use "nonconventional weapons", which are already being "prepared and stockpiled in a number of warehouses in northern Europe". The weapons are said to include "small, remote-controlled aircraft carrying chemical or biological substances". According to "an Italian intelligence report" cited by the newspaper, the weapons also include "balloons containing blood infected with the AIDS virus".

20 May In Washington, the interagency group reviewing US policy towards the projected BWC Protocol [see 23 Apr] has concluded, unanimously, that the Composite Text [see 10 Apr and 30 Mar] would be inefficient in stopping cheating and that all its deficiencies could not be remedied by the time of the negotiating deadline, so the *New York Times* now reports. The newspaper quotes an unidentified senior American official thus: "The review says that the protocol would not be of much value in catching potential proliferators". The newspaper continues: "The White House has yet to formally endorse the review's conclusions, but since all the relevant agencies agreed to it, the White House is considered virtually certain to go along". The interagency group had been led by Ambassador Donald Mahley [see 13 Sep 00] and comprised representatives of the departments of State, Defense, Commerce and Energy as well as the intelligence agencies. It had found, according to the *New York Times*, "38 problems with the protocol, a handful of them serious". Interfax later quotes the Russian Foreign Ministry expressing its concern about "reports that have appeared in the mass media recently which said, with reference to members

of the American administration, that the United States might refuse to sign the monitoring protocol for the Convention on the Prohibition of Biological Weapons of 1972, the drafting of which is the subject of negotiations that have entered their final stage. The question arises: which agreement on disarmament and nonproliferation will come next on the US black list.”

21 May In Hong Kong, more than a million mature poultry birds – chicken, pigeon and quail – are being slaughtered in an attempt to eradicate a new outbreak of avian influenza.

21 May In Geneva, the 54th World Health Assembly adopts a resolution on *Global Health Security: Epidemic Alert and Response*. Among other matters, it empowers the Director-General of WHO “to devise relevant international tools, and to provide technical support to Member States for developing or strengthening preparedness and response activities against risks posed by biological agents, as an integral part of their emergency management programmes”.

21 May US Secretary of Defense Donald Rumsfeld moves responsibility for the US chemdemil programme away from the Secretary of the Army and into his own office, thus increasing the level of oversight and accountability of the programme, which will now be overseen by Undersecretary of Defense for Acquisitions, Technology and Logistics, Pete Aldrich.

21 May The US Department of Health and Human Services announces what it calls “the HHS anti-bioterrorism initiative”, for which \$348 million are proposed in the FY 2002 budget, an 18 percent increase over the current funding. An HHS fact sheet lists the following six areas where the Department’s efforts are focused: “Improving the nation’s public health surveillance network, to quickly detect and identify the biological agent that has been released; strengthening the capacities for medical response, especially at the local level; expanding the stockpile of pharmaceuticals for use if needed; expanding research on the disease agents that might be released, rapid methods for identifying biological agents, and improved treatments and vaccines; preventing bioterrorism by regulation of the shipment of hazardous biological agents or toxins; and providing a secure communications system for responding to bioterrorism.” Of the \$348 million proposed for FY 2002, \$182 is for the Centers for Disease Control and Prevention, \$51 million is for the Office of Emergency Preparedness and \$93 million is for research. On the latter, the fact sheet says that an area of major emphasis at the National Institutes of Health will be the generation of genome sequence information on potential bioterrorism threats—especially the organisms that cause anthrax, tularemia and plague. In addition, the NIH will support intensive work on a new smallpox vaccine.

21–22 May At the UN in New York, the UNMOVIC college of commissioners reconvenes [see 21–22 Feb] for its fifth plenary session. As at the previous sessions, IAEA and OPCW staff attend as observers. Executive chairman Hans Blix briefs the commissioners on activities since their last meeting, on progress in the revision and updating of the dual-use import/export lists [see 8–9 May] and on the UNMOVIC training programme. The main document before the college is a report on the ongoing work to identify unresolved disarmament issues which had been revised in the light of Commissioners’ comments at the February meeting. Also presented are draft chapters of the UNMOVIC handbook, dealing with: incident and accident response procedures; procedures for the disposition of prescribed items or un-notified dual-use items; air operations; and management of confidentiality and security within UNMOVIC. The commissioners encourage UNMOVIC staff to assess the

significance of the unresolved issues and to examine ways in which they could be resolved. At the next session, the commissioners will be briefed on the scope and form of a reinforced system of ongoing monitoring and verification. There could also be a discussion of the criteria for identifying key remaining disarmament tasks. The next session will be held from 28–29 August in New York.

22 May The United Kingdom, backed by the United States, submits a draft resolution to the UN Security Council that would replace the existing trade sanctions on Iraq with a system of “smart sanctions” whereby non-military imports by Iraq would be decontrolled but military imports would remain prohibited. Imports of dual-use goods would require specific authorization and might be subject to UN monitoring. Associated with the resolution is a comprehensive new list of military and dual-use goods subject to import control. Financing would continue to be controlled by the UN through the escrow account that handles payments for Iraqi oil. Russia characterizes the proposal as a strengthening, not an easing, of the sanctions and next day submits a proposal of its own. Iraqi Deputy Prime Minister Tariq Aziz describes the proposal as “very wicked and malicious” and threatens to suspend the oil-for-food programme.

22 May In Washington, the chairman of the BWC Ad Hoc Group, Ambassador Tibor Toth of Hungary, meets for talks with US officials on his “composite text” for the BWC Protocol. Participating are Under Secretary of State for Arms Control and International Security John Bolton [see 8 May], Assistant Secretary of State for Arms Control Avis Bohlen, Special Negotiator for Chemical and Biological Arms Control Donald Mahley, and officials from the National Security Council. Deputy State Department Spokesman Phil Reeker later tells reporters that the US policy review [see 20 May] is not yet complete, continuing: “But we have talked to him [Toth], taken on board his views, shared with him some of our views, and we then should be ready to develop a strategy during the ad hoc meeting that begins in July”.

22 May In the US House of Representatives, the Special Oversight Panel on Terrorism [see 23 May 00] of the Armed Services Committee holds hearings on *Terrorist Threats to the Homeland*. The subcommittee discusses the recently released State Department report *Patterns of Global Terrorism 2000* [see 30 Apr] and hears testimony from two State Department witnesses, Acting Deputy Coordinator for Counterterrorism Mark Wong and Adviser on Weapons of Mass Destruction Samuel Brinkley.

22–24 May In Gifu, Japan, the UK Defence Evaluation and Research Agency joins with ICF Consulting and Science Applications International Corporation to host *CWD2001*, the fourth International CW Demil Conference.

23 May In Moscow, *Nezavisimaya Gazeta* publishes an article on the 1979 Sverdlovsk anthrax outbreak. The article is authored by Stanislav Petrov [see 31 Jul 00], Mikhail Supotnitskiy and Stanislav Ve. The article disputes that the anthrax outbreak in Sverdlovsk was the result of a leak from a Soviet BW facility, basing its evidence on open sources, epidemiological evidence, meteorological conditions and the length and pattern of spread of the outbreak. The article claims that political reasons were behind the timing of the Western allegations: “The ‘spin’ in the Western press on the topic of the ‘release’ of anthrax in Sverdlovsk began in January 1980, immediately after the beginning of the war in Afghanistan. But the accusation against the USSR was first officially issued by the US State Department in March 1980.” The article goes on to imply that the outbreak

was the result of “subversive activity”: “Today few are aware that, from the very beginning of these events, there was yet another version that is mentioned only occasionally and in muted tones — that is, the version of an anthrax outbreak of resulting from wide-scale subversive activity.” According to the article, the “biggest riddle of the epidemic” was the fact that the strains of anthrax recovered from victims originated in North America and South Africa. The article claims that further evidence for the “subversion version” can be found in other unusual epidemics during the Cold War, such as an anthrax outbreak in an area of Zimbabwe controlled by pro-Soviet forces in 1979–80 and an outbreak of dengue fever in Cuba in 1981. The article then goes on to say: “The ‘Sverdlovsk’ arguments became decisive in renewal of the scientific program to improve developments of biological weapons in the United States just when new and expensive genetic engineering technologies for perfecting biological warfare agents appeared. In the United States, allocations ‘to prepare for biological war’ increased by a factor of 5 in the first five years after 1979. This was a direct consequence of the said events.” The article concludes as follows: “If the 1979 anthrax outbreak in Sverdlovsk is viewed as an element of an indirect and long-term strategy, one must acknowledge that its developers achieved the following goals: (1) A serious blow was inflicted on the USSR biological warfare complex at the very moment when the biological threat began to assume a qualitatively new form on account of the development of genetic engineering technologies. (2) The prestige of the USSR, and lately Russia, in the international arena was seriously undermined, and it became possible to pressure Russia by accusing her of violating international agreements and exporting technologies for creating weapons of mass destruction; within the country, it became possible to provoke the public’s hostility to its armed forces. (3) It became possible to ‘count’ Russia among ‘renegade nations’ and justify the need for a nuclear strike against her at any time by inciting psychosis in the world mass media”.

A longer version of the article is published in *Nezavisimoe voennoe obozrenie* by Supotnitsky and Petrov. The article concludes thus: “An analysis of key publications during the last propaganda outbreak which took place early in 1998 reveals that all materials used by [those ‘exposing’ the incident] were taken from open Russian scientific journals and then shamelessly distorted. The anthrax epidemic in Sverdlovsk in 1979 may have been only part of a large-scale subversive operation carried out against the USSR and its allies in the late 70s and early 80s with the use of BW. This operation continues against Russia today, only via information warfare.”

23 May In Stockholm, the Convention on Persistent Organic Pollutants [see 19 Apr] is opened for signature. At the signing ceremony 127 countries sign the treaty, which will enter into force following ratification by 50 states. The convention sets out control measures covering the production, import, export, disposal and use of an initial list of 12 POPs. The list consists of eight pesticides (aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex and toxaphene), two industrial chemicals (PCBs and hexachlorobenzene, which is also a pesticide) and two unwanted by-products of combustion and industrial processes (dioxins and furans). A review committee will consider additions to the list on a regular basis.

24 May In Japan, the head of the Russian Munitions Agency, Zinoviy Pak, has just met with Seiji Kojima, Deputy Director General of the Foreign Ministry’s Economic Cooperation Bureau, in order to discuss possible Russian contribution to the destruction of the Japanese chemical weapons abandoned in China. Director-General Pak, who has been participating in *CWD2001* [see 22–24 May], now tells ITAR-TASS news

agency that he had visited Japan with the aim of establishing business relations to pave the way for the participation of Russian enterprises and institutions in the Japanese ACW-destruction programme. The news agency also reports, with attribution to a representative of the company that is supplying equipment to the Russian chemdemil facility at Gornyy, Dr Koehler GmbH, that Germany is interested in participating in the programme, using Russian experience. Pak has earlier described the Gornyy plant as a sort of experimental one where technologies can be tried out that could be used elsewhere.

24 May The UN Secretary-General submits to the Security Council UNMOVIC’s fifth quarterly report [see 27 Feb]. The report covers the period from 1 March to 31 May, including the fifth meeting of the college of commissioners [see 21–22 May]. During the period of the report, Executive Chairman Hans Blix has visited Norway, Canada, France, Sweden and the USA, as well as briefing the respective presidents of the Security Council and keeping the Secretary-General informed of UNMOVIC activities. He also held talks with IAEA officials in Vienna and with members of the EU Political and Security Committee in Brussels.

The number of UNMOVIC staff has increased by one since the last report, bringing the total to 45 from 22 nationalities. UNMOVIC’s third training course concluded in Vienna in March [see 19 Feb–23 Mar] and the fourth will commence in the next few days in Ottawa. The report notes that more specialized training has also been undertaken, including practical exercises in sample taking and preparation for a number of UNMOVIC staff and some trained experts.

The report states that UNMOVIC’s principal focus of work has remained the identification of unresolved disarmament issues. This work will also form the basis for the identification of the key remaining disarmament tasks. Although the completion of both tasks will only be possible once UNMOVIC staff are allowed into Iraq, the report states that staff have made considerable progress through analysing and assessing UNSCOM material and other information acquired since 1998. Commission staff have also completed the major part of the draft handbook for inspectors and a review of the criteria for the classification of inspection sites and facilities in Iraq. The report concludes that “with the work completed to date, UNMOVIC is ready to take up the full tasks mandated to it by the Council. Only then will UNMOVIC be able to assess fully the disposition of Iraq’s now proscribed weapons of mass destruction programmes through the operation of the reinforced system of ongoing monitoring and verification the Council has called for.”

27–28 May In the former Yugoslav republic of Macedonia, government forces use chemical weapons in artillery bombardment of villages in the Lipkovo region, according to the Albanian-language Skopje newspaper *Fakti*, which quotes the testimony of local people, among them a doctor who had said: “A large number of villagers of Sllupcan were showing symptoms, such as coughing, scorched chests, vomiting, fainting, exhaustion, and so forth”. The report is later characterized by Army and Defence Ministry spokesmen as “terrible nonsense”.

27–31 May In Vilnius, Lithuania, during the spring plenary session of the NATO Parliamentary Assembly, the science and technology committee considers a draft report on *Technology and Terrorism*. Included in the report’s conclusions is the following: “WMD terrorism should be fought also by updating and strengthening international and national laws and arms control strategies: Strengthen the Biological Weapons Convention (BWC) by the adoption of a legally binding protocol setting mechanisms for inspections. Such a protocol should also provide a system for investigating unusual outbreaks of disease in

humans, animals and plants. Exports of dual-use chemical and biological equipment should be controlled and export laws harmonised. Also increase diplomatic efforts to convince all countries to sign and ratify the BWC and the Chemical Weapons Convention. Sustain and enlarge non-proliferation programmes aimed at the former Soviet Union's WMD complex, particularly with regard to combating illegal traffic in nuclear weapons technology and chemical/biological agents. Make it illegal to possess chemical and biological agents and diffuse information on how to build and use such weapons (taking into account that the Internet is increasingly used to this purpose). National laws of some countries (such as the United States) should be strengthened." The report will be considered further at the Assembly's autumn plenary session to be held during 6-9 October in Ottawa.

28 May In Ottawa, the fourth [see 19 Feb–23 Mar] month-long UNMOVIC training course is opened by the Executive Chairman, Hans Blix. The course is attended by 61 participants from 26 nationalities. Upon the completion of this course, UNMOVIC will have a roster of nearly 180 people trained for work in Iraq. The course is due to end on 29 June.

29–30 May In Budapest, NATO foreign ministers refer to the ongoing BWC Protocol negotiations in the final communiqué of the North Atlantic Council meeting. The communiqué includes the following: "We continue to emphasise the importance of universal accession and adherence to, as well as full compliance with and implementation of, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention (BTWC). ... We welcome the efforts in the Ad Hoc Group of the BTWC to agree on measures, including possible enforcement and compliance measures, to strengthen the Convention. We remain fully committed to pursue efforts to ensure that the BTWC is an effective instrument to counter the growing threat of biological weapons."

On the subject of chemical-weapon destruction in Russia, the Council states the following: "While the Russian Federation is responsible for the destruction of its chemical weapons, we confirm our support to Russia in the area of chemical weapons destruction."

31 May In Moscow, the State Commission for Chemical Disarmament [see 4 May], which is chaired by Sergei Kirienko, convenes for its first session. It determines that Russia will not be able to complete the destruction of its chemical weapons before 2009 [sic] and will have to seek, from the OPCW, an extension until 2012.

31 May From the US Department of Defense, two new case narratives are released by the Office for the Special Assistant for Gulf War Illnesses, Medical Readiness and Military Deployments. One, *Reported Chemical Warfare Agent Exposure in the 2d Reconnaissance Battalion* is an interim report focusing on a group of Marines who reportedly experienced injuries which appeared symptomatic of chemical warfare agent exposure. The report concludes that it was "unlikely" that the blisters on the hands, necks and ears of the six Marines had been caused by exposure to mustard gas. The second case narrative, *11th Marines*, is a final version of an earlier report [see 5 Nov 98], dealing with 17 chemical warfare agent incidents experienced by the 11th Marine Regiment. The interim version has been reviewed by the Presidential Special Oversight Board which recommended that it be republished after the incorporation of additional information. In two incidents, the final report assesses the presence of chemical warfare agents as "indeterminate" due to a lack of information; in 13 incidents the report assesses the presence of chemical warfare agents as "un-

likely"; and in the final two incidents chemical warfare agents were "definitely not" present.

31 May In Arkansas, at Pine Bluff Arsenal, the Clara Barton Center for Domestic Preparedness is opened. The centre is designed to train American Red Cross personnel to deal with incidents involving weapons of mass destruction. Over the past year, 58 of 516 "non-traditional domestic disasters" to which the Red Cross responded were for potential WMD attacks, including anthrax hoaxes.

31 May–2 June In Prague, there is a NATO Advanced Research Workshop on *New Scientific and Technological Developments of Relevance to the BTWC*. The co-directors of the workshop are Professor Bohumir Kriz, head of the Department of Epidemiology and Microbiology, National Institute of Public Health in Prague and Professor Graham Pearson of the Department of Peace Studies at the University of Bradford. The workshop is attended by 49 people from 19 countries. Many of the experts present are from government departments and agencies which would be involved in the forthcoming fifth BWC review conference.

31 May–2 June In Texas, the Department of Health holds the *51st Annual Southwest Conference on Diseases in Nature Transmissible to Man* in Austin. One session, on 2 June, is devoted to bioterrorism with state health officials making presentations on the threat of bioterrorism, the Alamo exercise, the capabilities of laboratories in Texas, and a review of other potential emerging viruses.

1 June In Berlin, the Federal German Government responds to a number of questions about Bundeswehr research into genetics and biological weapons [see 22 Oct 00] put by Bundestag members. In its reply, the government states that German facilities are not involved in the weaponization of biological agents and that defensive research is concentrated exclusively on the prevention, diagnosis and treatment of diseases. Although refusing to identify individual civil facilities working for the defense ministry, the reply does give details of projects underway or completed during 2000.

1 June The UN Security Council adopts resolution 1352 extending the oil-for-food programme until 3 July, thereby allowing more time for consideration of the "smart sanctions" proposed by Britain and the United States as an alternative to the current embargo on Iraq [see 22 May]. This go-ahead to pursue the smart-sanctions concept reflects the concurrence of France and China, reportedly after hard bargaining about exactly what dual-use goods should be specified on the import-control list. Iraq objects to the one-month extension instead of the usual six-month extension of the programme, and halts its official exports of crude oil.

1 June UNMOVIC Executive Chairman Hans Blix submits revised and updated lists of dual-use goods to the President of the Security Council. The lists cover items and material which are subject to notification to UNMOVIC under the Export/Import monitoring mechanism approved by Security Council resolution 1051 (1996) [see 27 Mar 96]. The Council had requested that the lists be revised by 5 June 2001 [see 5 Dec 00]. UNMOVIC staff had met with representatives of member states on two occasions to discuss the lists of chemical and biological items [see 13–14 Feb and 8–9 May] The revised lists deal with chemical, biological and missile items.

The annex dealing with chemicals contains two lists, A and B. List A contains 51 chemicals described as "capable of being used for the development, production or acquisition of chemical

weapons, but which are also usable for purposes not prohibited by resolution 687 (1991) and, therefore, are subject to notification under the Export/Import monitoring mechanism for Iraq approved by Security Council resolution 1051 (1996).” The 20 chemicals on List B are described as “chemicals that have little or no use except as chemical warfare agents or for the development, production or acquisition of chemical weapons, or which have been used by Iraq as essential precursors for chemical weapons and are, therefore, prohibited to Iraq, save under the procedure for special exceptions provided for in paragraph 32 of the Plan (S/22871/Rev.1).” Also included is a list of “dual-use equipment” containing 13 items and sub-items.

Under the provisions relating to biological items, the revised list includes the following, all of which are subject to notification: 32 microorganisms, 52 viruses, 18 toxins, 14 fungi, one “other organism” and 3 genetically modified organisms; and 31 individual items divided between ten categories, including facilities, equipment, growth media, vaccines and “documents, information, software or technology for the design, development, use, storage, manufacture, maintenance or support of entries 1 to 9 above, excluding that in the public domain, published basic scientific research or the minimum necessary for the use of the goods detailed in entries 1 to 9.”

The third annex contains provision relating to missile items.

1 June In Alexandria, Virginia, the Chemical and Biological Arms Control Institute (CBACI) publishes *The BWC Protocol: A Critique* by its president, Michael Moodie. The concluding section of this careful study of the approach to a strengthened BWC that underlies the Composite Text draft Protocol opens thus: “The Ad Hoc Group’s effort to negotiate a legally binding protocol to the BWC got off on a wrong foot and it never recovered. Initially, the AHG adopted — almost wholesale — the approach taken in the then-recently adopted Chemical Weapons Convention. Over time, AHG members came to realize that specific details in the CWC were not necessarily applicable in the BW context, and so they sought to adapt those details. But they never questioned the basic approach or the fundamental structure of the protocol, which in general terms was put in place fairly early in the negotiation process. They did not examine whether that approach was based on sound assumptions when placed in the BW context. And they also never really asked whether another, perhaps simpler approach would have been better for the world of biology, biotechnology, and the threats that, unfortunately, derive from them. As a consequence, the product resulting from the Ad Hoc Group process as embodied in the proposed chairman’s text falls short as cost-effective, sharply focused, useful instrument in the fight against BW proliferation.”

4 June In Moscow, visiting Canadian Defence Minister Arthur Eggleton meets for talks with Russian Security Council Secretary Vladimir Rushaylo. According to ITAR-TASS news agency, they exchange views “on the future of the constructive Russian-Canadian dialogue on key modern issues, including ... the destruction of chemical weapons”. In addition, “Rushaylo confirmed Russia’s adherence to the Chemical Weapons Convention and expressed the hope for further closer interaction with Canada in the scrapping of these weapons”.

4 June The American–German Sunshine Project publishes another paper in its background series, this time on *Biological Weapons Research Projects of the German Army* [see 1 Jun]. An English summary of the longer and more detailed German version describes the paper as an attempt to “create transparency and to enable a broad public debate about the political goals, the risks of the dual-use research, and about the underlying threat assessments which are not based on the deploy-

ment of the army in battlefields far away from Germany.” Much of the information in the paper is taken from German BWC CBMs submissions from 1992–2000, to which the author had been given access by the German foreign ministry. The study reveals that defence ministry spending on biodefence has increased markedly. In 1994 the total budget was DM 6.3 million whereas in 1999 it had grown to DM 10 million. Of the DM 10 million, approximately half is allocated to the two main military biodefence facilities, the Sanitätsakademie der Bundeswehr in Munich and the Wehrwissenschaftlichen Institut für Schutztechnologien in Munster, while the remaining half is spent on contract research, mainly in universities. From open sources and correspondence, the author of the paper has compiled a list of 17 research projects underway in German universities and private companies in 1999. Most projects focus on the development of rapid early warning systems and vaccines. In 2000, 15 projects involved the use of genetic engineering.

4–7 June In Norfolk, Virginia, the US Defense Threat Reduction Agency holds its 10th Annual International Conference on Controlling Arms.

5 June The OPCW Technical Secretariat issues a paper on the calculation of residual production capacity of chemical weapons production facilities with respect to their destruction or conversion for peaceful purposes. The methodology used takes two separate questions into account: how to measure destroyed production capacity in cases when the Secretariat and the declaring state party disagree whether certain items are specialized, as opposed to standard, equipment; and how to measure destroyed capacity when a facility is being converted for legitimate purposes.

5 June In Washington, Secretary of State Colin Powell and Uzbek foreign minister Abdulaziz Kamilov sign a Cooperative Threat Reduction Agreement. The agreement will enhance defence cooperation and joint work under the CTR programme to prevent the proliferation of weapons of mass destruction and technology and expertise. During the signing ceremony, it is also noted that “cooperation will include the dismantlement of Soviet military, chemical and biological weapons facilities left on the territory of Uzbekistan at the time of independence.”

5 June In the US House of Representatives, the *Agroterrorism Prevention Act of 2001* (HR 2060) is introduced. The bill would extend existing provisions of the federal criminal code prohibiting “animal enterprise terrorism” to also cover “plant enterprise terrorism”. The bill also proposes enhancing the penalties for plant or animal terrorism and requiring the FBI director to establish a national agroterrorism incident clearing house to collect, collate and index details on crimes and terrorism committed against plant or animal enterprises. A total of \$5 million would be provided to the director of the National Science Foundation to award grants with the aim of assessing the risk to research activities from agroterrorism. The bill is referred to the Committees on the Judiciary and Science.

5 June In the US House of Representatives, the Subcommittee on National Security, Veterans’ Affairs and International Relations of the Government Reform Committee holds another [see 13 Sep 00] hearing on *The Biological Weapons Convention Protocol: Status and Implications*. Opening the hearing, subcommittee chairman Christopher Shays announces that “yesterday, the White House requested more time to finalize their response to our questions. I, regretfully in some ways, acceded to that request ... I’m very unhappy the administration has once again requested a deferment before this committee.” Instead of appearing in person, the Administration witnesses,

namely Don Mahley and Owen Sheaks, submit written testimony. Appearing before the subcommittee are: Gillian Wollett of PhRMA; Alan Zelicoff of Sandia National Laboratories; Robert Kadlec of the National War College; Amy Smithson of the Stimson Center; and Barbara Hatch Rosenberg of the Federation of American Scientists.

Referring to earlier press reports [see 20 May], Mahley stresses that “the United States is not thinking about withdrawing its support from the Biological Weapons Convention.” However, Mahley then goes on to say that the US has “serious substantive concerns” with the composite text of the BWC protocol presented by the chairman of the Ad Hoc Group [see 23 Apr]. Mahley notes that the key question for the US is whether the chairman’s text has “enough substantive and political utility ... to allow the United States to accept and sign ... despite the substantive concerns we still have with it.” On the timeframe for the completion of the protocol, Mahley says that “we have always treated the November review conference as a target, not as a deadline.” However, he does acknowledge the “very real political implications of not finishing the protocol’s negotiations by the Convention’s review conference.” In such a situation, Mahley predicts “a very troublesome review conference, with some bitterly fought attempts to incorporate national views in the final document of the review conference. He adds that “this is another factor the United States will take into consideration in its approach to the protocol.”

In his written testimony, Sheaks states that the BWC is “inherently difficult to verify” and that therefore “any protocol must grapple with the same inherent verification problems.” Indeed, factors such as proving intent and detecting the small physical signatures of biological production “virtually preclude the achievement of an effective international verification system.” After listing what he considers the limitations on the declarations, visits and investigations envisaged in the protocol, Sheaks concludes his testimony as follows: “Irrespective of whatever transparency value a protocol ... might provide, it would not improve our ability to verify compliance. The dual-use nature of biology and the advance, as well as worldwide spread, of biotechnology have conspired to make the BWC not amenable to effective verification, especially by an international organization. ... National intelligence, particularly from human sources, is essential to detect BWC cheating. US efforts to strengthen the Biological Weapons Convention should always proceed from that fundamental reality.”

5 June In Tampa, Florida, the trial begins of George Trofimoff [see 14 Jun 00] on charges of espionage. Formerly a colonel in the US Army Reserve who had been chief of the Joint Interrogation Center in Nuremberg, he is accused of having passed more than 50,000 pages of documents to the Soviet Union and then Russia over a 25-year period that ended in 1994, including US military documents assessing the CBW capabilities of East European states. The trial ends on 26 June, the jury having taken just two hours to decide that Trofimoff is guilty.

6 June The American Medical Association, in today’s issue of its *Journal*, publishes detailed recommendations for measures to be taken by medical and public health professionals in the event of tularemia being used as a biological weapon against a civilian population. This is the fifth in a series of articles on possible biological weapons [see 9 Jun 99, 12 May 99, 3 May 00 and 28 Feb 01]. Like the earlier articles (dealing with anthrax, smallpox, plague and botulinum toxin) the publication is a consensus statement by 18 specialists from the Working Group on Civilian Biodefense, organised out of the Johns Hopkins Center for Civilian Biodefense Studies.

6 June In the US Senate, control passes today from the Republican to the Democratic Party following the action by Senator James Jeffords on 24 May of declaring himself an independent. Among the consequent changes is the passing of the chairmanship of the Committee on Foreign Relations from Senator Jesse Helms to Senator Joseph Biden.

7 June In Berlin, the president of the Max Planck Society, Hubert Markl, delivers a statement of acceptance that the management and staff of the predecessor Kaiser Wilhelm Society had been involved in atrocities during the Hitler period, including human experimentation with germs and chemicals. In 1999 he had commissioned a 5-year investigation of the role played by research workers at Kaiser Wilhelm Institutes during the second world war, and his statement is in response to preliminary findings by the group of science historians conducting the investigation. The Society had been responsible for medical experiments at concentration camps. The statement is also an expression of apology to the victims: not, it says, a request for “removal of guilt” but “the sincerest expression of deepest regret, compassion, and shame at the fact that crimes of this sort were committed, promoted, and not prevented within the ranks of German scientists”. Markl is quoted later in the London *Financial Times* as saying: “For us as scientists, [what happened in Germany] is a warning never to forget there is no goal of research that can be viewed as so important and high-ranking that it justifies seriously restricting or completely disregarding another person’s dignity or human rights against their will.”

7 June In Luxembourg the EU Environment Council again considers the white paper on *Strategy for a Future Chemicals Policy* prepared by the Commission of the European Communities. While acknowledging that the white paper “addresses many of the concerns identified earlier by the Council”, it considers that “further elaboration of the proposed mechanism is required in order to introduce workable and effective controls for chemicals.” The Council therefore calls upon the Commission to present its main proposals by the end of 2001 and to set up a task force with representatives of member states, industry, NGOs and other stakeholders which is to produce the first results of its work by the end of 2002.

8 June In Russia, there is a flag-raising ceremony at Shchuch’ye to acknowledge the international support to the construction of the chemical weapons destruction facility there. The ceremony is attended by deputy prime minister Ilya Klebanov, chairman of the State Commission on Chemical Disarmament Sergei Kiriyenko, Russian Munitions Agency director Zinoviy Pak, Thomas Kuenning, director of the US CTR programme, and representatives from Canada, Finland, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, the UK and the European Union. Officials from the OPCW are also in attendance. The event had reportedly originally been planned as a ground-breaking ceremony, but that has now been postponed indefinitely.

8 June In Paris, addressing the IHEDN (Institute of Higher National Defence Studies), President Chirac notes “the development by certain states of ballistic capabilities that could some day give them the means to threaten Europe with nuclear, biological or chemical weapons” but says that French nuclear weapons “should ... enable us to face the threats that regional powers possessing weapons of mass destruction may pose to our vital interests”.

8 June The Dutch Foreign Minister announces that the European Union will soon deliver a demarche in Washington calling on the US to support the BWC Protocol. Replying to parliamen-

tary questions, he says that he has raised the issue during his trips to Washington in March and May and in his intervention during the North Atlantic Council meeting in Budapest [see 29-30 May]. Asked about the Dutch bid to host the seat of the OPBW, the minister replies that the campaign is well underway and that there are signals that The Hague has more support than Geneva, although a final result is not expected until August at the earliest.

The Swedish ambassador in Washington had, in fact, delivered an EU demarche on 5 June. The demarche reiterates "the high priority [the EU] attaches to the successful conclusion, this year, of the negotiations in the Ad Hoc Group ... as agreed upon in 1994 at the Special Conference and reaffirmed in 1996 by all States Parties to the BTWC." The demarche continues: "The European Union has already accepted a lot of compromises in order to meet the concerns of the USA, especially on the declaration of biodefense programs and facilities, on the declaration of production facilities other than vaccine ones, as well as on the provisions related to the conduct of on-site activities. The European Union supports that composite text presented by the chairman, as being a much needed platform from which political decisions on compromises need to be taken on a consensus basis. This means that the European Union does not view the composite text as being flawless, especially when it comes to clarification visits to undeclared facilities as well as to the initiation procedures for investigations. Nevertheless, the European Union considers the composite text as a balanced compromise. The European Union would like to make clear that it currently sees no chance of renegotiating a new mandate with a more 'restricted' approach, i.e. with a main focus on investigations and legally binding Confidence Building Measures. Having stated this, the European Union would like to re-emphasise that it therefore considers negotiations on the composite text, with a view of finalising it before the 5th Review Conference, as the best way forward, and that it hopes that the USA would consider the situation in a similar fashion."

8 June In Anniston, Alabama, there is a ribbon-cutting ceremony for the chemdemil incinerator. The address is by the new Deputy Assistant Secretary of the Army for Chemical Demilitarization, Henry Dubin. Referring to the flag-raising ceremony at Shchuch'ye [see 8 Jun Russia] Dubin says "I can assure you that there is significant impetus among the nations and that treaty compliance is gaining momentum internationally. That's why June 8th is a great day for chemical demilitarization."

8 June In Oklahoma, traces of sarin nerve gas are detected in one of 29 one-ton storage containers held in a secure area of McAlester Army Ammunition Plant and now being processed for disposal. A spokesman for the facility, Mark Hughes, tells reporters that the containers, supposedly decontaminated, had been received from Rocky Mountain Arsenal in 1977.

9 June In southern Korea, in the vicinity of Mount Mudung near Kwangju in late 1951, a US military biplane sprayed a white fog-like substance that led to the deaths of at least a hundred citizens and troops after high fever and diarrhoea, so a 74-year old former North Korean partisan, Chong Un-yong, has just told the National Fact-Finding Committee on US Atrocities, according to Yonhap news agency.

9 June In Manama, Bahrain, military delegations from the six member-states of the Gulf Cooperation Council (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE), Egypt, Jordan and the United States convene for *Eagle Resolve 2001*. This is the third in a series of annual conferences convened under the US Defense Department Cooperative Defense Initiative. It is focussed on methods to improve and better coordinate the C⁴I

(command, control, communications, computers and intelligence) capabilities of the participating countries in order to discourage resort to CBW by adversaries in the region.

9 June In Dresden, there is a conference on *Biological Weapons in the 21st Century* organized by the Sunshine Project. The conference is intended to act as an introduction to biological weapons, with sessions on "biological weapons yesterday, today and tomorrow" and on "the responsibility of science and politics" along with a panel discussion. There is also an opportunity to see the exhibition *Schwarzer Tod und Amikäfer* [see 29 Nov 00] organized by Erhard Geissler of the Max-Delbrück-Centrum für Molekulare Medizin, Berlin-Buch.

9 June From Washington it is announced that CNN and Jack Smith, co-producer of the CNN *Tailwind* documentary that had reported US military use of nerve gas during the Vietnam War [see 7 Jun 98], have settled the lawsuit in which Smith was seeking \$106 million in damages for fraud, defamation and wrongful dismissal [see 30 Jun 00]. Terms of the settlement are not disclosed, but Smith says it "serves as a down payment on restoring my reputation as a journalist and I'll take it as that". CNN and the other co-producer, April Oliver, had settled a similar suit a year previously [see 26 May 00].

10-13 June In Maryland, the *Fourth International Conference on Anthrax* [see 7-10 Sep 98] convenes at St. Johns College in Annapolis. A poster is presented on the failed 1993 Aum Shinrikyo attempt to release anthrax from a Tokyo rooftop [see 6 Jun 95] on which the conference abstract includes the following: "The Aum Shinrikyo, a religious doomsday cult, conducted the attack as part of their efforts to trigger an apocalyptic global nuclear war. The spray was intermittently generated from one of two large dispersal devices over a roughly 24 hour period on July 1 and 2. Nearby residents complained of a foul odor associated with the spraying. A gelatin-like fluid, which fell on the side of the building, was collected in test tubes. During a 1996 arraignment of Aum Shinrikyo members, the nature of the attempted attack was first made public. ... The attack apparently failed due to the non-encapsulated strain used, or other contributing factors such as an inefficient spray device and low agent concentration in the dispersed fluid."

11 June The Pentagon announces that it is to further [see 30 Nov 00] slow its Anthrax Vaccine Immunization Program (AVIP). Vaccination will now only be provided to personnel in designated special mission units, anthrax vaccine research and congressionally mandated studies. The slowdown provides for a small reserve of vaccine in the event of an emergency. A Defense Department press release reports that the Joint Program Office for Biological Defense is working with BioPort Corp. in an effort to release vaccine by the first quarter of 2002.

An earlier newspaper report had noted a sharp increase in adverse reactions to the vaccination. Since the mandatory vaccinations began in 1998, the Vaccine Adverse Event Reporting System has collected complaints of more than 200 reactions defined as fatal, life-threatening or resulting in hospitalization or permanent disability out of more than 1,500 complaints. However, the medical results of 45 per cent of 1,300 complaints initially classified as non-serious are either unknown or unresolved, indicating that the number of serious reactions could be higher than 200. Thus far, about 500,000 service personnel have received two million inoculations in the six-shot series. Adverse reactions range from swollen arms, rashes and fever to more serious symptoms, such as a progressive muscle-weakening condition leading to paralysis and long-term neurological disorders.

11 June From Seattle, Corixa Corporation announces that the US Space and Naval Warfare Systems Center has awarded it a two-year \$3.5 million contract for a DARPA-sponsored programme to develop methods of enhancing immune responses to infectious diseases, including BW agents. The company will now embark upon preclinical testing of its synthetic lipid-A-like immunomodulatory agents. According to a company release: "These drugs act on a newly recognised family of receptors, called Toll-like receptors, to generate protective immunity to a wide variety of infectious agents. Certain Toll-like receptors are present in the upper airways and stimulation of these receptors may induce the immune system to prevent infections of various types, especially those transmitted by inhalation."

11–12 June In Luxembourg, the fifteen EU foreign ministers issue a statement on the negotiations on the BWC Protocol. The ministers, meeting as the Council of the European Union, adopt the following conclusions: "The Council expressed its concern over the risk of proliferation of biological weapons and over the lack of mechanisms to ensure compliance with the Biological and Toxin Weapons Convention (BTWC). A Protocol to strengthen the Convention, was a much needed instrument in the overall multilateral disarmament and non-proliferation regime. The Council reiterated the high priority it attached to the successful conclusion, this year, of the negotiations in the Ad Hoc Group in Geneva on a legally binding Protocol establishing an effective-compliance regime to the BTWC as agreed upon in 1996 by all States Parties to the BTWC. The Council also recalled the active role continuously played by the EU throughout the negotiations, based on the common positions adopted in 1996, 1998 and 1999. The Council stressed that during the past six years of negotiations substantial progress had been achieved and the compromise proposals made by the Chair in its composite text brings now an agreement within reach. The Council underlined that the next session of the negotiations will be of the utmost importance. The Council expressed its conviction that a Protocol including the essential principles set out in the EU's Common Position of 17 May 1999 would strike the right balance between compliance requirements and national security interests and the economic interests of the States Parties. Such a Protocol would thus respond to the proliferation challenges posed by the rapid scientific and technological developments in this field, without stifling the economic progress these developments can offer and without affecting national security interests. The Council recalled that currently the negotiation in the Ad Hoc Group in Geneva was the only ongoing multilateral disarmament negotiation and emphasised that, from a wider perspective, the successful outcome of these negotiations would send a positive signal demonstrating the international community's commitment to strengthen the multilateral disarmament and non-proliferation regime."

In addition, the meeting also adopts a report on the implementation of the *Common Strategy of the European Union on Russia* [see 19–20 Jun 00] to be submitted to the forthcoming European Council in Gothenburg. The report states that the Joint Action [see 17 Dec 99] on financial assistance to the construction of the Gorny chemdemil facility has been "a useful tool and a catalyst for concrete and concerted efforts" on chemdemil. It adds: "Decisions are being prepared to expand efforts under the Joint Action to new project sites, including the Shchuchye chemical weapons destruction site" [see 17 May Moscow and 8 Jun Russia].

13 June In China, what is left of the BW facility of Unit 731 of the Japanese Imperial Army at Harbin is now open to the public after completion of the programme of maintenance and further exploitation that had been announced a year previously [see 1 Jun 00]. The work has involved the relocation of more than a

hundred households and ten factories. Preparations are still in progress for an application to UNESCO for inclusion of what Xinhua calls "this historical reminder of World War II" on the World Heritage list.

13 June In Moscow, a news conference is told by environmental activist Lev Fedorov [see 13–15 Jun 00 and 17 Jul 99] that there are about 500 dumps hidden across Russia and other former Soviet republics containing old and undeclared chemical weapons produced between 1915 and 1946. He says that he had found information on the dumps in military archives, and that it means "our country is not answering its international obligations" under the CWC. This charge is rejected by Munitions Agency officials. The Deputy Director of the Agency's Department for Convention-Related Chemical and Biological Weapons Problems, Alexander Gorbovsky, says "it's obviously delirium": Russia's seven chemical-weapons storage sites had all been opened for OPCW inspection — "There were more stores earlier, but that's history that is 60–70 years old".

13 June In the UK, the Ministry of Defence posts on its website details of the voluntary immunization programme against anthrax for UK forces. The programme had begun in 1998 but had to be suspended owing to vaccine supply problems. New supplies are now available from the Centre for Applied Microbiology and Research at Porton Down. Vaccination, through a course of four injections and annual boosters, will be offered to military and civilian personnel deployed to the Persian Gulf region and to some specialist nuclear, biological and chemical units.

14 June On the internet, a new website is launched that is dedicated to the Biological Weapons Convention and its projected Protocol. The website, at www.opbw.org, is produced by the Government of Canada and managed by the University of Bradford Department of Peace Studies. The welcoming message, by Ambassador Tibor Tóth of Hungary, says: "Once a Protocol is concluded and a Provisional Technical Secretariat established, this site could be transferred to the Provisional Technical Secretariat and constitute the basis for an eventual Organization for the Prohibition of Biological Weapons (OPBW) web site. In order to maximise the utility of the web site to the future Provisional Technical Secretariat, the strategy to be followed by the Department of Peace Studies in regard to the further development of the web site will be developed in consultation with myself, as Chairman of the Ad Hoc Group, and the Government of Canada."

14 June In Moscow, the Russian government adopts its revised chemical weapons destruction programme. The plan updates the original 1996 *Federal Programme for Chemical Weapons Stockpile Destruction in the Russian Federation* [see 21 Mar 96].

Instead of 2005, the deadline for destruction of the 40,000 ton stockpile is delayed until 2012, meaning that Russia will have to request a five-year extension from the OPCW. The intermediate deadlines have also been revised: one per cent of the stockpile will be destroyed in 2003; 20 per cent will be destroyed by 2007; 45 per cent will be destroyed by 2008; with destruction completed in 2012. The revised plan also states that Category 2 chemical weapons will be destroyed in 2001, while Category 3 will be destroyed in 2003. The Russian Munitions Agency is named as the government agency responsible for programme implementation and chief programme developer. The overall cost of the programme is expected to be 92.7 billion rubles financed from the federal budget, extra-budgetary funds and "gratuitous international aid".

Also revised is the number of chemical weapons destruction facilities; there will only be six facilities instead of the original seven and only two will be full scale facilities. The Gorny facility [see 11–12 Jun] will be a small pilot blister agent CWDF operating from 2002–05 while a full scale blister agent plant will operate at Kambarka from 2005–11, based on the experience gained in Gorny. The second full scale facility will be constructed at Shchuch'ye [see 11–12 Jun] for the destruction of nerve agents during the period 2005–11. Nerve agent munitions stored at Kizner will be transported to Shchuch'ye upon the destruction of the Shchuch'ye stockpile. Small scale demilitarization and detoxification facilities will begin operating at Maraikova, Pochep and Leonidovka in 2006. The neutralized agent will be destroyed or re-used in civil facilities.

Other "new conceptual provisions" introduced into the programme include: "Implementation of a series of foreign policy measures to provide for support of the provisions of the Program by the States-Parties to the Convention, as well as to increase the volume of donor assistance" and "inclusion into the Program of measures for destruction or conversion of CW production facilities and remediation of the after-effects of their activities."

Other provisions are also included in the updated plan "in order to implement the revised Program measures". These include: "implementation of national and international control measures for compliance with the Convention" and "protection of Russia's economic interests during implementation of the Convention, including introduction of amendments into the Convention".

14 June In Strasbourg, the European Parliament adopts a resolution urging the BWC Ad Hoc Group to complete negotiation of the BWC Protocol before the fifth Review Conference. The resolution urges all AHG states parties to support a compromise agreement based on the chairman's composite text and calls on them to create the strongest possible verification regime. The resolution also invites EU leaders to raise the issue with US President Bush at the forthcoming EU-US summit in Gothenburg. The resolution is forwarded to the Council of the European Union, the European Commission, AHG chairman Tibor Tóth, the Secretary-General of the United Nations, the US president and the heads of state or government of the EU member states and of the applicant states.

During the debate on the resolution, Commissioner for Health and Consumer Protection David Byrne expresses the European Commission's support for the resolution and says that "the time has now come to conclude [the] protocol." He adds that: "The Commission hopes that all States Parties will accept the compromise paper as a good starting point towards enabling the task of drafting and agreeing on the protocol to be finalised in time for the BTWC Conference."

On 26 June, the Russian foreign ministry issues a statement supporting the Parliament's resolution and expressing concern at "media reports that the United States might refuse to sign the protocol." The statement continues: "We express hope that all the participants in the negotiations will show a constructive approach to the elaboration of the Protocol, which must become a major instrument strengthening the regime for the prohibition and nonproliferation of biological weapons."

14 June In the US Senate, the Special Oversight Panel [see 22 May] of the Armed Services Committee holds a hearing on *The Department of Defense Anti-Terrorism and Force Protection Program*. Testifying are Robert Newberry, the Acting Assistant Secretary of Defense for Special Operations and Low Intensity Conflict and Brig-Gen Jonathan Cofer, deputy director for operations, combating terrorism on the Joint Staff. Asked whether the Defense Department is prepared to respond to a

bioterrorist attack, Newberry replies as follows: "Are we there? As a nation, we're a long way from there. ... If you're asking if the Department of Defense and the nation as a whole — the biological response would probably be the least adequate to respond at this stage. ... The size of the event, the number of suits, the response, the doctors capability, their capability to isolate the patients — I would have to say we probably won't be and say we're probably going to be overwhelmed."

14–15 June In the UK, the Home Office and the Department of Health jointly host the first in a series of three seminars on *Managing the Consequences of a Deliberate Release of Chemical or Biological Agents*. The seminars, held at the Home Office Emergency Planning College at Easingwold near York, are designed to "raise awareness of issues that will have to be addressed following a deliberate release, and to encourage those who would be involved in the management of the response to think about their potential roles", according to an invitation circulated to local authorities, emergency planning managers, National Health Service Trusts and Health Authorities. The seminars involve short presentations by the Home Office, the Department of Health, CBW experts and the media. One chemical and one biological scenario is put to the participants, who then discuss the issues raised by the scenarios and the subsequent response.

The invitation states that "the risk of a deliberate release of CB is low, but increasing". In response, it reports that government department, emergency services, local authorities, health providers, the military and others are all working together to develop a response to the threat. The Department of Health issued guidance in March 2000 and the Home Office has also recently issued guidance for local authorities. The invitation also notes that there have been exercises, with the most recent being *Exercise Trump Card* in July 2000 in which London's response to a number of CB incidents was tested.

15–16 June In Gothenburg, leaders of the European Union, meeting as the European Council under its Swedish Presidency, adopt a declaration on prevention of proliferation of ballistic missiles. The declaration includes the following: "Strengthening international norms and political instruments to prevent the proliferation of weapons of mass destruction and their means of delivery is of prime importance to the EU. We are committed to contributing to the achievement of this goal. We stress the need to maintain strict enforcement of our national export controls and to reinforce the multilateral non proliferation and export control regimes." The leaders urge the Council of the European Union to adopt a common position on ballistic missile proliferation based on the universalization of the international code of conduct proposed by MTCR members.

On 14 June, President Bush had met in summit session with the European Council. According to a Swedish official, the projected BWC Protocol was not on the agenda despite the European Parliament's request that it should be [see 14 Jun].

15–19 June In Stockholm, there is the *7th International Symposium on Protection against Chemical and Biological Warfare Agents* [see 10–15 May 98]. There are over 820 participants from more than 40 countries, as well as 80 corporate exhibitors of CBW protective equipment or services. There are around 100 podium presentations and around the same number of contributions to the two poster sessions.

The symposium is opened by Swedish defence minister Björn von Sydow. He begins his address thus: "Man has mapped out its own genetic code. A technological achievement that has been compared to achievements such as travelling in space, the invention of the steam-engine, and even the wheel. ... This progress gives us a hint of the positive effects of bio-

technology. At the same time there is a risk that the new technology can be used in an illegitimate way. There is a dark side in the history of biotechnology that has turned out to be even darker than we imagined a couple of decades ago. ... We must address these questions with the attention that they deserve. History has too often shown what happens if we don't."

Other speakers in the opening session include Anna Johnson-Winegar, US Deputy Assistant Secretary of Defense for Chemical and Biological Defense, Zinovy Pak, director general of the Russian Munitions Agency and Graham Pearson of Bradford University's Department of Peace Studies. Each daily session is opened by a keynote address; the five speakers are: Rolf Ekeus, former UNSCOM executive chairman; Milton Leitenburg speaking on "biological weapons in the twentieth century" [see 1 May, Washington], Jack Woodall on "how the internet provides early warning of outbreaks of infectious diseases and toxins", Anthony Tu on "clinical aspects of sarin and VX terrorist attacks in Japan in 1994 and 1995", and Rolf Hedqvist on "ethos: a rhetorical key concept, and a key concept for a successful risk communication".

18 June In Pretoria High Court, Judge Willie Hartsenberg acquits Brigadier Wouter Basson on 15 of the 46 charges against him [see 4 Apr]. Reasons for the ruling will be set out in the final judgement at the end of the trial, but there is press speculation that the prosecution has concurred in the acquittal possibly because of insufficiency of evidence.

18 June In Washington, FEMA director Joe Allbaugh announces a realignment of the Agency's structure and the establishment of the new Office of National Preparedness [see 8 May]. The restructuring is effective immediately and will be fully implemented by 25 August.

18 June The US State Department imposes trade sanctions under sections 2 and 3 of the *Iran Nonproliferation Act of 2000* [see 14 Sep 99] on a Chinese company, Jiangsu Yongli Chemicals and Technology Import and Export Corporation. The sanctions are announced on 26 June in the *Federal Register*, the effective date being 14 June. According to a State Department spokeswoman, the violation involved "technical assistance controlled under a multilateral regime". Although the Department declines to specify which international regime, unidentified Congressional aides are reported as deducing it to have been the CWC. Sanctions had been imposed on the company in 1997 for shipping equipment and chemicals to Iran [see 21 May 97]. Chinese officials later deny the allegations: "We will by no means help any country develop such weapons. These companies are engaged in normal international trade, which is in line with the spirit and goals of the Chemical Weapons Convention." The foreign ministry spokeswoman is also quoted as saying: "China holds that internal laws and stipulations must never override international laws and it is irrational for the United States to impose sanctions against Chinese companies using the excuse of so-called 'internal laws'."

18–19 June In Washington there is the annual *Carnegie International Non-Proliferation Conference*. The keynote address is given by US Senator Richard Lugar who addresses WMD proliferation as follows: "In short, the proliferation of weapons of mass destruction is the number one national security threat facing the United States and its allies. More so than at any other time in the past, the spread of weapons of mass destruction and their means of delivery constitutes a profound and urgent threat at home and abroad. These weapons are seen by potential adversaries as possessing substantial utility, either for use against neighbors or as instruments of asymmetric warfare designed to overcome the conventional military superiority of the

United States. They are becoming the 'weapons of choice' rather than the 'weapons of last resort'. This more complex and dangerous environment requires us to rethink our strategies and the continuing utility of the traditional tools available to counter the threats our nations face."

On the subject of chemdemil in Russia, Lugar has the following to say: "Despite the tremendous progress Nunn–Lugar has achieved and the real prospects for additional contributions in the future, there are areas that require additional attention and support. In my opinion, chemical weapons elimination in Russia is at the top of this list. ... Critics of US involvement argue that the weapons stored at Shchuch'ye pose no more than an environmental threat to the local Russian population. Nothing could be further from the truth. The size and lethality of the weapons I observed are clearly a threat." Lugar concludes his address thus: "It is time to utilize the window of opportunity to destroy these dangerous weapons. It is imperative for Americans, Russians, and the world that Russia's vast stores of chemical weapons do not end up in the hands of rogue nations or terrorists. We are losing precious time to eliminate these dangerous weapons. Securing the necessary authorization and appropriations for the construction of the destruction facility is my highest priority this year."

Also addressing the conference is Stephen Hadley, the deputy assistant to the US President for national security affairs. His speaking notes, which are subsequently posted on the Carnegie Endowment website, include the following: "We support the Chemical Weapons Convention. We are in the process of destroying our own CW arsenal. We are assisting Russia in its CW destruction efforts by providing \$230 million to date — far more than any other state. We are committed to ensuring the effective functioning of the CWC's implementing body, the OPCW, and will work constructively with our international partners to find solutions to the current budgetary problems so that the full inspection regime can be carried out. We see the Australia Group as an invaluable and essential forum for coordinating the national export controls on CBW-related items. We wish to strengthen these controls and make them more effective. ... Finally, we support unequivocally the Biological Weapons Convention (BWC), and we are willing to pursue effective measures to improve verification and deter cheaters. We view the BW threat to be both real and growing. This may in fact be the greatest threat we face in the future. Because we take this so seriously, we need effective measures to counter it. We must set a high standard and meet it."

On 18 June, there is a panel on *Global Epidemiological Monitoring in Response to the BW Threat* chaired by Jessica Stern of Harvard University. The panelists are: Margaret Hamburg of the Nuclear Threat Initiative; James Hughes of the Centers for Disease Control and Prevention; and Tara O'Toole of the Johns Hopkins Center for Civilian Biodefense Studies. A summary of the panel discussion and following question and answer session is later posted on the Carnegie Endowment website. It reports Margaret Hamburg as saying that "the BW program in the Nuclear Threat Initiative will address ... concerns by supporting awareness, engaging the scientific community, reducing access to pathogens and developing the necessary research agenda."

18–23 June In Tashkent, officials from the Uzbek Ministry of the Interior, the National Security Service and the Prosecution Service participate in a workshop organised by a team from the US Defense Department and Federal Bureau of Investigation on countering the proliferation of weapons of mass destruction. The workshop is the first of four that have been scheduled within the framework of a training programme on the prevention and investigation of the trafficking of nuclear and CBW weapons.

19 June In Almaty, a Polish security official visiting for talks with officials from several Kazakh government offices offers mutual collaboration in various fields. Speaking on Khabar Television, Colonel Marek Dukaczewski, who is first deputy chairman of the Polish National Security Bureau, says: "I am aware of the fact that Kazakhstan is looking for ways to process chemical industry waste. As for us, we have a lot of chemical weapons in the Baltic Sea, left since the Second World War. After Poland ratified an international convention, we worked out a number of effective measures to render chemical weapons harmless. We have been cooperating with Russia, Ukraine and the Baltic Sea littoral countries for a long time, but are only just starting our cooperation with Central Asia."

19 June In Iraq, Qusay Saddam Husseyn, son of the president, has ordered that warplanes stationed in secret bases outside Baghdad be equipped with chemical weapons, according to a release in Vienna by the Supreme Council of Islamic Revolution in Iraq.

19 June In Switzerland, the lower house of Parliament votes 146–42 to approve a motion requesting the government to elaborate a programme of assistance to Russia in its destruction of chemical weapons. The upper house has already approved a similar motion. The Swiss Government is now empowered to put into effect its plans for greater involvement in international chemical disarmament, especially Russian chemdemil, and, depending on which of the options Parliament prefers, anticipates spending CHF 30–50 million over the next 6–8 years.

19 June In Germany, a Stuttgart court finds a 59-year-old mechanical engineer, Roland Franz Berger, guilty of violating foreign-commerce law by assisting Libya in the construction of a chemical-weapons plant at Rabta in 1994. He is sentenced to two and a half years in jail and required to forfeit \$112,000 in income earned in Libya. The DM 3 million plant had been supplied by an Indian company in Bombay and shipped to Tripoli; Berger had been involved in its delivery and installation. He had been living in Libya since 1973, and had surrendered himself to authorities at Stuttgart airport the previous year.

19–20 June In Russia, at Dzerzhinsk, Nizhegorodskaya district, the Moscow NGO Center on Export Controls holds its first export-controls seminar, which is targeted at chemical and biotechnology companies and is supported by government agencies. Representatives of 19 companies participate. The next such seminar is to be held in Volgograd on 30–31 October.

19–22 June In Edinburgh, there is the inaugural meeting of the Global Forum for Law Enforcement and National Security. Among the many workshops during the conference, there is one on *The Biological Revolution: Contagion, Conflict and Crime* and another on *The Trade in Prohibited and Protected Items: An Overrated Threat or a Real Danger?* The conference also addresses the threat of biological warfare, particularly in the light of the recent outbreak of foot and mouth disease in the UK.

20 June In the US, the National Research Council publishes a new report on *Opportunities in Biotechnology for Future Army Applications*. Sponsored by the Department of the Army, the report has been written by a 16-member committee of the NRC Board on Army Science and Technology chaired by Michael Ladisch of Purdue University. The purpose of the 118-page report is "to assist the Army in planning its science and technology program and to highlight barriers to the development of desirable technologies in the next 25 years." The report adds: "In

keeping with national policy and treaty obligations, the study did not include offensive biological weapons." The report identifies the following areas as offering "significant opportunities" for the Army: "Sensors: assay analysis; detection methods; chip architectures. Electronics and computing: protein-based devices; biocomputing; biomolecular hybrid devices. Materials: tissue engineering; biologically inspired materials and processes; hybrid materials. Logistics: miniaturization of biological devices; functional foods; biological energy sources; renewable resources. Therapeutics: genomics and proteomics; drugs and vaccines; drug delivery systems."

21 June In Romania, the Bucharest *Ziua* carries an interview with former Defence Minister Gheorghe Tinca in which he touches on his country's chemical-weapons past [see 30 Jun 94]: "[T]he United States strongly suspected that we were working on a chemical weapon, even though we had signed the convention that bans this kind of weapon. Furthermore, people believed we gave certain formulas to another country. That time it was Iran. Many of the actions we took to deepen our relations with the United States were hindered by these suspicions. The Americans strongly opposed our entrance into the international body in charge of monitoring this field. This happened because Ceausescu had implemented a program to manufacture a chemical weapon, the 'weapon of the poor' he called it. But when he saw how much it cost, he abandoned the project. ... I surprised the State Department when I was in Washington: right at the beginning of a discussion when they were telling me the United States was worried about our chemical weapons, I requested a team of US experts to come to Bucharest whenever they wished, to investigate all their reasons for suspicion with our experts. The US experts arrived, they spent a few weeks here, they saw what they wanted [see 22–26 Aug 94], and at the end they told us things were clear and the report would be favorable to Romania."

21 June In the UK, the Medical Research Council announces that it has advised the Defence Ministry that an epidemiological study to determine whether former participants in the Service Volunteer Programme at Porton Down have suffered unusual mortality or illness would indeed be feasible [see 9 Apr, and see also 1 May, UK]. It invites expressions of interest from the academic research community regarding three possible studies: [a] a questionnaire sent to a sample of past Porton volunteers to obtain information on any symptoms they have experienced; [b] a cohort morbidity study of short-term effects of exposures to certain substances, based on service medical records; and [c] a cohort study of mortality and cancer incidence.

21 June US Defense Secretary Donald Rumsfeld includes some new quantitative information about the proliferation of CBW weapons in testimony before the Senate Armed Services Committee. His prepared statement contains this: "In 1972, the number of countries pursuing biological weapons was unknown; today there are at least 13 we know of, and they are of increasing sophistication and lethality; [i]n 1972, 10 countries had chemical programs we knew of; today there are 16 (4 countries ended their chemical weapons programs, but 10 more jumped in to replace them". He does not identify the countries enumerated, nor does he address their status under the Biological and Chemical Weapons Conventions.

21–22 June In Paris, at the Ecole Militaire, there is an international conference, *Biorisques et Biodefense: Le risque biologique provoqué accidentel*, the third [see 18–19 May 00] in a series organized by the Haut comité français pour la défense civile in partnership with the Fondation Mérieux and the Service de santé des armées.

22 June In Atlanta, the Centers for Disease Control and Prevention issue new recommendations on the use of the smallpox vaccine. The existing recommendations have been revised to take into account the bioterrorism threat: "Currently, international concern is heightened regarding the potential use of smallpox (variola) virus as a biological weapon." For this reason, the recommendations include a section on "smallpox vaccine for bioterrorism preparedness", which begins as follows: "Although use of biological agents is an increasing threat, use of conventional weapons (e.g., explosives) is still considered more likely in terrorism scenarios. Moreover, use of smallpox virus as a biological weapon might be less likely than other biological agents because of its restricted availability; however, its use would have substantial public health consequences."

22 June From Chicago, findings are published from an informatics study of the "extensive and unmanageably large [open-source scientific] literature on viruses" aimed at identifying viruses having potential as BW agents. The work, done at the University of Chicago and at the University of Illinois Psychiatric Institute, has been funded by the US Defense Intelligence Agency and the US Office of Naval Research.

22–23 June At Andrews Air Force Base, the Center for Strategic and International Studies in partnership with the Johns Hopkins Center for Civilian Biodefense Studies, the ANSER Institute for Homeland Security and the Oklahoma City National Memorial Institute for the Prevention of Terrorism, hosts *Dark Winter*, an exercise simulating a bioterrorist attack on US territory. The scenario involves the covert release of smallpox in Oklahoma City, Atlanta and Philadelphia against a background of rising tensions in the Taiwan Straits and on the Iraq-Kuwait border. The exercise is set in three successive NSC meetings with Sam Nunn playing the role of the US president. By the end of the exercise there are 16,000 reported smallpox cases in 25 states with 1,000 people already dead. Cases have also been reported in 10 other countries. Lessons learned from the exercise will be published in various articles and reports over the coming months and there will be at least one congressional hearing.

23–24 June In Oegstgeest, the Netherlands, there is the fifteenth workshop of the Pugwash Study Group on the Implementation of the CBW Conventions. The topic of the meeting is *Approaching the First CWC Review Conference*. Participating are 37 people from 14 countries.

23–27 June In New Orleans, the annual meeting of the Institute of Food Technologists includes a panel on *Bioterrorism: Is the Food Industry at Risk? A panellist from the FDA is reported as saying: "The food supply is an obvious target — we all have to eat. We need to raise the attention of the food industry to the possibility of terrorism."* Craig Watz, director of the FBI centre for biological terrorism, tells the conference that his office now handles 200 to 250 cases a year of possible bioterrorism, most of which turn out to be hoaxes.

25 June The OPCW Technical Secretariat announces the release of version 1 of the electronic version of the Central OPCW Analytical Database. The CD-ROM contains mass spectrometry data adopted by the Conference of the States Parties at its first and second sessions.

25 June In Washington, at the two-day meeting of the Indo-US Joint Working Group on Counter-Terrorism that begins today, the third in the series, officials are expected to discuss the implications of the use by terrorists of CBW weapons, so *The Hindu* reports from Delhi. The newspaper also reports that

the United States is expected to help India set up a counter-terrorism centre and that there may be closer intelligence cooperation between the two countries in this area.

25–26 June In Luxembourg, the 15 EU foreign ministers, meeting as the Council of the European Union, decide to provide further [see 17 Dec 99] financial support to chemdemil activities in Russia. The ministers decide to contribute EUR 2 million to the completion of a critical infrastructure project, such as an access road, utility supply or construction of a railway or gas pipeline, at the Shchuch'ye chemical weapons destruction facility. The expansion of EU support from Gorny to Shchuch'ye is justified as follows: "The Gorny site contains old chemical blister agents (lewisite) stored in bulk. This is an important site since this will be the first site where actual destruction can be initiated. However, it is of utmost importance that the more modern chemical nerve agents stored in projectiles are also destroyed since they are more relevant with regard to a risk of proliferation. The EU has a clear interest in making sure that this will happen and visibly in the context of destruction of modern chemical weapons. It would be wrong for the EU to only concentrate on outdated and less weapons-ready substances." It is anticipated that the project will be implemented under the umbrella of a financial agreement between the European Commission and the UK government which has already decided to allocate money to the Shchuch'ye facility [see 30 Oct 00]. The EU foreign ministers also decide to provide EUR 700,000 to the Russian Munitions Agency. The funds are designed to provide technical assistance to reinforce the Agency's interactions with external donors and its communication with local actors. The support, in the form of an EU consultant and computer equipment, will be channelled through the Swedish ministry of foreign affairs and should begin in the first quarter of 2002.

25–27 June The Johns Hopkins School of Public Health holds a summer course on *Medical and Public Health Aspects of Bioterrorism: Current Policy Issues in Biological Weapons Prevention and Response*. The three-day course is structured into a number of themes, such as: "vulnerabilities to epidemics and bioweapons"; "elements of epidemic response"; "detection and surveillance"; "disease as a natural affliction and weapon"; "reactions, perceptions and information flow"; "prevention"; and an interactive scenario entitled "decision making in a time of plague". Among the lecturers are Ken Alibek, D A Henderson, Amy Smithson and Scott Lillibridge.

25–30 June In the UK, at RAF Stafford, there is a practice CWC challenge inspection. Attending the exercise are four OPCW staff members, including three inspectors, and observers from Australia, India, the Netherlands, Pakistan and the US.

26 June In Tehran, the Chairman of the Expediency Council, Ayatollah Akbar Hashemi-Rafsanjani, tells German Ambassador Rudiger Reyels that any measure of involvement by the German government in the medical treatment of Iranian veterans afflicted by chemical weapons during the 1980–88 Iraq–Iran war would improve relations between the two countries, having regard to the assistance in the manufacture of chemical weapons given by German companies to Iraq. According to the Iranian news agency IRNA, the ambassador expressed regret and stated that the companies, having violated German laws, had been punished. IRNA reports, further, that the ambassador had "expressed optimism towards treatment of Iranians wounded in chemical warfare". Later, Iranian newspapers carry editorials explaining why German companies should be expected to compensate Iranian CW victims. The editorials coincide with the anniversary of the Iraqi CW attack on the Iranian city of Sardasht during the Iran–Iraq war.

26 June In The Hague, at OPCW headquarters, a lunchtime lecture on *Monitoring of Dual Capable Industry: Are There Implications for the Biological Weapons Convention Protocol?* is given by Dr David Kelly of the UK Defence Ministry Proliferation & Arms Control Secretariat

26 June In the UK, the government introduces into the House of Commons the *Export Control Bill* [see 9 May]. The bill is a response to criticisms made in the Scott Report [see 15 Feb 96] and a development of proposals made in the Government's white paper on strategic export controls [see 1 Jul 98]. For the first time, the bill sets out the purposes for which export controls might be imposed. The first such purpose is to give effect to UK international obligations, including those arising from membership of the EU. The second purpose is prohibiting or regulating the export of goods and transfer of technology if the consequences include any of the following: an adverse effect on the national security of the UK and other countries; an adverse effect on regional stability and internal conflict; use anywhere in the world "in connection with the development, production or use of weapons of mass destruction", breaches of international law and human rights; or the carrying out of acts of terrorism or serious crime.

In addition to regulating the export of goods, the bill also applies to the transfer of technology by intangible means. For the purposes of implementing the bill, "transfer" is defined as "a transfer by any means (or combination of means), including oral communication and the transfer of goods on which the technology is recorded or from which it can be derived". Likewise, "technology" is defined as "information (including information comprised in software) that is capable of use in connection with — the development, production or use of any goods or software; the development of, or the carrying out of, an industrial or commercial activity or an activity of any kind whatsoever." The bill is also intended to implement a year-old EU decision concerning the control of technical assistance related to certain military end-uses [see 22 Jun 00]. The bill defines "technical assistance" as "services which are provided or used, or which are capable of being used, in connection with the development, production or use of controlled goods or controlled technology."

When enacted, the bill will additionally require the Secretary of State to report annually to Parliament on its operation.

27 June The Japanese government approves a plan to begin the removal of abandoned chemical weapons in the Jilin province of China, so it is reported. The weapons will be removed from a wetland area in Haerbaling with removal beginning in the current fiscal year, following the construction of an access road.

27 June In The Hague, the International Court of Justice rules against the United States in the death-penalty case brought by Germany. Two German brothers, guilty of murder and deprived of the consular representation that was their right, had been put to death by poison — hydrogen cyanide in the one case, lethal injection in the other — by the State of Arizona [see 24 Feb 99]. The second killing proceeded despite an emergency order from the world court requiring a halt to the execution until it had heard a petition from Germany, and despite personal representations by the Chancellor and the Foreign Minister of Germany.

27–28 June In The Hague, the OPCW Executive Council reconvenes [see 2–6 Apr] for its twenty-fifth formal session. [For further details see *Progress in the Hague* above]

28 June In Washington, at a briefing for diplomats, the US State Department presents three options alternative to the BWC Protocol composite text. *Chemical & Engineering News*

reports that two of the options are already part of the compromise text. It goes on to say: "The third option, an unnamed mechanism outside 'structured arms control approaches' may allude to a recent National Academy of Sciences effort to have scientists police themselves".

29 June In Belgium, legal action is initiated against Iraqi President Saddam Hussein as six Kurdish refugees file a complaint under the 1993 legislation empowering Belgian courts to adjudicate in cases of war crimes, wherever committed. The complaint concerns attacks on the Kurdish population of northern Iraq, including the use of chemical weapons. The 1993 legislation had not been used until recently when four Rwandan nationals were convicted by the Court of Assizes for war crimes committed in Rwanda in 1994. Complaints have also recently been lodged against Israeli prime minister Ariel Sharon by survivors of the 1982 Sabra and Shatila massacres in Lebanon.

29 June In the UK, clinical findings on the second 1,000 Gulf War veterans to attend the Medical Assessment Programme are published in the *Journal of the Royal Army Medical Corps*. The study concludes that 80 per cent of the veterans were well; 31 per cent of those surveyed had organic disease; and 25 per cent had psychiatric conditions, of which 69 per cent had an active diagnosed disorder with post traumatic stress disorder being the predominant condition. The conclusion notes that: "The pattern of disease is similar to that seen in [National Health Service] practice. We found, like others, no evidence to support a unique Gulf War syndrome. Post conflict illnesses have many common features." Commenting on the study, Ministry of Defence Veterans' Minister, Lewis Moonie says "the lack of evidence of a unique 'Gulf war syndrome' is in line with previous research findings. However, we maintain an open mind on the issue of Gulf veterans' illnesses. Finding out why some veterans are unwell continues to be a high priority for the Ministry of Defence."

July The US Defense Department publishes a Congressionally-mandated report on *Biological Warfare Defense Vaccine Research and Development Programs*. The report had been requested by the FY 2001 *National Defense Authorization Act* [see 10 Oct 00]. Annexed to the report is an independent review of the Department's vaccine acquisition strategy by a panel of experts assembled by external contractors SAIC. The panel finds that "the scope and complexity of the DoD biological warfare defense vaccine requirements were too great for either the DoD or the pharmaceutical industry to accomplish alone. To put in perspective, within the United States, vaccines are currently licensed to protect against approximately 20 diseases, whereas the DoD biological warfare defense program alone requires vaccines to protect against almost an equal number of disease-causing, biological warfare agents. In addressing this requirement, the Panel agreed with the DoD vaccine acquisition strategy, which focuses initially on a limited set of approximately eight vaccines [see 11 Aug 00]". The panel's report therefore recommends "a combined, integrated approach drawing on industry, DoD, and national scientific strengths and assets is essential". The panel also concludes that "a government-owned and contractor-operated vaccine production facility is an essential element of the DoD program". The DoD estimates that such a facility would cost \$1.56 billion over a 25-year life cycle with production beginning approximately seven years after the project starts. The panel of experts estimated that the DoD vaccine acquisition programme would require between \$2.4 and \$3.2 billion in research and development costs over a seven to twelve year period. The panel's report is being studied by the Defense Department, although the Department acknowl-

edges that “many of the Panel’s recommendations are at variance with Departmental policy.”

In a section headed “management of BW perceptions and treaty compliance issues”, the panel’s report includes the following: “In addressing DoD vaccine requirements to protect against BW threats, an upfront and agreed upon public affairs plan is essential in overcoming any negative perceptions ... about DoD’s [Biological Defense Program]. Further, the industry does not want to be wrongly tainted by any suggestion it might be producing BW agents for DoD and it is opposed to any potential inspections imposed by BW conventions under the pretext that they might be producing BW agents instead of manufacturing vaccines to protect against such agents. If such inspections are or will be required, industry would be seriously concerned from both the perspective of potentially losing proprietary/trade secret manufacturing information, and the potential perception of being involved in an offensive instead of defensive program. Hence, such inspection activities would have an adverse impact on the industry’s image and growth and would not have the support of their shareholders.”

1 July In Syria, a Scud B missile carrying a chemical warhead is launched in a test flight from near Aleppo to some 300 km south, just short of the Israeli border, so the US-based *Middle East Newsline* reports a week later – without, however, explaining how it knew the type of warhead. *Ha’aretz* describes the launch as the latest in a series of tests. Two weeks later, MENL reports that Syrian sources, which it does not identify, had confirmed the CW missile launch, explaining that this was “a message to Israel not to launch any attack on Damascus”.

2 July In Russia, the research vessel *Professor Shtokman* has returned from a new [see 22 Aug 00] expedition surveying ocean-burial sites in the Baltic Sea where chemical weapons were dumped at the end of World War II. During the three-week expedition, the scientists had discovered three sunken barges near the Danish island of Bornholm which could contain tonnes of munitions. Scientists involved say on television that “there are chemical weapons that were not only thrown over board near Bornholm but were also sunk together with the vessels carrying them. This is a sensational fact that has been established for the first time this year.” The results of the expedition are to be presented at a forthcoming international conference at the University of Ghent in Belgium.

2 July In the UK, the government inaugurates the Defence Science and Technology Laboratory (Dstl) as a new scientific organization within the Ministry of Defence. Dstl is one of the entities resulting from the partial privatisation of the former Defence Evaluation and Research Agency, the other being QinetiQ, an independent science and technology company which had temporarily been known as NewDERA. Dstl has a staff of around 3,000 which represents approximately 25 per cent of the former DERA. The new organization consists of most of DERA’s former technical expertise: the Chemical and Biological sector; the Chemical and Electronics sector, the greater part of the Centre for Defence Analysis and the Defence Research Information Centre.

2 July The UK, facing a Russian veto, withdraws its draft resolution from the UN Security Council that would impose “smart sanctions” on Iraq in place of the present trade embargo [see 1 Jun]. Next day, the Council extends the oil-for-food programme by a further five months.

3 July In Hanoi, a statement from the US Embassy announces that the governments of Viet Nam and the United States have reached agreement on how to proceed with the

projected joint US–Vietnamese research programme on dioxin pollution and other aspects of the Agent Orange sprayed during the Vietnam War. The US Congress has already approved funding for the programme, but last November’s talks in Singapore on how to conduct the research [see 27 Nov–1 Dec 00] had broken down. Two programme elements have now been agreed, meaning that the funds can be released. There is to be a study to screen soil for dioxin; and there is to be a joint Vietnam-USA scientific conference on human-health and environmental effects of Agent Orange, tentatively scheduled for April 2002 in Viet Nam.

4 July In Iran, the OPCW completes its 1,000th inspection. The inspection was to an industrial site. The OPCW has now inspected 462 facilities in 49 CWC states parties. Among the 1,000 inspections are 622 chemical-weapons-related inspections and 378 industrial inspections.

5 July Russian Federation government resolution no 508 confirms a list of closed administrative-territorial formations in Russia, among which is still [see 30 Jun 97] the town of Shikhany, location of the CW research, development and test facilities that date back to the German-Soviet collaboration of the 1920s and of GITOS (the State Institute for Heavy Organic Synthesis), which is currently involved in the chemdemil programme.

5 July In London, the Institute of Biology convenes a meeting for members and non-members on the fifth BWC Review Conference. Participants hear presentations from Graham Pearson and Malcolm Dando from Bradford University, Tony Phillips from Dstl [see 2 Jul] and Alan Malcolm of the Institute.

5 July In Manhattan Federal District Court, during the trial of Mokhtar Haouari accused of involvement in the thwarted bombing of Los Angeles airport in December 1999, convicted international terrorist Ahmed Ressam is cross-examined on the evidence he has given for the prosecution concerning his training at two camps in Afghanistan said by US officials to be run by Osama bin Laden [see 6 Feb and 17 Feb]. He states that he had received instruction in uses of hydrogen cyanide, such as introducing it into the ventilation systems of buildings by placing it near air intakes.

5–6 July In Belgium, an international workshop on *Chemical Munition Dump Sites in Coastal Environments* is convened at the Renard Centre of Marine Geology at the University of Ghent. The workshop is divided into three main sessions, dealing with status assessment, risk assessment and policy, and includes a visit to the Belgian chemdemil facility at Poelkapelle [see 26 May 98]. During the first session, scientists from the Shirshov Institute of Oceanology in Russia present the results of their recent expedition in the Baltic Sea [see 2 Jul]. During the last session, Jean Pascal Zanders of SIPRI presents a paper on “dealing with sea-dumped chemical weapons under the Chemical Weapons Convention”.

6 July The United Nations Sanctions Committee, which has been acting on applications to export goods to Iraq under the “oil for food” programme since it began five years ago [see 20 May 96], has now received around 19,700 applications worth over \$28.7 billion. Of these applications, 1350 worth \$3.39 billion are still on hold by the Committee. The UK Foreign and Commonwealth Office later explains this as follows: “The majority of Committee holds are imposed because applications are submitted with insufficient information for the Committee to be able to assess whether the goods could be used in Iraq’s Weapons of Mass Destruction (WMD) programmes. Where

there are serious concerns in this regard, assurances of end-use or in-country monitoring are often sufficient to lift the hold”.

9 July In the UK, Wiltshire Police announce that they have enough evidence to bring charges against at least five individuals in connection with chemical weapons experiments carried out in the 1950s at Porton Down [see 27 Feb]. The force will now ask the Director of Public Prosecutions to take the scientists to court. Five MoD scientists had been interviewed under caution in April, so it is reported. News that the police intend to refer the case to the Crown Prosecution Service is also conveyed by letter from Wiltshire Police to former servicemen and in an MoD briefing document issued to medical researchers bidding to carry out an epidemiological study [see 21 Jun, UK]. The MoD briefing says: “Recently the police have begun to interview under caution former Porton Down employees about their involvement in the trials. They have informed us that some cases will be referred to the Crown Prosecution Service later this year.” Any charges are likely to be brought under the 1861 *Offences Against the Persons Act*.

9 July In the UK House of Commons, the government states its judgement that “there is currently no significant threat to the UK from weapons of mass destruction.” The government adds that it continues to monitor developments closely. The statement comes in response to a question on the subject of rogue states. The government also adds: “‘Rogue state’ is generally not a term we would choose to use. We are concerned by the proliferation of weapons of mass destruction and their means of delivery in several regions including the middle east, South Asia and the Korean Peninsula.”

9 July The US Army chemical defence laboratories in the Edgewood Area of Aberdeen Proving Ground are funded at \$124.8 million in the revised FY2002 Defense Department budget, which totals \$343.2 billion.

9–13 July At Fort Leonard Wood, Missouri, the US Army Chemical School and the National Defense Industrial Association host the *18th Worldwide Chemical Conference and the Chemical Warfighters Conference* [see 19–23 Jun 00]. The conference website describes the event as “the preeminent chemical and biological conference held in the United States”. Attendees include representatives from 15–20 foreign governments and industries. The keynote address is given by Anna Johnson-Winegar, Deputy Assistant Secretary of Defense for Chemical and Biological Defense.

10 July In Russia, the government approves the draft of a second [see 16 Jun 99] protocol to the US–Russian Agreement on Safe and Secure Transportation, Storage and Destruction of Weapons and the Prevention of Weapons Proliferation (also known as the CTR Umbrella Agreement) [see 17 Jun 92]. The protocol would amend the original agreement by appointing executive agencies within both countries to implement the agreement. In Russia, the Russian Munitions Agency would be responsible for activities dealing with chemical weapons. In the US, the Defense Department will deal with chemical weapons as well as nuclear weapons, ballistic missiles and bombers.

10 July US Secretary of Health and Human Services Tommy Thompson announces the appointment of Scott Lillibridge as Special Assistant to the Secretary on National Security and Emergency Management [see 8–10 May]. Lillibridge, previously the director of the CDC’s Bioterrorism Preparedness and Response Program, will oversee the Department’s bioterrorism initiative and will report directly to Thompson. Lillibridge will also support the efforts of the Surgeon General to

revitalize the US Public Health Service Commissioned Corps. A former director of the CDC bioterrorism preparedness and response program, Lillibridge was also the head of a US medical delegation sent to Tokyo following the Aum Shinrikyo attack on the subway [see 20 Mar 95]. The Bush administration’s FY 2002 budget proposes an allocation of \$348 million to the Department of Health and Human Services’ anti-bioterrorism initiative, an increase of 18 per cent on the FY 2001 budget.

10 July In the US House of Representatives, the Subcommittee on National Security, Veterans’ Affairs and International Relations of the Government Reform Committee holds another [see 5 Jun] hearing on *The Biological Weapons Convention Protocol: Status and Implications*. Testifying are: Ambassador Don Mahley and Edward Lacey from the State Department and former ambassador James Leonard. Written testimony is submitted by Ad Hoc Group chairman Tibor Toth, Graham Pearson of Bradford University and by a group of European academics and experts, including: David Atwood of the Quaker United Nations Office in Geneva; Malcolm Dando of Bradford University’s Department of Peace Studies; Alastair Hay of the University of Leeds; Alexander Kelle of the Peace Research Institute Frankfurt; Ian Kenyon of the Mountbatten Centre for International Studies; Kathryn Nixdorff from Darmstadt University of Technology; Julian Perry Robinson of the University of Sussex; and Nicholas Sims of the London School of Economics.

The written testimony submitted by Mahley and Lacey is almost identical to that submitted at the subcommittee’s previous hearing on this subject [see 5 Jun]. In his written submission, the AHG chairman Tibor Tóth addresses the question of verification which Lacey had raised in his statement: “the ultimate aim of the Protocol can not be and is not verification of the BTWC, certainly not in terms of how verification is understood in the United States. Instead the Protocol will create enhanced transparency of relevant areas of dual-use civilian and military activities.” After summarizing the reasoning behind the provisions of the draft protocol, Tóth concludes as follows: “The draft instrument before the Ad Hoc Group will provide the international community with a permanent legally binding mechanism to address the problem of biological weapons proliferation. It will not absolve us from all our worries in this regard, but with it we will have an additional and complementary tool to address the threat. Failure in Geneva will, I fear make other efforts, including unilateral ones, much more difficult to sustain and prosecute. I would therefore urge all States Parties not dismiss this opportunity of strengthening the international BTW control regime lightheartedly. I sincerely hope that the United States will be able to further demonstrate its commitment to this process and provide the necessary leadership in the common struggle against biological weapons, as it did in the negotiation and completion of the Biological Weapons Convention three decades ago and the Chemical Weapons Convention nearly ten years ago.”

Under questioning, Mahley reveals that the US administration review of the draft protocol [see 23 Apr], which he chaired, is classified. When pressed to explain US objections to the draft protocol’s provisions on export controls, Mahley responds that “the current chairman’s text in the area of the text, which deal directly with the issue, which is Article Seven of the text, Sections A through D, does indeed, in my judgment, largely reflect Western values.” However, he states that the US would only be able to support Article 7 if it did not contain a Section E. As it currently stands, Mahley says that the US would be unable to support Article 7. Addressing activities within the US, Mahley says: “the inherent ambiguity in trying to find answers to what people intended to do with activities in the biological nature, by on-site activities, is, ... an almost unanswerable conundrum. In terms of United States government facilities, there were activi-

ties conducted which did, indeed, raise some of those ambiguities.”

Mahley, Lacey and Leonard are also questioned on their expectations for the future of the draft protocol. Leonard says that “the worst thing that could happen would be for the government, the administration, to say that this protocol is not satisfactory and we have a new, bright idea of some sort that we think can effectively substitute for it. There have been some hints that something like this might be in the offing and I think the result—there are some good ideas for other things beside the protocol. But if the United States puts them forward as a substitute for the protocol, it will kill them dead as a dodo. And that is not our interest or in the interest of moving forward on this basic problem.” Lacey outlines some options for improving the verifiability of the BWC: “We can do them unilaterally. We can do them in concert with other nations, our friends, our allies. We can devote additional resources to the collection and evaluation of intelligence and other related data. Diplomatically, we can take a very vigorous approach to compliance diplomacy. This means following up on compliance concerns and suspected violations. We can press for visits to suspect facilities by compliance experts. ... We can press known and suspected violators to come clean and to take corrective action. These are things that we can do nationally and certainly that we can do multi-nationally.”

10–11 July In Washington, the National Governors Association and the National Emergency Management Association host *Preparing the Nation: A Policy Summit on Domestic Terrorism*. The executive-level meeting brings state teams of governors’ policy advisers and lead state officials in law enforcement, public health, fire and emergency management together with federal officials. Speakers include: Secretary for Health and Human Services Tommy Thompson; Attorney General John Ashcroft; West Virginia Governor Bob Wise; General Dennis Reimer, director of the Oklahoma City National Memorial Institute for the Prevention of Terrorism; Lt-Gen. James Clapper of the Gilmore Commission; and Congressman Christopher Shays. The agenda of the meeting is structured around a table-top bioterrorism exercise involving the release of plague in the fictional state of New Aberdeen by a neo-nazi.

Secretary Thompson concentrates his speech on his Department’s anti-bioterrorism initiative which has been proposed for an 18 per cent increase in funding in its FY 2002 budget allocation. He says that the initiative focuses on four areas: coordination; surveillance; rapid response; and prevention. Under the latter, he reveals that as of April 2001, 230 laboratories across the US have registered with CDC to transfer “select agents” pursuant to the 1996 *Antiterrorism and Effective Death Penalty Act* [see 20 May 99].

12 July In Kazakhstan, a team of US scientists has just completed a visit to the chemical-industry joint-stock company at Pavlodar [see 26 Jul 00], where it has taken samples and studied production processes. The deputy head of the Pavlodar Region department for industry, trade and development of entrepreneurship, Temen Zhalin, says on television that the team is convinced that chemical weapons are not produced at the facility despite the presence of all the equipment needed for such production. He says, too, that the team will be recommending to the US State Department that it finance the elimination of the former chemical-weapons production facility.

12 July In Moscow, the Interdepartmental Scientific Council on Chemical and Biological Weapons Conventional Problems, which is subordinate to the Russian Munitions Agency and to the presidium of the Russian Academy of Sciences, convenes for its inaugural session. The Council is chaired by Academician Anatoly Kuntsevich [see 25 Oct 99 and 13–14 Nov 00]. Ac-

ording to the chairman of the State Commission on Chemical Disarmament, Sergei Kiriyenko, “the commission and council should work hand in glove. We believe that the council will be an expert body that will provide scientific reviews covering all activities of the commission ...”. Kiriyenko goes on to note that the council will focus on chemdemil technologies: “First, the most profitable, cheapest and most efficient solutions should be found. Second, there will always be the question who makes the choice. There are many groups of authors and each believes that his technology is the best. And we understand clearly that if we leave the choice to state officials only there will always be a suspicion that some of them lobbied for the interests of a friendly institute or enterprise.” He hopes that the council will consist of the best minds from across Russia, thus ensuring the council’s credibility: “The state will be much more tranquil when expert reviews related to chemical and bacteriological weapons are issued by an independent interdepartmental council.”

12 July In the UK House of Commons, the Foreign and Commonwealth Office describes the areas of the BWC Protocol chairman’s text in which it considers more work needs to be done. “At the next session of the Ad Hoc Group in Geneva, the UK will continue to press for completion of the BWC protocol and resolution of the outstanding issues identified by the Chairman of the Ad Hoc Group, Ambassador Toth. There are a limited number of specific items in his ‘composite text’ where further work is required. These are to be found in the sections on Definitions, Declarations, Visits, Measures to strengthen the implementation of Article III of the Convention, Investigations and Legal issues. The UK will continue to work closely with the Chairman and other Delegations to attempt to find solutions to these issues which are acceptable to all.”

12 July From the US Department of Defense, a new case narrative is released by the Office for the Special Assistant for Gulf War Illnesses, Medical Readiness and Military Deployments. The report, *Reported Mustard Exposure: Operation Desert Storm*, is a final version of two earlier interim reports dealing with the diagnosed exposure of a US Army soldier to liquid mustard chemical warfare agent. The 1997 interim report had assessed exposure as “likely”, but the final version assesses exposure as “indeterminate” due to conflicts between key pieces of physical evidence.

12 July In the US Senate, the Subcommittee on Emerging Threats and Capabilities of the Armed Services Committee in its review of the FY 2002 Defense Authorization Request hears testimony on the US chemdemil programme and cooperative threat reduction. Testifying are: Anna Johnson-Winegar, Deputy Assistant Secretary of Defense for Chemical and Biological Defense; Maj-Gen. Robert Bongiovi, acting director of DTRA; Robert Waldon, Assistant Deputy Director of the NNSA; and Susan Koch, Acting Assistant Secretary of Defense for Threat Reduction. In his opening statement, subcommittee vice-chairman Pat Roberts says: “I will note ... that the US Chemical Weapons Program is not without its share of problems. ... There have been growing concerns about the oversight and management of the program. The Congress through the work of this committee has repeatedly directed the secretary of Defense to take a greater oversight role in this program. ... Executing the Chem Demil Program and meeting our obligations under the Chemical Weapons Convention is a national priority and should receive a commensurate degree of oversight from the secretary of Defense.”

Asked whether the US will be able to meet the 2007 CWC deadline for destruction of all of its chemical weapons, Winegar responds as follows: “Certainly I think that it’s going to indeed

be a very big challenge for us to meet the ultimate deadline ... I think that we're off to a good start. ... In my personal opinion the major obstacles for us to overcome are to make technology decisions regarding the stockpiles at Pueblo and Bluegrass." Addressing the conditions which the Senate attached to US funding for the Russian CWDF at Shchuch'ye, Susan Koch says: "the conditions you outlined helped ... greatly within [the] government in focusing attention and pointing them on a good path ahead. And we have had good progress on all. They've dramatically increased their '01 budget for chemical weapons destruction including \$25 million for [Shchuch'ye]. They're working very hard on a systematic overall destruction plan which they have lacked before. They're working on being able to transport chemical weapons for destruction in just a very few sites as opposed to the many that they had once planned. And their work at the [Shchuch'ye] site on the general infrastructure which we would require to go ahead continues apace."

Describing the work of the Department of Energy's Nonproliferation and Verification Research and Development Program, Robert Waldron states that the main challenge of the programs supporting homeland defence is "biological detection. The challenge of distinguishing a threat pathogen from its harmless, very close relatives is pushing scientists to discover new and finer distinctions among organisms. Other technological gaps we face include accurately predicting where and how the plume of a threat agent will spread — in, out or around a building and in a city. An accurate understanding of the hazard area is critical to a rapid and effective response." On support to WMD counterproliferation Waldron says: "The challenge is to catch clandestine WMD activity. Potential adversaries have taken considerable steps to disguise activities that might provide clear indications of the nature of their weapons development programs. ... New sensors that detect new kinds of signatures are necessary, and advanced processing and exploitation methods must be developed to create useful information out of this data."

13 July The UK government, in September 2000, "inadvertently issued a licence for a small quantity of military listed chemical to Libya", so the House of Commons is told by Foreign Office Minister Ben Bradshaw. His statement continues: "This was technically in breach of the UK interpretation of the EU arms embargo on Libya. The chemical was for use in the laboratory analysis of water and sewage samples. The goods have now been exported and the licence has been returned as exhausted. As a result of the error we have revised assessment procedures of export licence applications to embargoed destinations. The Government continue to support the EU arms embargo on Libya."

15 July In Iraq, calling for talks with Kurdish leaders, President Saddam Hussein says: "Iraqi people meet at the great post of the big tent, which is Iraq. This tent forms the real shield that protects them against the evils of time. At the same time, it provides the cover that protects them from the climate changes which may kill some people." Reporting this, the Arab weekly *Hawlati* observes that, according to some political observers, the expression 'climate' is symbolic and that Saddam Hussein is threatening the Kurds with chemical weapons.

15 July UK Home Secretary David Blunkett has told his officials to bring forward plans to issue police forces with tranquilizer dart guns, so *The Observer* reports. This follows an incident three days previously in which police marksmen in Liverpool shot dead a schizophrenic man armed with a samurai sword after CS gas had failed to subdue him.

16 July In Moscow, President Putin and President Jiang Zemin sign a treaty of good neighbourly friendship and cooper-

ation. Article 12 of the treaty states that Russia and China will "actively promote the process of nuclear disarmament and reduction of chemical weapons, advance the strengthening of the system for banning biological weapons, and take steps to prevent the proliferation of weapons of mass destruction, the means of carrying them, and their related technology."

16 July In Moscow, the Chairman of the State Commission on Chemical Disarmament, Sergei Kirienko [see 4 May, Russia], speaks to reporters about the work of his commission in guaranteeing environmental security in locations where Russian chemical weapons are being destroyed. He acknowledges that there are problems, some technical, some in public relations. He says: "It is great that the Commission and the Interdepartmental Scientific Council on Conventional Problems of Chemical and Biological Weapons [see 12 Jul, Moscow] involve regional representatives. Being President Vladimir Putin's envoy, I regularly deal with elections in this or that region. The problem of chemophobia is speculated upon by candidates during election campaigns. Even candidates in Nizhny Novgorod, which never had any chemical weapons stocks, managed to use the issue in their favour." He goes on to say that, according to the data of the Health Care Ministry, "the only disease which permanently exists in the areas where chemical weapons stocks are located is the chemophobia".

16 July The US administration has now completed its review of US assistance to Russia and has concluded that most of the Cooperative Threat Reduction (Nunn-Lugar) and other programmes concerning Russian nuclear and CBW weapons, including State Department support for the ISTC in Moscow, should be continued, so the *New York Times* reports. The newspaper also reports, however, that the administration has deferred decision on the future of US assistance for construction of the chemdemil facility at Shchuch'ye [see 12 Jul and 25-26 Jun].

17 July At Porton Down, the Centre for Applied Microbiology and Research (CAMR) announces that it has fulfilled an order to supply anthrax vaccine to the Ministry of Defence. The announcement is the culmination of two years' work at the centre, where the vaccine production facility has been rebuilt at a cost of over £2 million. The vaccine is the only licensed anthrax vaccine in production, given the problems being encountered in the US [see 11 Jun]. According to media reports, the MoD has received half a million doses of the vaccine which will be offered to armed forces personnel to be deployed in the Persian Gulf and to selected other units under the Voluntary Immunization Programme (VIP). Coinciding with the announcement, the MoD posts on its website information for armed forces personnel regarding the vaccine, the threat from anthrax and the safety of the vaccine. Some vaccine will also be produced and stockpiled for use in the event of a bioterrorist attack on the UK.

18 July The UK Defence Ministry includes the following in its response to a parliamentary question about the latest mortality figures for veterans of the Gulf War: "Overall, in the period 1 April 1991 to 30 June 2001 the mortality of UK Gulf veterans was no different than that of the control group. The number of Gulf veterans dying from disease related causes is rather less than the control group, whereas the number of Gulf veterans dying of external causes is rather higher than for the control group. The MOD will conduct a more detailed analysis of accidental deaths, to establish where there are any underlying trends that might help explain this."

18 July In New York, at the United Nations Secretariat Building, a documentary film entitled *In Shifting Sands: The Truth*

about UNSCOM and the Disarming of Iraq is premiered by Five Rivers Production, Inc, in cooperation with the UN Correspondents Association. The director of the film, former UNSCOM Chief Inspector Scott Ritter [see 16 Aug 00] is present to respond to questions. According to a Five Rivers Production press release: "In *Shifting Sands*' for the first time on film reveals the scope of the intelligence work carried out by UNSCOM in Iraq, as well as the betrayal of UNSCOM and its disarmament mission by the United States in favor of unilateral American policies of containment and regime removal. The reality of Iraq's disarmament status is compellingly contrasted with the ongoing humanitarian crisis in Iraq. 'In *Shifting Sands*' challenges the existing school of thought concerning Iraq and its disarmament, providing the audience with information and insights that have not been placed in the public eye by either the US government or the mainstream media." At the press briefing accompanying the premiere, Ritter is quoted as saying that "by 1995 Iraq had been fundamentally disarmed. The difficulty was to find a political way to get that conclusion endorsed by the Security Council. ... Iraq did comply to a very large degree with its obligation to disarm." In the documentary, Ritter alleges that "the United States orchestrated the events that led to the demise of inspections" in late 1998. He adds that "[the US] used UNSCOM in two ways – as vehicle for information pertaining to the security of Saddam Hussain and to manipulate the process of inspection to create appropriate triggers for military action." Ritter also expresses his opinion that Iraq does not pose a current danger: "Between 1998 and 2001, Iraq has not had access to technology, Iraq has not had access to the funds required to significantly rebuild a meaningful weapons of mass destruction capability."

19 July In the Netherlands, the government releases its annual report on weapons exports for calendar year 2000. The report includes details of the exports which have been denied by the Dutch government under the EU Code of Conduct on Arms Exports [see 6 Jun 98], among them a consignment of "equipment for the testing of nuclear, biological and chemical filters" destined for the Chemical Warfare Defence Department of the Egyptian army which was denied in May 2000. The shipment was denied under three of the Code's criteria dealing with the receiving country's "commitment to non-proliferation and other areas of arms control and disarmament, in particular the signature, ratification and implementation of relevant arms control and disarmament conventions", including the BWC and CWC.

20 July In Genoa the G8 summit opens amidst concern about security, including security against CBW attack [see 20 May]. Besides several thousand police, some 2700 Italian armed-forces personnel have been deployed on protective duties, NBC defence specialists among them. Surface-to-air missile units guard against air attack. Great numbers of anti-globalization and other demonstrators have been arriving in the city. Newspapers have been carrying reports that European and US intelligence agencies are hunting the Meliani terrorist group, of which 17 Algerian alleged members have been arrested since December in Germany, Italy, Spain and the UK [see 17 Feb]; and that al-Qaida headed by Osama bin Laden [see 5 Jul] may be planning a suicide attack on the summit.

20 July In the UK, Biotrace International Plc announces that it is forming a joint venture with Dstl [see 2 Jul] to be called Lucigen Ltd. The joint venture will be based in the science park at Dstl's Chemical and Biological Sciences facility at Porton Down and will develop and manufacture reagents based on technology developed at Porton.

20 July In the UK, the government publishes its fourth annual report on *Strategic Export Controls* [see 21 Jul 00] covering calendar year 2000.

22 July In Genoa the G8 summit [see 20 Jul] comes to an end after much violence in the streets. In the final communiqué, which shows signs of discord on the Kyoto Protocol and other environmental issues, there is no allusion to any discussion of the BWC Protocol negotiation, as there had been in previous G8 communiqués [see 21–23 Jul 00], or of assistance for Russian chemdemil and conversion activities in the CBW field. Indeed, the communiqué contains no references to international security issues whatsoever. Attitudes now being displayed by the US administration to both these matters had given rise to speculation that the issues would be addressed, either in the G8 context or bilaterally with the United States.

23 July In Pretoria High Court, where the trial of Brigadier Wouter Basson [see 18 Jun] is now in its 21st month, the defendant takes the witness stand for the first time. His evidence in chief is expected to engage the court for a week, and his subsequent cross-examination is expected to last for six weeks. [For further detail, see *Proceedings in South Africa*, above.] Reportedly, the defence costs alone currently exceed \$0.5 million. Like the prosecution itself, the defence costs are a charge to the state because Dr Basson was a state employee at the time of the alleged offences.

23 July In Geneva, the Ad Hoc Group of states parties to the BWC reconvenes for its twenty-fourth session [see 23 Apr]. Participating are 60 states parties (the same as those that participated in the twenty-third session, but with Albania, Bosnia and Herzegovina, Cyprus, Ethiopia, Luxembourg, Malta, Venezuela and Viet Nam participating instead of Bangladesh, Jordan, Philippines and Tunisia) and three signatory states (Egypt, Morocco and Myanmar). The session is due to end on 17 August. [For further detail, see *Report from Geneva* above]

23 July In London, at Blackfriars Crown Court, fines are imposed on Imperial College for breaches of the Health and Safety at Work Act 1974 and of the Genetically Modified Organisms (Contained Use) Regulations 1992. Following an inspection by the Health and Safety Executive in December 1998, the College had admitted "failing to apply principles of good microbiological practices and principles of good occupational safety and hygiene" during a vaccine-related research project that involved the creation of a hybrid virus from the viruses of dengue fever and hepatitis C.

23 July In the US Senate, the Committee on Governmental Affairs holds a hearing on *FEMA's Role in Managing Bioterrorist Attacks and the Impact of Public Health Concerns on Bioterrorism Preparedness*. Testifying are: Bruce Baughman, director of planning and readiness in FEMA; Scott Lillibridge, Special Assistant to the Secretary of Health and Human Services on National Security and Emergency Management [see 10 Jul]; Tara O'Toole of the Johns Hopkins Center for Civilian Biodefense Studies; and Dan Hanfling, the chairman of Inova Fairfax Hospital's disaster preparedness committee.

23 July In the US House of Representatives, the National Security, Veterans Affairs and International Relations Subcommittee of the Government Reform Committee holds a hearing, *Combating Terrorism: Federal Response to a Biological Weapons Attack*. The hearing is the first congressional examination of *Dark Winter*, the recent bioterrorism exercise [see 22-23 Jun]. Testifying in the first panel are participants in *Dark Winter*: Frank Keating, governor of Oklahoma; Sam Nunn, chairman of

the Nuclear Threat Initiative; John Hamre, president of the Center for Strategic Studies; Margaret Hamburg, vice president, biological programs for the Nuclear Threat Initiative; and Jerome Hauer, managing director of Kroll Associates. The second panel considers the role of the National Guard and public health personnel and consists of: Maj-Gen William Cugno, Adjutant General of Connecticut; Maj-Gen Ronald Harrison, Adjutant General of Florida; James Hughes, director of the CDC National Center for Infectious Diseases; Patricia Quinlisk, medical director and state epidemiologist, Iowa Department of Public Health, Jeffrey Duchin, chief of Communicable Disease Control, Epidemiology and Immunization Section, Seattle and King County, Washington.

In his testimony, Sam Nunn says the following: "Our lack of preparation is a real emergency. ... I am convinced the threat of a biological weapons attack on the United States is very real. ... I have no interest in setting off panic; it is important not to overstate this threat. But it is not necessary to overstate the threat to make the point that it is real, it is dangerous, and if it came today it would catch us unprepared." In his statement, committee chairman, Christopher Shays says: "If there is a ray of hope shining through Dark Winter, it is sparked by this irony: improving the public health infrastructure against a man-made biological assault today better prepares us to face natural disease outbreaks every day. Just as biotechnologies can be used to produce both life-saving therapies and deadly pathogens, public health capabilities are likewise 'dual use', enhancing our protection against smallpox attack by a terrorist and an influenza pandemic produced by Mother Nature."

23–24 July In The Hague, the OPCW Technical Secretariat hosts a preparatory meeting for the IUPAC evaluation of technical issues relating to the CWC which will be submitted to the first CWC review conference in 2003. IUPAC will carry out this review with the cooperation of its national constituent academies and societies. The review will focus on two areas: synthetic organic chemistry and how advances may effect the Convention, its implementation, and the General Purpose Criterion, and analytical chemistry and how that field can contribute to the technologies and methods used in verification of the CWC. In July 2002, IUPAC will convene a workshop at which the findings will be presented and discussed. IUPAC will involve the worldwide chemical industry in this review. The OPCW Scientific Advisory Board plans to hold its own discussions on scientific and technological developments and their relevance to the Convention in 2002.

23–27 July At Indian Head, Maryland, the United States hosts a CWC challenge inspection exercise, the fourth such exercise since 1997. The trial inspection was conducted by ten OPCW inspectors. US personnel and six international observers from other states parties were also involved in the simulation. Previous challenge inspection exercises have been held in the UK [see 25–30 Jun] and Brazil [see 3–9 Oct 99]. The Indian Head Naval Surface Warfare Center is also home to the US Marine Corps Chemical Biological Incident Response Force [see 13 Jan 00].

24 July In Moscow, President Putin meets with the governor of the Saratov region, Dmitriy Ayatskov, and their agenda includes the present state of work on the chemdemil facility under construction at Gornyy. Governor Ayatskov later tells reporters that the facility's first-phase plant could become operational as early as the first quarter of 2002 if problems associated with financing are resolved. R1.4 billion have been allocated for the first phase, but another R0.7-0.8 billion are required to finish construction.

24 July In Washington, a briefing reportedly takes place at the White House for selected journalists at which administration officials set out the reasons for the US rejection of the draft BWC protocol, that will be formally announced in Geneva the following day. According to a report in the *New York Times*, an unidentified "senior administration official" said that "you can't apply traditional arms control thinking to biotechnology. You need out-of-the-box solutions to stopping the spread of this kind of weapon because it is like no other." According to the report, the officials described a number of alternatives which the US would soon share with its allies, including seeking "to strengthen export controls" particularly through the Australia Group, to "pursue 'international legal instruments' that would prevent terrorist groups or countries from getting and misusing dangerous germs and toxins" and "efforts by individual states to pass legislation and international treaties or conventions that make it a crime to buy, build, acquire or use a biological weapon for terrorist attacks." The report quotes one official as saying: "The administration remains firmly committed to the treaty and to stopping the spread of biological weapons, but through effective and innovative measures." The official is also quoted as saying: "Iran has an offensive biological weapons program. Iran would not be signing a document that prevents it from cheating."

24–26 July In Arlington, Virginia, there is the annual summer meeting of the Department of Energy's Chemical and Biological National Security Program [see 15 Mar]. As at previous such occasions [see 28–30 Jul 98 and 20 Jul 99], the goal of the meeting is "to gather community experts for technical and programmatic information exchange and to provide a forum for presentation and review of the work sponsored by the CBNP during the past year." The meeting opens with a keynote address from Senator Pete Domenici.

25 July In Moscow, AVN Military News Agency reports an interview with Academician Anatoliy Kuntsevich, chairman of the Interdepartmental Scientific Council on Conventional Problems of Chemical and Biological Weapons [see 16 Jul], on questions of how Russia should comport itself under the provisions of the Chemical Weapons Convention. Kuntsevich says that Russian participation should be considered "from the point of view of causing damage to the country's national interests". The AVN report continues thus: "The Convention ... defines principles of control over functioning of any military, industrial, research or other installation and grants the right to reject this control. Taking this into account Russia should thoroughly analyse efficiency of mechanisms protecting its interests, the academician went on. For instance, it should assess the state of the country's chemical industry and make sure who the owners of the industry's enterprises are. According to Kuntsevich, Western companies have been trying to gain control over the phosphor chemistry lately. It means that Russia will soon be kicked out of global markets because those who have monopolized that sphere are hardly interested in development of phosphor chemistry in the interests of Russia's defence. This type of chemistry includes development of flame-throwing, incendiary and smoke weapons, as well as means of protection of nuclear blasts' searing effect. Kuntsevich also said that elaboration of the state policy in the sphere of control over allowed and prohibited activities in the sphere of chemical disarmament was among the main tasks of his Council."

25 July In Geneva, US head of delegation to the BWC Ad Hoc Group Don Mahley [see 10 Jul] announces the long-rumoured [see 20 May] US rejection of the chairman's text of the BWC protocol. Mahley states: "After extensive deliberation, the United States has concluded that the current approach to a

Protocol to the Biological Weapons Convention, ... is not, in our view, capable of achieving the mandate set forth for the Ad Hoc Group The traditional approach that has worked well for many other types of weapons is not a workable structure for biological weapons. We believe the objective of the mandate was and is important to international security, we will therefore be unable to support the current text, even with changes, as an appropriate outcome of the Ad Hoc Group efforts." Reflecting recent Congressional testimony [see 5 Jun and 10 Jul], Mahley continues: "The draft Protocol will not improve our ability to verify BWC compliance. It will not enhance our confidence in compliance and will do little to deter those countries seeking to develop biological weapons. In our assessment, the draft Protocol would put national security and confidential business information at risk."

Mahley then moves on to explain that the US "intends to develop other ideas and different approaches that we believe could help to achieve our common objective of effectively strengthening the Biological Weapons Convention. We intend to explore those ideas and other alternative approaches during the next several months with the goal of reaching a consensus on a new approach for our shared objective." Among these ideas, he mentions that "we strongly support the Australia Group, and will be working actively to strengthen it at its next meeting in Paris". After stating that "the conceptual approach used in the current negotiating effort fails to address the objective we have sought throughout the negotiations", Mahley says that "if we are to find an appropriate solution to the problem, we need to think 'outside the box'. It will require new and innovative paradigms to deal with the magnitude of biological activity that can be a threat, the explosively changing technology in the biological fields, and the varied potential objectives of a biological weapons program. We simply cannot try to patch or modify the models we have used elsewhere."

Mahley concludes his statement thus: "Some have argued both publicly and privately that not having this Protocol will weaken the BWC itself. The United States categorically rejects that supposition. Let me re-emphasize that the U.S. fully supports the global ban on biological weapons embodied in the BWC, and remains committed to finding effective ways to strengthen the overall regime against the BW threat, including multilateral ones. The United States will, therefore, work hard to improve — not lessen — global efforts to counter both the BW threat and the potential impact such weapons could have on civilization. And we would reply to those who cry that not having this Protocol weakens the global norm against BW that there absolutely is no reason that kind of reaction need occur. It will happen only if we convince ourselves that it is happening, and we would urge others to join with us in ensuring such a reaction does not take place."

At a later press conference, Mahley adds more detail to his statement. In particular, he gives some idea of what new proposals the US might come up with in time for the fifth BWC Review Conference: "Strengthening the Biological Weapons Convention, to us, can happen in a number of ways. It can happen first of all by greater universality and adherence to the convention. ... Secondly, the idea of compliance with the Biological Weapons Convention to us is divided into several generic objective categories. One of them is trying to get more information that would let us identify situations that might be of concern to the Biological Weapons Convention. Now that, of course, in the current Protocol draft is what they try to do with declarations. We think that there are other mechanisms that you have to pursue and we will try to provide that kind of an increased information base. Secondly, we think that there ought to be, indeed, ways to raise the kind of concerns that you have to public consciousness so that people are more aware of the norm. We think for example that there may be things to do in terms of

codes of ethics and other kinds of activities that would be enduring means of trying to remind people of the fact that biological weapons are not things to do. One of the things is that when we say we want to strengthen the Biological Weapons Convention, what we are trying to say is that we want to strengthen both the norm and the practice of repressing biological weapons proliferation. That also means, for example, that we think we ought to reinvigorate other tools we already have, such as the Australia Group, and I think I noted in my address this morning that we intend to be doing that at the meeting of the Australia Group in October of this year. There are other things that we think can happen that are not appropriate for the Ad Hoc Group, and that should be pursued by other organizations with competence. For instance, we believe that increased capability to resist disease, among other things, lowers the probability that a biological weapons attack would be successful, and therefore in some ways lowers the desirability of biological weapons for a potential proliferator or for a terrorist."

Mahley is questioned further on US ideas for the Australia Group: "We think that there are ways to both expand that in terms of its scope of equipment and material, we think that there may be ways to expand the membership and get more people involved in the Australian Group coordination. We think that there are a number of ways in which that group, as one of the tools of non-proliferation, can indeed be strengthened and reinvigorated."

25 July In Washington, CBACI hosts a breakfast meeting on the fate of the BWC Protocol and biological weapons arms control. Many of the participants at the meeting express the need to fundamentally rethink approaches to biological arms control.

26 July In Hanoi for an ASEAN Regional Forum meeting, US Secretary of State Colin Powell answers press questions on the rejection of the BWC protocol [see 25 Jul]. Powell states: "When the BWC was originally signed a number of years ago, it was known at that time that it would probably never be verifiable, because it is too difficult to verify that kind of technology. Since then, it has become even more difficult to try to verify it, with the explosion of biotechnology and biotechnology facilities all across the world, and especially in the United States, the most developed nation with respect to biotechnology. And we examined it, and looked at it. We just couldn't see that this protocol would help with the BWC. And so we had to call it the way we saw it. It's not as if suddenly we jumped up and said 'we're out of here'. We have been communicating to our colleagues for many, many months, years in fact, but especially in recent months, that we had serious problems with this particular protocol."

Also in Hanoi for the ASEAN meeting is Australian foreign minister Alexander Downer who will soon host Powell in Canberra for annual US–Australian ministerials. Downer describes the US rejection of the BWC protocol as "an enormous setback". He continues: "We're very disappointed about that. It will be an issue that we will be raising with the Americans. We accept that there are weaknesses but you have to ask yourself if you can ever create a completely perfect biological weapons regime."

26 July North Korea has helped Iran to develop a CW warhead for the Shihab-3 missile, which has a range of 1300 kilometres and is based on the No-Dong missile, so unidentified "US defense sources" are quoted as saying by *Middle East Newslines*.

27 July In Washington, the Chemical and Biological Arms Control Institute publishes its final report on *Bioterrorism in the United States: Threat, Preparedness and Response*. The re-

port is launched by CBACI president Michael Moodie at the National Press Club. The 339-page report has been prepared by a team of CBACI researchers acting under the auspices of the CDC Bioterrorism Preparedness and Response Program and was submitted in November 2000.

27 July In the White House, press secretary Ari Fleischer says that “Iran is known to be producing biological weapons”. Answering press questions on the US rejection of the BWC protocol [see 25 Jul], he adds: “If you ever want proof perfect of why [the BWC] protocol is not a successful way to stop the development of biological weapons, ask yourself, if that protocol is so good, then why is Iran for it?” He goes on: “Iran is recognized around the world as a violator of the treaty. Yet that protocol has been agreed to by Iran, because they know it is so flimsy that they can cheat their way right through it.”

An Iranian foreign ministry spokesman later describes the allegations as “desperate and unfounded” and links them to US isolation within the BWC Ad Hoc Group in Geneva.

28 July In Washington, during a discussion on National Public Radio of BW threats to the United States, Dr D A Henderson of Johns Hopkins University says: “I don’t think there’s going to be any one solution that is really going to assure us that we’re not going to have a problem. I think its going to require acceptance of a norm of behavior that has got to be both at the political level and, I think as important, at the scientific level where scientists, those in medicine, those in public health, accept the fact that involvement with any of this is really a crime against humanity.”

29 July US Secretary of State Colin Powell holds a press conference en route to Australia for annual US–Australia ministerial consultations at which he is questioned on the US rejection of the BWC protocol [see 25 Jul]. Powell responds as follows: “The regime that came forward in this protocol was not something that so far we found would achieve its purpose or serve our needs. We have a huge biological and biotech industry and it would be hard to find a boundary who would be listed in such a protocol and who would not be listed. Once you list these large, large numbers of firms, then they become eligible for the inspection regime. Because we have such a vibrant large industry, it’s hard to find a boundary and then we are opening up far more facilities for those kinds of inspections than other countries would have to, especially those we’re most worried about. So the nations we’re least worried about would have the greater burden without any movement to an actual verification, as opposed to those who we should be most worried about but wouldn’t have much to declare because they do it, not in their biotechnology industrial base but in places they keep hidden. So, all things considered, we didn’t think it was a sound way to move.”

29 July In Canberra, Australia, US Defense Secretary Donald Rumsfeld, answering questions on the BWC protocol [see 25 Jul] at a media roundtable, states that he sees “an awful lot of intelligence and I see a non-trivial number of countries that are actively engaged in weaponizing with respect to biological warfare.” Talking about the BWC, Rumsfeld says “it is something that has been signed onto by countries like Syria, Iran, Iraq and various — I could be wrong on one of those but a number of nations that have — how do I say this? It’s been signed onto by nations that are not noted for their restraint with respect to some of these activities.”

Iranian parliamentary deputies later reject Rumsfeld’s allegations, accusing the US of being the producer of the world’s most dangerous biological weapons. In a later interview with the London *Al-Sharq al-Aswat*, Syrian president Bashir al-Assad says: “There is nothing new in this talk. We were receiv-

ing at the same time positive US messages that are quite the opposite through official and nonofficial channels.”

30 July In Canberra, Australia, the joint communiqué of the annual Australia–US ministerial consultations includes the following on the BWC protocol [see 25 Jul]: “Both governments underlined the threat to global security posed by the development and spread of biological ... weapons. While noting their differences concerning the negotiations for a protocol to strengthen the Biological Weapons Convention (BWC), both sides reiterated their commitment to the BWC and undertook to explore all effective options for preventing the proliferation of these heinous weapons.” On the subject of chemical weapons, the statement said: “In reviewing progress in the field of chemical disarmament, the two governments expressed concern over the impact of problems within the Organisation for the Prohibition of Chemical Weapons (OPCW) on its capacity to undertake its core non-proliferation activities. They agreed to continue to work together closely to improve the efficiency and effectiveness of the OPCW.”

At a press conference, US Secretary of Defense Donald Rumsfeld is asked to “flesh out” his earlier [see 29 Jul] comments on countries which possess biological weapons. This time, Rumsfeld does not refer to specific countries saying instead that “we as a country monitor as closely as is possible the steps that are being taken by various countries in this area and we certainly recognize that they constitute a very serious danger to those regions as well as the entire world.” US Secretary of State Colin Powell describes talks with his Australian counterpart on the BWC protocol thus: “We did have a good spirited discussion about the biological warfare convention and we disagree on that issue.” Australian foreign minister Alexander Downer adds: “The fact that the United States doesn’t wish to go along with the additional protocol to the BWC is a point that we don’t agree on, because we would like to feel it would be possible to proceed with that additional protocol, but, you know, it has to be kept in some perspective. Nobody’s suggesting, and no one should suggest that the United States is anything but vigilant and determined in its opposition to the proliferation or even the use of biological weapons.”

30 July In the UK, the Ministry of Defence posts on its website the second in a series of papers on emerging technologies, this one on *Genomics: Some Implications for Defence*. The eight-page paper has been produced in conjunction with a panel of four experts. It begins by stating that “the MOD’s interest in genomics as an emerging technology is entirely defensive. ... [A]n understanding of the genomes of pathogens, including certain bacteria and viruses, is likely to improve our ability to defend against such organisms, should they ever be used against us in biological warfare.” The paper explains how genomics will benefit biological defence efforts by helping to understand how agents cause disease, or by identifying gene sequences which can be used as gene probes for the rapid identification of agents in the field or to diagnose disease in individuals.

However, the paper also cautions that “we should remain wary through our threat assessment exercises of the potential misuse of genetic information, which will be freely available throughout the world. The human genome sequence shows us that differences between groups is likely to be very small and this greatly diminishes the prospect of so-called “genetic weapons”, targeted at particular groups. Also, many biological warfare agents are already extremely potent and this brings into question whether aggressors — even those with a sophisticated capability — would invest in the development of “improved” agents through the use of genetics and biotechnology. However, the possibility can-not be discounted completely and new advances may bring new threats, hitherto unknown. MOD

must therefore remain aware of these possibilities, and ensure that our defensive systems are as robust as possible against a range of future threats.”

A section on the MoD's response to genomics includes the following: “Finally, red-team thinking in MOD should be developed so that the potential threat of new technologies such as those described here can be assessed. This should involve a multi-disciplinary team and external advisers, who can assess

and calibrate future threats. MOD must contribute to this through maintenance of expertise in threat and hazard assessment, and through its programmes in chemical and biological defence and military medical research.”

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

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The CBW Conventions Bulletin (formerly the *Chemical Weapons Convention Bulletin*) (ISSN 1060-8095) is edited and published quarterly by the Harvard Sussex Program on CBW Armament and Arms Limitation. The goal is to provide information and analysis towards an effective multilateral treaty regime which will eliminate chemical and biological weapons and help prevent the exploitation of biomedical technologies for hostile purposes. The Harvard Sussex Program is supported by American and British charitable foundations, including the John D and Catherine T MacArthur Foundation, the W Alton Jones 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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Subscription enquiries should be addressed to Barbara Ring at the Department of Molecular and Cellular Biology, Harvard University, 7 Divinity Avenue, Cambridge, Massachusetts, 02138, USA. The 2001 subscription price is \$100 (individuals and non-profit organizations) or \$250 (corporate bodies). Payment may be made by cheque (in US\$) payable to 'CBW Conventions Bulletin'.