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PREPARING FOR THE SECOND CWC REVIEW CONFERENCE: HSP VIEWS

The Second CWC Review Conference will convene in The Hague during 7-18 April 2008. Its purpose is to “review the operation of the CWC, taking into account any relevant scientific and technological developments”. If this mandate is to be fulfilled adequately, the Harvard Sussex Program believes that the Review Conference must adopt a broad and long-term perspective on the challenges and opportunities facing the CWC.

Clearly, the Second Review and its culminating Conference will be influenced by both internal and external factors. In the time since the First Review Conference in 2003 there have been a good many developments – political, legal, scientific, economic, industrial – that will affect discussions and decisions.

States parties, civil society and industry – all the CWC’s stakeholders – should treat the Second Review as opportunity to look beyond the day-to-day preoccupations of the OPCW and towards, even past, the Third Review Conference.

Furthermore, the Second Review is also a chance to look at the CWC in its entirety, to review *all* of its prohibitions and obligations rather than just focusing on those of most immediate relevance to the routine functioning of the Convention.

Context

Advances in science and technology are an area on which the Review should spend much of its time. Particularly relevant is the convergence of chemistry and biology as noted in the report on *Globalization, Biosecurity and the Future of the Life Sciences* by the US National Academies, by the recent International Union of Pure and Applied Chemistry report for the OPCW and the preliminary report to the Second Review Conference by the OPCW Scientific Advisory Board.¹ The National Academies’ report, for example, highlights the many “linkable features” between the CWC and the BWC, such as the fact that toxins and synthetic biological products are covered by both treaties and could thus be subject to the CWC’s verification regime.

As chemdemil activities progress, the day will inevitably come when all declared stockpiles of chemical weapons have been destroyed, with consequent repercussions for the OPCW. These repercussions will be felt not only in terms of resources and personnel but also in terms of the OPCW’s core mission – no longer will its focus be on verifying the destruction of existing stockpiles but instead on ensuring that covert rearmament does not take place. While we cannot be

sure of the persistence of the threat from international terrorism, it is possible that it too will reinforce the shift away from a focus on “militarily significant” quantities of chemical weapons to a much broader concern with smaller quantities, capabilities and intentions.

Also contributing to this shift is the changing nature of warfare and the emergence of what have been referred to as “new wars”, meaning intra-state civil wars and insurgencies rather than formal armed conflict between nation-states.² Alongside these is the “global war on terrorism”. One element of this change is the growing use as weapons of toxic industrial chemicals, as seen recently in Iraq, in Sri Lanka and in the Balkans in the 1990s. Another element is the growing interest expressed in some quarters in so-called “counter-terrorist chemical weapons” such as the agent used in the Dubrovka theatre siege in Moscow in October 2002.

As globalization progresses, it is highly likely that the volume of chemicals traded between countries will increase and that more countries will want to develop their own chemical industries. At the same time, chemical production is continuing to shift from industrialised to emerging economies. Although generally to be welcomed, a larger universe of CWC-relevant facilities and trade will increase the potential for diversion and misuse and make the monitoring task of states parties and the OPCW much more challenging. Even now, the OPCW has barely begun to inspect the thousands of declared Other Chemical Production Facilities (OCPFs). Countries which host new facilities may currently lack adequate regulatory frameworks (and resources to implement and enforce

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them) and thus require assistance and financial support.

Finally, the CWC exists within what we call a “governance regime” for chemical and biological weapons, the elements of which are all interrelated so that developments in one influence the others. Among the other elements in this CBW governance regime are the 1925 Geneva Protocol, the 1972 Biological Weapons Convention, the 1977 EnMod Convention, the Australia Group, the Proliferation Security Initiative, the G8 Global Partnership, UN Security Council resolution 1540 and, possibly in future, the International Criminal Court.³

As factors influencing the background to the Second CWC Review Conference, these issues do not need to be tackled directly by the conference, but they should be in the minds of officials when making their preparations for the Review Conference, and during the conference itself. They also point to the need for the OPCW – its states parties and Technical Secretariat – to adapt to the changing situation in which it finds itself and to pursue institutional and policymaking innovations.

Recommendations

In the light of these contextual factors, we now put forward six recommendations for the actual substance of the review process. Here we are not just talking about what takes place during the Review Conference itself, but the review *process* as a whole, including the preparations for it and the period after it.

1. Early Preparations and Planning

There is a clear need for early planning and preparation. A recent paper on the Sixth BWC Review Conference which took place in 2006 noted that the principal lesson from that conference had been “that preparation and planning is a key component of achieving objectives. Success or failure at a review conference can be forged: success, however, takes longer to forge than failure.”⁴ It is therefore encouraging that the OPCW Executive Council’s preparatory Open-Ended Working Group (chaired by Ambassador Lyn Parker of the UK) should have made an early start and that many national and international events have been organized at which the Second Review has been a topic of discussion. To aid this planning and preparation, we in the Harvard Sussex Program are preparing a *Resource Guide for the Second CWC Review Conference* with funding offered by the governments of Germany, the Netherlands, Portugal and the UK.

It will also be important to avoid a “business-as-usual” approach which considers the Review Conference as just another meeting in the series of regular sessions of the Conference of the States Parties and the Executive Council. The Review Conference should not simply be seen as a “Conference of the States Parties without the budget negotiations” as some participants reportedly saw the First Review Conference.⁵ Avoiding this will contribute to ensuring that all states parties adopt the long-term and comprehensive perspective mentioned above. The early start of preparatory work will also help, as will openness towards civil society.

2. Reaffirm the CWC’s comprehensive scope

The First Review Conference reaffirmed the comprehensive nature of the CWC’s prohibitions, as enshrined in the “general purpose criterion”. Given advances in science and technology,

the shift from disarmament to the prevention of rearmament, and the continuing threat from international terrorism, it will be timely for the Second Review to consider the “general purpose criterion” in more detail. This is also important given the increasing convergence between chemistry and biology. While discussion of the “general purpose criterion” might entail the opening up of potentially contentious issues like the definition of “law enforcement purposes” and the status of chemicals otherwise intended for “domestic riot control”, such a debate is too important to delay and it should be possible for the Review Conference to at least propose a way forward on these issues. For example, the conference could decide that exploratory discussions on these matters take place within the OPCW at an expert or working level. Civil society groups such as the Harvard Sussex Program stand ready to contribute to and facilitate such discussions, and we have already submitted a paper on *‘Non Lethal’ Warfare and the Chemical Weapons Convention*.

3. Focus on national implementation

The credibility of the “general purpose criterion” is based upon comprehensive and effective implementation of the CWC at the national level.⁶ Initial implementation of the action plan on national implementation adopted after the First Review Conference concentrated on quantitative factors such as the number of National Authorities established or of states parties that had enacted legislation. The focus is now shifting from quantitative to qualitative issues such as the comprehensiveness of national legislation, enforcement and the empowerment of National Authorities.⁷ UN Security Council resolution 1540 (2004) also encourages states parties in this direction with its focus on “appropriate” and “effective” national laws and controls. Although more difficult to address, the Second Review Conference should endorse and maintain this qualitative approach. Innovative ways to improve national implementation, such as “peer review” between states parties or “mentoring” arrangements among National Authorities could be investigated. The Review Conference should also acknowledge that national implementation is a process, not a one-off event, and that it requires time and dedicated resources.

4. Broader concept of CWC implementation

While the world changes, the OPCW continues with its focus on the important job of implementing the very specific provisions of the CWC. However, the Organization should develop mechanisms to ensure that it does not focus on routine issues to the exclusion of all others. The OPCW needs to retain the institutional flexibility to adapt to external changes, be they in science and technology, industry or politics, and the foresight to incorporate relevant new issues into its agenda as they emerge. There are also prohibitions in Article I of the CWC that have not had the same degree of attention as those relating to the production and stockpiling of chemical weapons.⁸ The Review Conference could encourage initial consideration of how to verify fulfilment of these obligations. Since 2003, states parties to the BWC have very successfully broadened the understanding of BWC implementation to include issues such as biosecurity, codes of conduct and regional cooperation. The Second CWC Review Conference could mandate the OPCW to address similar issues, for example chemical facility security, and education and

awareness-raising, perhaps even at thematic meetings such as those under the BWC intersessional work programme.

5. *Widen and deepen synergies*

The CWC is part of a broader CBW governance regime, and initiatives such as UNSCR 1540 and the UN Counter-Terrorism Implementation Task Force point towards the need for increased synergies between international organizations. The Review Conference should therefore encourage the OPCW to sustain existing synergies with related international organizations and develop new ones. The OPCW already has relations with the UN, the World Customs Organization, the European Union, the Organization of American States and the African Union but the trend could be both *widened* to include more organizations, and *deepened* to further develop existing relationships.

The existence of the OPCW potentially encourages centralization but the Sixth BWC Review Conference provides an alternative model. With no equivalent to the OPCW, BWC states parties invited a wide range of international organizations, including the World Health Organization, Interpol, the Food and Agriculture Organization, the World Animal Health Organization, the International Committee of the Red Cross and the OPCW, to participate formally in the conference. The UN was also represented by the Secretary-General and staff from the Department for Disarmament Affairs, UNIDIR and UNMOVIC.

6. *Reach out to all stakeholders*

States parties and the Technical Secretariat should strive to make the review process as inclusive as possible. The implementation of the CWC rests on a “trisectional network” of actors from the public (governments), private (industry) and civil (NGOs) spheres, and all stakeholders should therefore be involved in the review process.⁹ This has been reflected in recent statements by the Director-General and representatives of states parties.

The various events organized for the 10th CWC anniversary have exemplified this “multistakeholder approach”. It is encouraging that the Open-Ended Working Group asked for written contributions from civil society and has already met with industry representatives. Its meeting with NGOs scheduled for 19 November is a valuable further step in this process.

During the Review Conference itself, the model of the Sixth BWC Review Conference could be followed. NGOs, scientific organizations and learned societies were all an accepted part of the BWC Review Conference and were provided with opportunities to make presentations to conference delegates at lunchtimes, as well as to address an informal session of the conference itself. The Chair of this year’s BWC meetings and President of the Sixth Review Conference, Ambassador Masood Khan of Pakistan, has said “constructive engagement with civil society is a vital component of effective national implementation of the BWC” and that it was therefore “desirable to engage civil society and industry in a more effective manner” at the impending 2007 Meeting of States Parties.¹⁰

Conclusion

We have been encouraged by the early start to the work of the Open-Ended Working Group and particularly by the spirit

of openness in which it is conducting its work. We are keen that the Working Group maintains its openness. We would like to encourage states parties and the Technical Secretariat to release working papers and background documents into the public domain at an early stage so that they can have maximum impact on proceedings next April. And we in HSP urge our fellow civil-society groups to continue contributing as much as may be possible to the Second CWC Review process.

We hope that the Second Review Conference builds on the successes of the First Review Conference and effectively reaffirms the CWC’s prohibitions. Such an outcome would set the agenda for the second decade of the OPCW’s work and for the period up to the Third Review Conference.

Notes

1. Institute of Medicine and National Research Council of the US National Academies, Committee on Advances in Technology and the Prevention of Their Application to Next Generation Biowarfare Threats (Co-Chairs: Stanley M Lemon and David A Relman), *Globalization, Biosecurity, and the Future of the Life Sciences*, Washington, DC: The National Academies Press, 2006; M Balali-Mood, P S Steyn, L K Sydnes and R Trapp, “Impact of scientific developments on the Chemical Weapons Convention”, IUPAC [International Union of Pure and Applied Chemistry] Technical Report as distributed at the OPCW Academic Forum, 18-19 September 2007; and *Preliminary Report ... on Developments in Science and Technology*, Annex 2 of OPCW document SAB-10/1 dated 29 June 2007.
2. Mary Kaldor, *New Wars and Old Wars: Organized Violence in a Global Era*. Cambridge: Polity Press, second edition, 2006.
3. Lisa Tabassi, “The nexus between the OPCW and the International Criminal Court”, *The CBW Conventions Bulletin* no 75 (March 2007) pp 1 & 7-12.
4. Jez Littlewood, “The making and breaking of policy for the BWC: Observations from the United Kingdom”, paper presented at the 48th Annual International Studies Association Convention, Chicago, February 2007.
5. Robert J Mathews, “Reviewing the Chemical Weapons Convention: Gently does it”, in Trevor Findlay (ed.), *Verification Yearbook 2003*, VERTIC, London: 2003, p. 116.
6. “What should be the scope of the CWC? A workshop report”, *The CBW Conventions Bulletin* no 55 (March 2002) pp 1-4.
7. Maarten Lak, Santiago Onate, Lisa Tabassi and Kai-Sebastian Melzer, “Sustaining follow-up to the Action Plan on Article VII: National implementation of the Chemical Weapons Convention”, *Chemical Disarmament*, vol. 5 no. 1 (March 2007), pp. 18-24.
8. Sergey Batsanov, “Approaching the 10th anniversary of the Chemical Weapons Convention: A plan for future progress”, *Nonproliferation Review*, vol. 13, no. 2 (July 2006), p. 349.
9. Emmanuelle Tuerlings and Julian Perry Robinson, “The Trisectional Network Associated with the Chemical Weapons Convention”, www.gppi.net/fileadmin/gppi/Tuerlings_Robinson_Chemical_Weapons.pdf.
10. Speaking Notes of Ambassador Masood Khan, Chairman of the 2007 Biological Weapons Convention Meeting of States Parties, Group Meetings, 14 November 2007.

The Biological Weapons Convention Meeting of Experts, August 2007

As reported in the *CBW Conventions Bulletin* 74 (December 2006), the Sixth Review Conference of the Biological and Toxin Weapons Convention (BWC) held in Geneva from Monday 20 November to Friday 8 December 2006 was very successful in its agreement of a Final Declaration, with its Article by Article review, and in the Decisions and Recommendations section with its elements on the topics: Work of the 2003-2005 Meetings of States Parties, Implementation Support Unit, Intersessional Programme 2007-2010, Confidence-Building Measures, and Promotion of Universalisation.

The Intersessional Programme for 2007-2010 agreed that six topics should be considered: two in 2007, two in 2008, one in 2009, and one in 2010. Each Meeting of States Parties will be prepared for during a one-week Meeting of Experts – a reduction from the two-week Meetings of Experts in 2003 to 2005. Otherwise the mandate is essentially the same as for the 2003 to 2005 meetings: *to discuss, and promote common understanding and effective action on:*

- (i) *Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.*
- (ii) *Regional and sub-regional cooperation on BWC implementation.*
- (iii) *National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.*
- (iv) *Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim to prevent misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.*
- (v) *With a view to enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, promoting capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases:*
 - (1) *for States Parties in need of assistance, identifying requirements and requests for capacity enhancement, and*
 - (2) *from States Parties in a position to do so, and international organizations, opportunities for providing assistance related to these fields.*
- (vi) *Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.*

It was also agreed at the Sixth Review Conference that the Meetings in 2007 would be chaired by the President of

the Sixth Review Conference, Ambassador Masood Khan of Pakistan, thereby providing valuable continuity from the Review Conference; that the Meetings in 2008 should be chaired by the Eastern Group, those in 2009 by the Western Group and those in 2010 by the NAM based on the principle that the President of the Review Conference should chair the first intersessional meetings and that the Chairman of the last intersessional meetings should not be from the same Group that chairs the next Review Conference.

Meeting of Experts, 20 to 24 August 2007: Opening Plenary Session

The Meeting of Experts began on **Monday 20 August** with a plenary session where the Chairman, Ambassador Masood Khan, welcomed all those present. He particularly welcomed the presence of Mr. Sergio Duarte, the Secretary-General's High Representative for Disarmament Affairs who was making his first visit to Geneva following his recent appointment. The Chairman went on to welcome the fact that four new States Parties had acceded to the Convention since the Sixth Review Conference: Montenegro, Kazakhstan, Trinidad and Tobago, and, on Thursday 16 August 2007, Gabon. This had brought the number of States Parties to a total of 159.

The Chairman then turned to procedural matters. In regard to the adoption of the Agenda, he noted that BWC/MSP/2007/MX/1 (all official papers are available at <http://www.opbw.org> and at <http://www.unog.ch/bwc>) had been circulated in all languages. This was adopted. The programme of work (BWC/MSP/2007/MX/2), which had been developed from the Chairman's letter of 10 July 2007, had likewise been circulated and was adopted. He noted that the Implementation Support Unit (ISU) had prepared two background papers (BWC/MSP/2007/MX/INF.1 and INF.2). MX/INF.1 is a 7 page document containing a summary of previous statements and proposals from States Parties related to enhancing national implementation. This summary is drawn from the Final Declarations of successive Review Conferences relating to Article IV and also from the proposals made by individual States Parties during the Meetings of Experts and States Parties in 2003. These are collected under five headings: Implementing Article IV; Scope of national implementation measures; Enhancing domestic cooperation; International and regional cooperation and assistance; and Transfers and export controls. MX/INF.2 is a 6 page document summarising seven various existing international and regional initiatives and activities aimed at enhancing national implementation of the Convention; namely, Association of South East Asian Nations (ASEAN); European Union (EU); International Committee of the Red Cross (ICRC); Interpol; Pacific Region; United Nations Security Council Resolution 1540 Committee; and Verification Research, Training and Information Centre (VERTIC). The Chairman also noted that Working Papers submitted would be reproduced in the language of submission only and would be made available on the website www.unog.ch/bwc as soon as possible.

Ambassador Khan then moved on to consider the Rules of Procedure noting that at the 2003 to 2005 annual meetings, the Rules of Procedure of the Fifth Review Conference had been applied *mutatis mutandis*. He proposed that the current series of meetings should operate under the Rules of Procedure of the Sixth Review Conference applied *mutatis mutandis*. However, he pointed out that formal accreditation would not be required for the annual meetings; registration would be sufficient. These Rules of Procedure were agreed.

It was then agreed that the following five Signatory States should participate in the Meeting of Experts: Egypt, Haiti, Nepal, Syrian Arab Republic, United Arab Emirates. In addition, it was agreed that one State neither Party nor Signatory should participate as an observer: Israel. Five intergovernmental organizations also participated as observers: The African Union Commission, the International Committee of the Red Cross (ICRC), the International Criminal Police Organization (Interpol), the League of Arab States, and the Organisation for the Prohibition of Chemical Weapons (OPCW). It was also agreed that, as at previous meetings, this meeting would be suspended on Monday 20 August at 16.30 and resume in informal session with the Chairman remaining in the Chair to hear statements from a number of NGOs. The Chairman then concluded the procedural matters by asking any State Party that wished to make a presentation during the Meeting of Experts to contact the ISU to advise when they would wish to make such a presentation. Because of time constraints, the Chairman suggested that such presentations be limited to 20 to 15 minutes.

Ninety-three States Parties to the Convention participated in the Meeting of Experts as follows: Albania, Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Canada, Chile, China, Colombia, Congo, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Ecuador, Estonia, Finland, France, Georgia, Germany, Ghana, Greece, Guatemala, Holy See, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Latvia, Lebanon, Libyan Arab Jamahiriya, Lithuania, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Rwanda, Saudi Arabia, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sudan, Sweden, Switzerland, Thailand, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela (Bolivarian Republic of), Viet Nam, and Yemen. This was fourteen States Parties less than the number that had participated in the Sixth Review Conference in November/December 2006, but ten States Parties more than those that participated in the Meeting of Experts in 2003; Armenia, Azerbaijan, Barbados, Belarus, Bolivia, Cambodia, Congo, Ecuador, Georgia, Iraq, Kazakhstan, Lithuania, Portugal, Rwanda, Singapore, Sudan, the former Yugoslavian Republic of Macedonia, Tunisia and Uruguay participated in MX 2007 whilst Afghanistan, Ethiopia, Iceland, Malta, Monaco, Mongolia, Oman, Senegal and Sri Lanka, who had participated in MX 2003, did not in MX 2007.

There were over 410 participants at the Meeting of Experts, of whom 365 came from States Parties including

over 160 participants from capitals. This compared very well with the participation at the two-week Meeting of Experts in 2003 when there were over 400 participants including over 100 legal and scientific experts.

The Chairman then made his introductory remarks noting that the Sixth Review Conference had successfully considered the outcome of the intersessional meetings in 2003 – 2005 and had in its Final Declaration made a number of decisions including the establishment of the ISU. He noted that the two topics being considered in the Meetings in 2007 had at least been considered partially before, hence there was an opportunity to consolidate what had been shared previously. He also noted that the States Parties were not meeting to negotiate an agreement but rather they were engaged in their collective capacity to prevent biological weapons being developed or used. He thanked those States Parties who had provided updates to the ISU on national implementation measures and a presentation on this would be given by the ISU that afternoon. He looked forward to ideas on improving cooperation between national enforcement agencies and envisaged these as contributing to the substance in the outcome of the Meeting of Experts. He hoped that if time allowed these could be rationalized and distilled, and added that a list would be annexed to the factual report of the meeting of Experts. He said that the ISU was a highlight of the Sixth Review Conference and he was pleased that it had already been in operation for some time. The formal launch of the ISU would take place at a reception on the afternoon of Monday 20 August at 1730. He concluded by saying that he looked forward to a stimulating and productive discussion and that he hoped that the constructive and creative spirit that States Parties had shown at the Sixth Review Conference would also be applied at this Meeting of Experts.

Cuba then spoke on behalf of the **NAM and Other States** noting that the 2007 – 2010 intersessional programme was commencing with the ways and means to enhance national implementation as well as regional and subregional cooperation on implementation of the Convention. Although there are diverse national situations for each of the States Parties, *the commitments to the Convention are the same. Some States Parties, especially developing countries, require assistance and cooperation to strengthen their national capacities for a full implementation of all the provisions of the Convention.* The statement went on to note that the NAM reiterates that *the only sustainable method of strengthening the Convention is through multilateral negotiations aimed at concluding a non-discriminatory, legally binding agreement, including on verification, dealing with all the Articles of the Convention in a balanced and comprehensive manner.* Furthermore, the statement said that *We strongly believe that the universal adherence to and further strengthening of the Convention will make a significant contribution to advancing further in the field of arms regulation, non-proliferation and disarmament ...*

The statement concluded by recalling the NAM proposal for an Article X Action Plan (in BWC/CONF.VI/WP.39) and highlighted four proposed measures as an example of what States Parties can do to strengthen the Convention:

- *Review national regulations of States Parties governing international exchanges and transfers in order to ensure their consistency with the objectives*

and provisions of Article X;

- *Adopt positive measures to promote technology transfer and international cooperation, in particular to the developing countries, for the benefit of all mankind;*
- *Provide upon request, where in a position to do so, assistance to other States Parties in enacting and enhancing national legislation to implement the Convention;*
- *Facilitate cooperation, where in a position to do so, in particular capacity building, as well as technology transfer in the area of customs control to facilitate the implementation of relevant provisions of the Convention.*

Portugal then spoke on behalf of the **EU and of the Candidate and other countries**, amounting to some 41 countries in all. It was noted that the intersessional programme for 2007 – 2010 was *a clear signal of the willingness of the International Community to strengthen the Convention's implementation*. It was considered that the work should not merely repeat the 2003 – 2005 discussions, but should build on them with a view to maximizing the value of the lessons identified in those discussions. Given the rate of scientific and technological change in areas relevant to the Convention coupled with the potential threat posed by bioterrorism, the need for the International Community to discuss and promote common understandings and to take effective action to strengthen and further implement the BTWC is all the greater. It was pointed out that the EU had adopted a Joint Action (2006/184/CFSP) in support of the BTWC to promote two major objectives; *firstly to increase the membership of the BTWC and secondly to assist States Parties transpose the obligations of the BTWC into appropriate national legislation and administrative measures*. In parallel, the EU had agreed an Action Plan to revitalize interest in and use of CBMs, and to increase the effectiveness of the current UNSG's mechanism for investigating cases of alleged use of (chemical) biological and toxin weapons.

Brazil then spoke on behalf of a group of **Latin American States** (Argentina, Brazil Colombia, Chile, Ecuador, Guatemala, Mexico, Peru, Uruguay, and Venezuela). The statement recalled that this group had submitted a number of working papers to the Sixth Review Conference and emphasized the importance of the initiative to promote universalisation which had been agreed at the Review Conference. The statement went on to say that they were convinced that efforts at the regional and sub-regional level enabled the identification of ways and means to improve scientific cooperation and technological transfer. This is vital for the application of the Convention at the national level and in turn becomes an important incentive for it to become universalized. The statement continued by pointing out the need to promote measures to create networks between the scientific community and the academic sector with reference to the application of the peaceful use of biotechnology, genetic engineering, microbiology and other areas related to the Convention. Another area which is of great interest to the group of Latin American countries is that related to the need for exchanging information and adopting legislation and administrative measures which allow for the full application

of the Convention. The statement concluded by highlighting the essential role to be played by civil society, particularly industry and the academic community, as well as the scientific community, and non-governmental organizations, all of which have an important contribution to make in contributing to the understanding of the obligations undertaken in the context of the Convention. In order to make progress in the universalization of the Convention and application of all of its obligations, a multidimensional and multisectoral effort needed to be undertaken.

China then spoke saying that *Adopting effective national implementation measures in accordance with the Convention and respective national situations constitutes basic obligations for the States Parties, as well as important prerequisite and guarantee for effective implementation of all Articles of the Convention*. The statement went on to say that *laws and regulations on implementation of the Convention have been put in place and a series of effective administrative measures taken and improved to ensure rigorous implementation of the law*. A series of laws and regulations, which cover the whole range of prohibition articles of the Convention, export control, biosafety and biosecurity, public health, infectious diseases surveillance have been promulgated and implemented. Furthermore, China has established a national implementation mechanism with clear division of responsibility and effective coordination. The mechanism consists of such government's organs as Ministry of Foreign Affairs, Defence, Agriculture, Health, Commerce and Chinese Customs. Each department bears its own responsibility and coordinates with others for ensuring full implementation of all related laws and measures. In addition, the statement said that *the publicity of relevant laws and regulations has been enhanced through various kinds of seminars and training courses, with a view to raising awareness and self-discipline of relevant enterprises, research and education institutions and personnel*.

The Russian Federation then spoke saying that *We have a positive view of the outcome of the Sixth Review Conference ... The main achievement of the Sixth Review Conference was the adoption of a range of practical future oriented decisions aimed to strengthen the Convention. The decisions of the Review Conference are a kind of a roadmap – a plan of action for the next several years. Nowadays we have to focus on mobilizing efforts to fully implement the Convention and the decisions of all Review Conferences*. The statement continued *In this regard we would like to emphasise the agreement to continue intersessional meetings for the next five years. We fully support this process and hope that at the meetings we will be able to exchange information relating to the national implementation of the Convention. We are confident that the meetings will help in reaching our chief objective to strengthen a universal ban on biological and toxin weapons. However, there is no doubt that effectively achieving this objective will be served by an early resumption of multilateral negotiations to develop a legally binding BWC verification mechanism. Our principled position on this point remains without change*. Consideration was then given to Confidence Building

Measures saying *There is certain positive change in the number of confidence building measures returns submitted this year. Given that we lack a verification mechanism, CBMs are the main means of increasing mutual confidence among States Parties in compliance with the BWC. However, the situation remains unsatisfactory because around 100 States Parties, including those that have a developed biotechnological industry and advanced R&D facilities, fail to submit declarations. We call upon all countries to respect the consensus decisions of Review Conferences and annually present CBM returns.* The statement went on to urge all States Parties that still maintain reservations to the 1925 Geneva Protocol to withdraw them. It concluded by welcoming the call for further universalisation whilst noting that there are *still a number of countries, including those situated in the regions of high tension such as the Middle East, remain outside the BWC. In this connection we call upon all states not parties to the Convention, to accede to it at the earliest.*

Saudi Arabia then spoke reaffirming its *commitment to the Convention and, in particular, the need for Article X to be fully consistent with the aims and provisions thereof.* The statement went on to outline the steps taking by Saudi Arabia to implement the Convention nationally and also the importance of Security Council Resolution 1540.

South Korea then spoke saying *We cannot overemphasize the importance of national implementation as a key element for the faithful implementation of the Convention. We believe that enactment and effective enforcement of appropriate national legislative measures are our core obligations under the Convention to prohibit and prevent the development, production, acquisition, transfer, retention, stockpiling and use of biological and toxin weapons. Penal legislation, tightened national export controls and regulations on bio-safety and bio-security are essential elements for enhancing national implementation mechanisms.* The statement went on to outline a new implementation law enacted in 2006 by South Korea and noted that WP. No 6 would provide additional information. The statement then concluded by addressing the importance of regional cooperation on the implementation of the Convention.

India then spoke saying that *it is imperative that the norms against biological weapons contained in BTWC are fully upheld and implemented, especially in the context of a growing threat of proliferation of biological weapons and bioterrorism. Advances in biotechnology, genetic engineering and life sciences hold great promise and equally great risks. The intrinsic capacity for the development of biological warfare agents will expand at the same speed as the pace of civilian research.* The statement went on to say that *the prohibitions contained in the Convention, for want of provisions on verification of compliance, critically depend on the commitment of the States Parties to observe these prohibitions.* The statement said that India was *pleased that the very first meeting of experts for the new inter-sessional work programme is devoted to national implementation, Our ensuing*

deliberations will catalyze fresh ideas and throw up best practices on how to implement the Convention more effectively. In this connection, we would like to express our appreciation for the important contribution made by some of the States Parties, the concerned international organizations as well as civil society organizations and think tanks in providing us with significant material on the core issues that we hope to consider in this meeting.

Canada then spoke saying that *we are pleased to note that universalization is coming closer to reality with the accession of Kazakhstan, Montenegro, and Trinidad and Tobago as well as Gabon to the BTWC. We must continue to take actions that will strengthen and universalize the BTWC.* The statement then noted that *Canada is engaged in various practical ways multilaterally in support of the BTWC:*

- *The G8 through a bioterrorism initiative*
- *APEC through a health and food safety initiative*
- *The WHO's work on biosafety and International Health Regulations to facilitate the identification of, and response to, public health events of international concern.*

The statement went on to mention examples of *the formation of partnerships between health and law enforcement agencies funded through the Counter Terrorism Capacity Building Program of the [sic] Canada's department of Foreign Affairs and International Trade.*

Iran then spoke saying that *There is no substitute for the BWC in order to effectively and legitimately deal with disarmament and non-proliferation concerns regarding biological weapons.* In regard to universalisation, the statement noted that *In this regard it should be underlined that the denial to adhere to the Treaty, by those Non-Parties that are advanced in biotechnology, poses a serious threat to the international and regional peace and security.* It went on to say that *The Fifth and Sixth Review Conferences decided by consensus on the follow-up mechanism aiming at promotion of common understanding among the States Parties with the hope that real multilateralism would be revived and the negotiations on the Protocol on strengthening the Convention would be resumed in a foreseeable future. We strongly believe that the present follow-up mechanism which is of limited scope and nature, cannot be considered as a substitute to afore-mentioned negotiations.* The statement went on to consider the two topics for 2007 pointing out in respect of the first one that *as the States Parties to the Convention have different constitutional process "One size fits all" approach should be avoided in this regard.* The statement went on to say that *this topic should provide the environment for serious discussions in a comprehensive and balanced manner so that both promotional and regulatory aspects of the Convention can be strengthened.*

Pakistan then spoke saying that following the successful outcome of the Sixth Review Conference *Pakistan looks forward to substantive discussions in this Meeting of Experts.* The statement also congratulated Tim Caughley and the members of the ISU *for putting into high gear the*

activities of the Unit. The statement went on to say that *Pakistan remains fully committed to strengthening the Biological and Toxin Weapons Convention including the establishment of a compliance regime through a legally binding instrument. We believe that as we wait agreement on such a mechanism for verification of faithful and effective compliance of the Convention, national implementation should be enhanced.* The statement added that *National implementation of the Convention can be further enhanced through more effective realization of the objectives in Article X of the Convention. International cooperation and transfer of technologies are areas that require attention and that we believe will complement and support national action.* The statement continued to outline the legislation in Pakistan as well as their activity in biotechnology. It concluded by saying that *the CWC has an elaborate verification mechanism that allowed the OPCW to develop detailed reporting formats. BTWC still awaits agreement in this area. ISU cannot be expected to undertake reporting tasks similar to the OPCW.*

Libya then spoke saying that they hoped that the Meeting of Experts will be a success, a success which will be vital for the strengthening of efforts made by States Parties in order to adopt a legally binding instrument to implement all the provisions of the Convention. The statement went on to say that their delegation attended the various meetings in previous years following the holding of the 16th Meeting of the Working Group on the Protocol, a Protocol which ought to have been adopted by the States Parties and would have been had there not been differing views, so that there was no consensus on the text of the Protocol, a Protocol which did reflect the aspirations of several States Parties for the implementation of the Convention. Furthermore, our delegation was present for the Sixth Review Conference held in Geneva last year and our delegation believes it necessary to strengthen the Convention, which is why we need to once again talk about the Amended Protocol. So many experts worldwide made so many efforts to develop the Protocol, without which it would be difficult to implement the Convention and put an end to violations of its provisions. The statement went on to say that Libya had taken unprecedented steps to abandon any programmes in support of weapons of mass destruction and to outline their national legislation. It then continued by saying that *our authorities are also trying to coordinate various views in order to strengthen the Convention in the context of the various regional conferences which are held, for example, within the Non-Aligned and other groups. Furthermore, we are trying to maintain the mandate of the Ad Hoc Group tasked with developing a legally binding instrument as something very important, if we are to implement the Convention and strengthen its application.* The statement outlined workshops on biosafety and steps being taken to adopt codes of conduct before concluding by saying the States Parties need to step up their activities to ensure that we have a mechanism which can verify the application, the implementation of the Convention. Nothing should be done unilaterally. We strongly support all measures to build confidence and to arrive at a legally binding instrument which can protect the peoples of the world from biological threat.

Indonesia then spoke saying that they wished to be associated with the statement made by Cuba on behalf of the NAM. The statement went on to note that *as weapons of mass destruction, biological weapons pose a danger to humanity, whether as a tool of war or weapons of terror. It is a common threat which could affect all nations and spread beyond boundaries. This threat should be dealt with in a concerted effort.... The urgency of a concerted effort is also reflected in this year's meeting which focuses on the topics: first, "ways and means to enhance national implementation" and, second, "regional and sub-regional cooperation on the implementation of the Convention" and we shall look forward with interest to sharing experience and best practices on the enforcement, legislation processes and other implementation efforts of Member States. This sharing of experience hopefully will enrich our understanding and synergize efforts to curb the threat of use of biological weapons. Moreover, we believe that the presentation by related international and regional organizations will contribute to a better understanding of the existing and future threats as well as the ways and means to counter these threats. Indonesia believes that regional cooperation is another important means of dealing with the threat of biological weapons and infectious diseases.* The statement continued by outlining regional cooperation between Indonesia and Australia in regard to the Biological Weapons Convention. The statement concluded by saying *at the same time, we also believe that our endeavours to strengthen the Convention should not hamper the rights of each Member State to benefit from the development of biological agents for peaceful purposes. They should enhance international cooperation in the field of peaceful uses of biological agents, including capacity building and combating infectious diseases.*

The final statement in the opening session was made by **Sudan** saying that *Sudan acceded to the BWC in 2003 and Sudan will go ahead in completing all the necessary steps and legal measures needed in order to ratify the Convention. Sudan will also aim at drawing up a well structured programme for capacity building through taking all the necessary national measures to implement the Convention at the national level, particularly the establishment of a focus point and the drawing up of national legislation, as well as providing support to strengthen national scientific institutions and national enforcement agencies. My delegation would like to fully endorse the statement of Cuba on behalf of NAM, particularly as Sudan has just recently acceded to the Convention.*

The Chairman then closed the opening Plenary Session thanking the various speakers for their contributions and saying that the afternoon session would commence with a briefing by the ISU on the national implementation measures dataset which would be followed by a presentation by the representative of Interpol. Then at 1630, the afternoon session would be suspended and continue in informal session to allow the NGOs to make their statements prior to the official launch of the ISU at 1730 in the Escargot Bar, two floors above the meeting room.

As at the Sixth Review Conference, there were group statements by the NAM, the EU and a group of Latin Ameri-

can States, but it was noted that although Canada and the Republic of Korea made statements in the opening session, neither of these spoke on behalf of the JACKSNNZ group (Japan, Australia, Canada, Republic of Korea, Switzerland, Norway and New Zealand). Likewise, none of the Working Papers submitted to the Meeting of Experts by Australia, Canada, Republic of Korea, Switzerland or New Zealand said that they had been coordinated within the JACKSNNZ group (as was the case with Working Papers submitted by these countries to the Sixth Review Conference).

Monday 20 August, afternoon public session

The afternoon session began with a presentation by the ISU on the national implementation measures dataset. It was recalled that an information repository had been created in 2003 in support of the Meetings of Experts and States Parties held in that year. In the final version of the 2003 information repository the dataset of measures included;

- 1016 individual measures, from
- 83 different States Parties (and the European Union).

This dataset had been updated in 2007 by the ISU using information submitted to UN SCR 1540 and 1673 as well as information submitted by States Parties to the Sixth Review Conference and subsequently to the ISU. As of Friday 17 August 2007, the dataset now comprised:

- 1938 individual measures (an increase of 91%) from
- 130 different States (and the European Union – an increase of 58%)
- Measures from 119 States Parties (76% of the membership of the BWC has at least some implementing legislation)
- Measures from 5 Signatories (Egypt, Myanmar, Nepal, Syrian Arab Republic, and the United Arab Emirates)
- Measures from 6 States not party (Andorra, Israel, Kiribati, Marshall Islands, Samoa, and Tuvalu).

The situation could be summarised as follows:

- Measures from 100% of Eastern Group States Parties
- Measures from 78% of Western Group States Parties
- Measures from 63% NAM States Parties.

Although this represents considerable progress, the ISU noted that there is still room to further improve this database. The opportunity was taken to ask States Parties to check the information in the database for their State and inform the ISU of any alterations and additions required. A demonstration was then given of how data can be accessed at the website <http://www.unog.ch/bwc> by going to the “National Implementation” page in the “Information for States Parties” part of the website. Each State for which information is available is listed.

This was then followed by a Powerpoint presentation by **Interpol** on their Bioterrorism Prevention Programme. The presentation began with a number of quotations from the public domain indicating a potential interest in biological weapons. The question as to what law enforcement needs to know was then addressed leading on to the identification of two different plans, one for covert bioattack and the other for

overt bioattack. The three pillars of the Interpol Bioterrorism Prevention Programme were outlined:

- BioT – Bioterrorism Prevention Police Training
- BioC – Biocriminalization
- BioD – Bio Events Database

The objectives for Biocriminalization included the development of a thorough understanding of what biological weapons-related criminal and administrative laws exist in which countries and the identification and filling in of key data gaps, and also provision of assistance to priority states in drafting, enacting and enforcing national biological weapons-related civil and penal measures. A number of conferences had been held during the last couple of years in a number of different regions around the world.

The presentation was followed by some discussion which included questions as to whether the presentation was based on hard intelligence or on media reporting – the response appeared to be that it was based largely on public sources and reports from NGOs. Other questions related to the responsibility for the chain of custody of any samples that might be taken following an incident and to whether there were any validated laboratories which might be able to carry out analyses of any such samples. Further questions related to the proposed Interpol Bio Events Database and how this might relate to the database on ‘biological incidents’ that is to be set up by the UN Office of Disarmament Affairs (ODA) under General Assembly resolution A/RES/60/288. It was also agreed that the Interpol presentation would be reviewed to remove some of the material presented that had been taken from public sources and had caused some concern to delegations.

Although the **Organisation for the Prohibition of Chemical Weapons (OPCW)** was one of the intergovernmental organizations represented at the Meeting of Experts, its presentation was not made until the morning of Thursday 23 August, the penultimate day, and after the informal compilation of the proposals made at the Meeting of Experts had been circulated on the previous afternoon of Wednesday 22 August. Its potential impact on the deliberations of the Meeting of Experts was consequently much reduced.

The meeting was then suspended and resumed with the Chairman remaining in the chair to hear statements from seven NGOs:

- a. The **University of Bradford**. Graham Pearson spoke summarizing Bradford Briefing Paper No. 20 and recommending a number of steps that could usefully be agreed by the Meeting of Experts and its subsequent Meeting of States Parties. The steps include the preparation by the ISU of a comparative compilation of national implementation measures using criteria developed from those used by the OPCW in a similar comparative compilation of national measures to implement the CWC.
- b. The **Harvard Sussex Program on Chemical and Biological Weapons (HSP)**. Graham Pearson spoke drawing the attention of the States Parties to the Harvard Sussex Draft Convention on CBW Criminalization which would complement the Biological Weapons Convention and the

CWC by conferring on national courts jurisdiction over individuals present in their national territory, regardless of their nationality or official position, who order, direct, or knowingly render substantial assistance to the use of chemical or biological weapons anywhere.

- c. **The London School of Economics.** Filippa Lentzos spoke drawing the attention of States Parties to the three components of national implementation: Legislation; means of enforcing national legislation; and methods for monitoring relevant work with biological agents and toxins within the national territory. She urged that the Meeting of Experts should address ongoing day-to-day monitoring of the life sciences as this is essential for effective oversight frameworks or risk regulation regimes.
- d. **The BioWeapons Prevention Project (BWPP).** Jean-Pascal Zanders spoke emphasizing the importance of regional and sub-regional cooperation and pointing out some of the findings that the BWPP has learnt from its outreach activities in various parts of the world. He urged that States Parties who are members of regional and sub-regional organizations should accord higher political importance to the quantitative and qualitative universality of the BTWC so as to buttress other inter-regional and bilateral initiatives in support of the Convention.
- e. **The Center for Arms Control and Non-Proliferation/Scientists Working Group on Biological and Chemical Weapons.** Jean-Pascal Zanders spoke pointing out that the obligations of Article IV reinforce, through national action, the prohibitions placed on States Parties by Article I of the Convention. He urged that States Parties should develop, adopt and implement mechanisms for monitoring, reviewing and assessing their own government directed biodefense research and development activities and programs to ensure that they comply with Article I. Such compliance review mechanisms would advance the objectives of Article IV.
- f. **VERTIC (Verification Research, Training and Information Centre).** Rocio Escauriaza spoke outlining the VERTIC National Implementation Measures website which brings together a variety of resources relating to the implementation of the Biological Weapons Convention. She pointed out that this website was developed under a VERTIC project funded by the Netherlands and the UK which is described in a Netherlands/UK working paper for the Meeting of Experts (WP.3).
- g. **Pax Christi International.** Trevor Griffiths spoke pointing out that strengthening of the BTWC is of utmost importance for international peace and security, yet the goal of enforcing the Convention should not infringe on human dignity. He urged that the Meeting of Experts should encourage those States Parties in a position to do so to provide assistance in capacity building measures. He also stressed the importance of ethical principles and the development of codes of conduct as such measures contribute directly to in-depth implementation.

The Chairman then closed the afternoon session thanking

all speakers for their contributions. He announced that the working session of the Meeting of Experts would start on Tuesday morning at 11 am thus enabling delegates who wished to do so to attend the Plenary session of the Conference of Disarmament at 10 am to hear the Secretary-General's High Representative, Sergio Duarte, speak.

Two other statements were made available to the Meeting of Experts although these were not presented:

First, the Inter Academy Panel on international issues had prepared and circulated on 9 August 2007 to the States Parties a paper describing the role of national academies and other networks of scientific organizations to advise their governments on scientific and technological issues, especially those related to the BTWC. This concluded that a number of national and international scientific organizations are actively engaged in biosecurity issues at the regional level. The paper identifies some of the major organizations and highlights some of the recent activities in relation to issues relevant to the BTWC. These examples illustrate the resources available to support regional coordination and collaboration among BTWC States Parties and with international and intergovernmental organizations.

The second was a paper entitled *Making Legislation Work*, prepared by Daniel Feakes, Filippa Lentzos, Caitriona McLeish and Angela Woodward and circulated to the States Parties on 11 June 2007, which pointed out that national implementation comprises three components: legislation; methods for monitoring relevant work with biological agents and toxins with the national territory; and means of enforcing the legislation. The authors particularly urged that, at the Meetings in 2007, the States Parties should discuss the issue of appropriate oversight mechanisms for the continuous monitoring of relevant work with biological agents. They emphasized that there must be coherence between the three components for the national implementation regimes to be effective.

In addition, as at the Sixth Review Conference, Richard Guthrie in association with the BioWeapons Prevention Project provided daily reports on the Meeting of States Parties that were made available in hard copy to the delegations as well as electronically. These reports can be found at <http://www.bwpp.org/2007%20MX/MX2007Resources.html>

During the Meeting of Experts there were only two side events at lunchtime. The first was a briefing on Tuesday 21 August by the BioWeapons Prevention Project to launch the second version of the BioWeapons Monitor. The second was a presentation on Thursday 22 August by the UN Office of Disarmament Affairs (ODA) on the United Nations biological incidents database to be set up under General Assembly resolution A/RES/60/288 which was adopted by consensus in 2006.

The launch of the Implementation Support Unit then followed the afternoon session at 1730 in the Escargot Bar. The launch began with Sergio Duarte, the Secretary-General's High Representative for Disarmament saying *today we will inaugurate a new level of cooperation between the United Nations Office for Disarmament Affairs and the States Parties to the BWC. Together, we are taking a sensible, modest, but long-overdue step forward in addressing what*

some have called the “institutional deficit” of the BWC. He went on to say that *I am pleased that the States Parties have pragmatically decided that their Implementation Support Unit should be established within the United Nations Office for Disarmament Affairs. This is a natural partnership – after all, the first resolution adopted by the General Assembly in 1946 called for the elimination of all weapons adaptable to mass destruction, so it is surely fitting that the States Parties to the BWC would work with the United Nations in achieving their common aims. This is also an expression of trust. On this point I would like to assure the States Parties that the Office for Disarmament Affairs will offer every support to the ISU to enable it to fulfil its mandate effectively.*

The United Nations Under-Secretary-General and Director-General of the United Nations Office at Geneva, Sergei Ordzhonikidze, then spoke saying that *the establishment of the Unit is a milestone in the history of the Convention. Indeed, it is a very positive development in our overall collective efforts against biological weapons, and for multilateral disarmament in general. He went on to say that for nearly four decades, the disarmament community in Geneva has worked to confront the terrible threat posed to humanity by biological weapons. The Biological Weapons Convention was negotiated in Geneva in an earlier incarnation of the Conference on Disarmament and all the six review conferences have been held here. The sometimes-turbulent history of the Convention has been played out here: challenges have been faced, disputes inflamed, solutions found, disappointments endured, and as we saw in December last year triumphs celebrated. The launch of the Implementation Support Unit (ISU) marks the start of a new chapter in this important development. It is an innovative solution to the long-acknowledged need to provide an institutional focus for the Convention, and I appreciate that the establishment of the Unit has, in effect, made an official seat for the BWC at what is considered the Convention’s ‘spiritual’ home: the United Nations Office at Geneva.*

Ambassador Masood Khan, Chairman of the Meetings of Experts and of States Parties in 2007 then spoke saying that *the establishment of the ISU was one of the most significant outcomes of the Sixth Review Conference, and will help set the BWC on its new course. We faced many challenges and difficult negotiations at the Review Conference, but it was striking that the proposal for an ISU was accepted in principle right from the outset. It was clearly an idea which all States Parties, despite their differing circumstances, perspectives and priorities, recognised as a necessary step to strengthen the Convention. He went on to say that although the ISU is an innovative step forward, it is a step taken on the secure ground of demonstrated capability and well-defined expectations. A small, efficient and highly-focused unit, the ISU will coordinate, concentrate and magnify the efforts of the States Parties. It will harness resources, forge connections, develop networks and identify opportunities. He concluded by saying that I have no doubt that the ISU will make an important and innovative contribution to our collective effort to reduce the terrible threat posed by biological weapons.*

This was then followed by an entertaining presentation by Richard Lennane, the Head of the ISU which was preceded

by extracts from a 1950’s civil defense film entitled “What you should know about biological weapons”. In the presentation he said that the role of the ISU was to help the States Parties to help themselves. The ISU would be engaged in facilitating communication, focusing efforts, coordinating actions, making connections – or in other words, the States Parties do the work and the ISU take the credit! Nevertheless, there were promising early results with four new States Parties and a record number of CBM submissions already in 2007.

A reception then followed with four hosts; The United Nations Office in Geneva, the Office of Disarmament Affairs in New York and in Geneva, and Ambassador Khan of Pakistan.

Outcome of the Meeting of Experts

The Meeting of Experts resumed in closed session at 1100 am on Tuesday 21 August 2007. In accordance with the programme of work (MX/2) the first day, Tuesday, was on the first topic: *Consideration of ways and means to enhance national implementation.* and during the morning of the second day, Wednesday, moving on to the second topic: *Consideration of regional and sub-regional cooperation on implementation of the Convention.* During the Meeting of Experts, 22 Working Papers were submitted by 17 States Parties with the numbers submitted by individual States Parties ranging from one to three; Australia (12,13), Brazil (21), China (17), Cuba (19), Germany (4, 5, 22), Iran (18), Italy (20), Japan (7, 8), Republic of Korea (6), Netherlands (3), New Zealand (15), Portugal on behalf of the EU (1), Slovakia (14), Switzerland (9, 10), United Kingdom (2, 3), United States (11) and Ukraine (16). In addition, Portugal, on behalf of the EU, submitted a paper entitled *Implementation of the BTWC in the EU Member States (BWC/MSP/2007/MX/MISC.2).* Most of these address the first of the two topics.

On the **Wednesday afternoon**, an informal compilation of the proposals made at the Meeting of Experts was circulated. The proposals were grouped under the same, or closely similar headings, to those used in the background paper prepared by the Secretariat (MX/INF.1), as follows:

- Implementing the Articles of the Convention; (18 proposals from 12 countries)
- Scope of national implementation measures; (24 proposals from 13 countries)
- Enhancing domestic cooperation (managing national implementation); (27 proposals from 11 countries)
- International and regional cooperation and assistance; (23 proposals from 11 countries)
- Transfers and export controls; (12 proposals from 7 countries)

These proposals were from 18 countries (China, Cuba (on behalf of the NAM), Georgia, Germany, India, Iran, Japan, Korea, Netherlands, New Zealand, Pakistan, Philippines, Poland, Portugal (on behalf of the EU), Switzerland, United Kingdom, United States, Ukraine).

On **Thursday morning**, a closed session was held to consider the final presentations which included one given by a representative of the Organisation for the Prohibition of Chemical Weapons (OPCW) on the subject of “National

Implementation”. This made the point that *by the First Review Conference in 2003 it was evident that effective domestic implementation of the Convention would require serious attention, support and coordination, and continual review.* This led to the Article VII Plan of Action under which the States Parties were required to take steps to enact legislation, establish a National Authority, adopt administrative measures, submit the full text of their legislation and review their trade regulations for consistency with the CWC. The presentation showed the progress achieved under the Action Plan.

Also on the Thursday morning, a draft text for the substantive paragraph of the report of the Meeting of Experts was circulated which was based on that in the report of the Meeting of Experts in 2005:

15. The Chairman, under his own responsibility and initiative, prepared a paper listing considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the topics under discussion at the Meeting. The Meeting of Experts noted that this paper had no status; that it had not been discussed; that it could not be considered as being complete; that the appearance of any consideration, lesson, perspective, recommendation, conclusion or proposal in the paper did not in any way indicate or imply that States Parties agreed with it; and that it should not necessarily form a basis for future deliberations. The Meeting of Experts noted that it was the Chairman’s view that the paper could assist delegations in their preparations for the Meeting of States Parties in December 2005 and in its consideration of how best to “discuss, and promote common understanding and effective action on” the topic in accordance with the decision of the Sixth Review Conference. The paper prepared by the Chairman is attached as Annex I to this Report.

On the **Friday morning**, in public session, the Meeting of States Parties agreed the draft report (MX/CRP.1) and the annex to the report (MX/CRP.2). The substantive paragraph in the report was shortened from the draft that had been circulated earlier (see above) and now read as follows:

15. The Chairman, under his own responsibility and initiative, prepared a paper listing considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the topics under discussion at the Meeting. The Meeting of Experts noted that this paper had not been agreed and had no status. It was the Chairman’s view that the paper could assist delegations in their preparations for the Meeting of States Parties in December 2007 and in its consideration of how best to “discuss, and promote common understanding and effective action on” the topics in accordance with the decision of the Sixth Review Conference. The paper prepared by the Chairman is attached as Annex I to this Report.

The Annex in CRP.2 is entitled *Considerations, Lessons,*

Perspectives, Recommendations, Conclusions and Proposals drawn from the Presentations, Statements, Working Papers and Interventions on the Topics under Discussion at the Meeting and was annotated ‘as of 15:30 on 23 August 2007’. The proposals listed were under the same headings as the preliminary listing, referred to earlier, issued on 22 August 2007, although considerably more proposals were now included – including a new grouping of “*Enforcing national measures*”:

- Implementing the Articles of the Convention; (26 proposals from 16 countries)
- Scope of national implementation measures; (41 proposals from 20 countries and including 2 from an IGO (OPCW))
- Managing national implementation; (35 proposals from 16 countries and including 1 from an IGO (OPCW))
- Enforcing national measures; (18 proposals from 7 countries and including 2 from an IGO (Interpol))
- International and regional cooperation and assistance; (43 proposals from 16 countries)
- Transfers and export controls; (13 proposals from 7 countries)

These proposals were from 27 countries (Australia, Brazil (on behalf of some Latin-American States), China, Cuba (on behalf of the NAM), Georgia, Germany, India, Iran, Japan, Korea, Libya, Netherlands, New Zealand, Pakistan, Philippines, Poland, Portugal (on behalf of the EU), Russian Federation, Slovakia, Sudan, Sweden, Switzerland, Turkey, United Kingdom, United States, Ukraine) and from two IGOs (Interpol, OPCW). Both Brazil and Cuba made proposals on their own behalf as well as on behalf of a group.

The report (MX/3) of the Meeting of Experts also recorded that at its final meeting on the morning of Friday 24 August 2007 the Chairman gave an interim report on activities to secure universal adherence to the Convention, in accordance with the decision of the Sixth Review Conference. The Meeting noted that the Chairman would prepare the provisional agenda and programme of work for approval and adoption at the Meeting of States Parties to be held from 10 to 14 December 2007. In his interim report on universalisation, the Chairman said that *in accordance with my mandate to address states not party to the Convention, earlier this year I wrote in my capacity as Chairman to the foreign ministers of states not party, urging them both to accede to the Convention and to provide information on their intentions and progress. I also advised them that they were likely to be approached by individual States Parties on a bilateral or regional basis, and that many States Parties would be prepared to offer support and assistance for the accession process.* He said that he had received replies from two States: Mozambique and Israel, and that the reply from Mozambique is promising. He went on to say that *as we have heard earlier this week, four new members have joined the Convention since the Sixth Review Conference: Montenegro, Kazakhstan, Trinidad and Tobago, and Gabon. This brings the number of States Parties to 159. This is pleasing progress, and is due to the efforts of several States Parties to encourage and persuade these four states to join. I would like to acknowledge in particular the efforts of the Depositaries – the Russian*

Federation, the United Kingdom, and the United States – as well as the Joint Action of the European Union. If we can maintain this rate of progress of three to four accessions every six months, we are on track to secure universal adherence by the Seventh Review Conference in 2011.

Annex 1 to the final version of the report (MX/3) of the Meeting of Experts was slightly different from CRP.2. The groupings were amended in MX/3 to more closely follow the two topics of the Meeting of Experts:

Agenda Item 5 – Ways and means to enhance national implementation ...

- Implementing the Articles of the Convention; (28 proposals from 16 countries)
- Scope of national implementation measures; (40 proposals from 21 countries and 2 from an IGO (OPCW))
- Managing national implementation; (31 proposals from 16 countries and 1 from an IGO (OPCW))
- Enforcing national implementation measures; (18 proposals from 7 countries and 2 from an IGO (Interpol))
- International and regional cooperation and assistance; see section on Agenda 6 below
- Transfers and export controls; (13 proposals from 7 countries)

Agenda Item 6 – Regional and sub-regional cooperation and assistance; (39 proposals from 18 countries)

Some proposals are repeated in different groupings; for example, the UK proposal for *Clear guidance for industry and academia...* appears on page 8, on page 13 and on page 18; and the Russian Federation proposal for *Full implementation of measures agreed at past review conferences ...* appears on page 6 and on page 11.

Following the adoption of the report of the Meeting of Experts, the Chairman then made some concluding remarks in which he said that *I think it is fair to say that we have had a very useful and constructive meeting. We have focused on national measures in a large number of States Parties, across all regions. We have heard a wide range of perspectives, from States Parties of different sizes, different situations, and varying systems of government and administration. We have had broad overviews of approaches to national implementation, and highly detailed technical expositions of particular aspects of enforcement, interagency coordination, regional cooperation, and export controls. As well as the contributions from States Parties, we have had the benefit of highly relevant and useful input from Interpol and from the Organisation for the Prohibition of Chemical Weapons. And we also benefited from the helpful contributions of a number of nongovernmental organizations.* He went on to say that *we have heard a range of ideas, advice and proposals, and certain themes have consistently emerged. One is that there is no “one size fits all” solution for national implementation: we need to develop an approach that can be tailored to the individual circumstances and needs of each State Party. This was elegantly articulated by the OPCW, which suggested that an “implementation checklist” was a more useful tool than model legislation.*

Another common theme was the need to make use of the Implementation Support Unit as a catalyst in better coordinating and managing activities. A further important point, which was alluded to in several presentations, is that there is a need to help States Parties build capacity. It is not enough to provide guidance on enacting legislation and regulations: States Parties need practical assistance to build their capacity to enforce and manage such measures. On this point, I am pleased to note that several delegations – including the European Union, the United States, India and Pakistan – used this meeting to announce their readiness to provide assistance for national implementation. I hope others will follow their example. He also noted that there are some lessons we can draw, and improvements we can make for the future. Many delegations would appreciate more intensive discussion and interaction, with the opportunity for questions and answers straight after each presentation. Some have observed that short, focused presentations are more useful than long ones, although many consider that long presentations are justified if such detailed material is relevant. Some suggested that “prescreening” and thematic grouping of presentations would be helpful to more focused discussion. I think we should weigh this very carefully, so that pre-screening does not mean pre-censorship. Many find PowerPoint a useful aid, and would encourage presenters to make use of it. These are all helpful suggestions which we will integrate into our planning for the Meeting of States Parties, and indeed for the meetings in subsequent years. Looking ahead to the Meeting of States Parties in December 2007, he said that I will be writing to all delegations to outline my plans, and will consult closely in the coming months. As in previous years, I will prepare a synthesis paper that distills the essence of the many ideas and proposals we have annexed to our report. I am anxious to make the most of the week available to us, and plan to develop an intensive programme of work. I think it is important that the Meeting of States Parties produces an outcome that is of practical benefit to national implementation and regional cooperation efforts, especially for States Parties which are not able to participate in our meetings. But we must keep in mind the interests and needs of the entire membership of the Convention, especially the smaller States Parties which are often those most in need of assistance and encouragement. For this reason, a substantive outcome encapsulating our work and collective wisdom is very important.

Reflections

The Meeting of Experts had a splendid participation with over 410 participants from 92 States Parties, 5 Signatory States, 1 non-Party as well as from IGOs and NGOs. It was, however, a one-week meeting addressing two topics and it is arguable whether optimum use was made of the time available. There was no meeting on the Thursday afternoon and the final session was completed by noon on the Friday. In contrast to the two-week Meeting of Experts in 2003 when the IGO presentations were held outside the formal sessions, on this occasion two of the Interpol presentations and the OPCW presentation were held during the closed formal sessions. It was also evident that there was no provision in the programme

for any general debate and discussion of the two topics addressed; the meeting thus largely consisted of a succession of presentations each followed by some discussion. As the Chairman noted in his concluding remarks, there would have been advantage in a thematic grouping of presentations in order to promote more focused discussion.

The official launch of the Implementation Support Unit on the afternoon of Monday 20 August 2007 with its high level participation by Sergio Duarte, the Secretary-General's High Representative for Disarmament, was indeed as he said *a sensible, modest, but long-overdue step forward in addressing what some have called the "institutional deficit" of the BWC*. The Implementation Support Unit should have a significant impact on the effectiveness of the Convention and its implementation.

It is noted that 6 States Parties (Cuba (on behalf of the NAM), Russia, India, Iran, Pakistan and Libya), out of the 14 who made statements in the opening session on Monday 20 August, referred to the importance of a legally binding compliance mechanism. Although this topic will not be considered again until the Seventh Review Conference in 2011, it should be recognized that it will then be over 10 years since the negotiations on such a mechanism ceased and that there would be no sense in starting from the last draft as the international situation has developed and changed over the decade. The earlier negotiations will do no more than provide some basic material that will need to be considered afresh in the light of the circumstances at the time when consideration is resumed.

Some opportunities were missed at the Meeting of Experts in that it is regretted that the JACKSNNZ group (Japan, Australia, Canada, Republic of Korea, Switzerland, Norway and New Zealand) did not continue the practice that they had successfully adopted at the Sixth Review Conference of having a group statement, and of coordinating their working papers.

It is also regretted that the presentation by the OPCW was not made until the Thursday morning, when the OPCW representative was available. The experience of the OPCW in enhancing national implementation of the CWC was directly relevant to the topic of this Meeting of Experts, and if the presentation had been made earlier, it would have enabled more States Parties to benefit from the what was said. As the Chairman noted in his closing remarks, the OPCW suggested that *"an implementation checklist" was a more*

useful tool than model legislation, a point that was also made by some States Parties. It is to be hoped that the ISU can consult the OPCW and develop such an "implementation checklist" as a background document for the Meeting of States Parties in December 2007.

Although it might appear that the point - argued cogently by Sussex/LSE/VERTIC in their paper *Making Legislation Work* - that monitoring relevant work with biological agents is on a par with legislation and enforcement was not reflected in the groupings of the proposals adopted for Annex I to the report of the Meeting of Experts, careful study shows that a number of States Parties made proposals relating to monitoring and oversight.

In looking ahead to the Meeting of States Parties in December 2007, the Chairman has undertaken to prepare a synthesis paper that distills the essence of the many ideas and proposals in Annex I to the report of the Meeting of Experts. This paper is likely to include language that can be incorporated into the substantive paragraphs of the report of the Meeting of States Parties. As the ideas and proposals captured in the Annex embrace national implementation and regional cooperation in the broadest sense, the synthesis can likewise be expected to include all aspects of national implementation, including those that are being considered at subsequent intersessional meetings, thereby providing a useful impetus to their consideration. In addition, the Meeting of States Parties can be expected to give some consideration to the promotion of universality as well as to the first annual report on the Implementation Support Unit. The Eastern Group should advise who will be the Chairman for the intersessional meetings in 2008 and the dates for those meetings in 2008 decided. It would be very helpful if the Chairman for the 2008 intersessional meetings could take the opportunity at the Meeting of States Parties in December 2007 to set out his/her approach to the topics for 2008 so that the States Parties could start their preparation instead of having to wait until they receive a letter sometime in 2008. Overall, the Meeting of States Parties can be expected to continue the momentum created by the successful outcome of the Sixth Review Conference.

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

Ensuring True Implementation of the CWC¹

Walter Krutzsch*

States parties to the 1993 Chemical Weapons Convention have committed themselves to the principle stated in its Preamble that *achievements in the field of chemistry should be used exclusively for the benefit of mankind*. The Second Review Conference of the CWC, which the OPCW will conduct in April 2008, will serve its purpose if it agrees on measures to make this principle more of a reality within state structures and within society world-wide. This, however, will be difficult to achieve under present circumstances, for several reasons:

- The character of war is changing. Armed conflicts are becoming increasingly brutal. Humanitarian norms are recklessly neglected. Distinctions between war and terrorism have been fading. All this was true when the First Review Conference convened in 2003; unfortunately, it will not be any better for the Second.
- Science and technology in the fields of biology and chemistry are undergoing dramatic change. Combined with informatics, nanotechnology and other such innovation, many new scientific discoveries can now be put immediately into practice – either for production of civilian goods or for weapons.
- There is shrinking respect for international humanitarian law, especially the disarmament norms. Indeed, to judge from attempts to minimize the Convention's obligations, this seems to be a contagious political disease. Witness, for instance, the current efforts to permit new uses for chemical weapons:² the treaty-provision that excludes chemicals intended for "law enforcement including domestic riot control" is being falsely interpreted and applied to uses of toxic chemicals that the Convention does not permit.

If the implementation system of the CWC is to meet these challenges, it needs significant change.

Present failings

The implementation system has four main functions:

- **Information:** gathering reliable objective information about implementation-related facts and activities;
- **Evaluation:** evaluating information about such facts and activities for consistency with the Convention;
- **Decision:** taking decisions on actions for resolving issues of compliance with CWC obligations; and
- **Fair process:** carrying out actions world-wide in a fair process, in which all States Parties are treated equally.

All of these functions are currently afflicted by major difficulties that have to be overcome.

Information. The OPCW Technical Secretariat has to gather reliable information that has been professionally and independently acquired and is of an increasingly high scientific standard. This includes not only information provided by declaration and verification activities but also information from scientific and economic communities. The Administrative Tribunal of the International Labour Organisation considers

disregard of independence to be inconsistent with the proper functioning of an international organization.³ Unfortunately, the independence of the Technical Secretariat has been compromised in many respects. For example, the Convention grants full diplomatic immunity to members of the inspection teams, and their papers and correspondence, including records, samples and approved equipment, enjoy inviolability⁴. Yet these key provisions have been routinely violated during hundreds of inspections.

The declaration obligations for chemicals need urgently to be adapted to the higher standards of science and technology. The extension of these obligations to certain dual-use technologies has to be discussed. The records of National Authorities on their implementation activities should become an additional part of the information required and received routinely by the OPCW. In the future, this flow of information could be enriched by information obtained from researchers, developers and producers, and from networks of non-governmental organisations, groups and individuals participating in implementation.

Evaluation. Evaluating information is a precondition for sound decision-making. It means analysing the gathered information against the norms and values enshrined in the Convention. There can be no valid evaluation without discussion involving:

- the representatives of States Parties;
- the Technical Secretariat (in accordance with its responsibility to inform the Executive Council about problems concerning compliance);
- the Director-General (to fulfil his/her additional obligation to inform the Executive Council without delay when facts established are of a nature to suggest that the obligations undertaken have not been met);⁵
- the Executive Council, especially under paragraphs 35 and 36 of Article VIII; and
- the Conference of the States Parties (for consideration and the decision making as mandated to it by the Convention in Art. VIII, paragraphs 20 and 21(k)).

Other potential participants are members of the Scientific Advisory Board. This body is of the highest value when it comes to assessing the work of the OPCW in regard to new science. The same would be true for inclusion in the evaluation discussion of members of civil society having relevant experience.

Appropriate evaluation has most conspicuously been missing in regard to information concerning compliance with Article I of the Convention in regard to incapacitants. At the outset of the First CWC Review Conference, Switzerland, Norway and New Zealand referred to this issue in their national statements; papers on the same subject were submitted by international organizations; and in its report to the Conference the OPCW Scientific Advisory Board referred to the development of new riot control agents and other 'non

lethal' weapons. Nevertheless the First Review Conference chose to make the issue neither a subject for further discussion nor a case for action.⁶

Decision. The organic structure for decision-making within the OPCW generally follows the model of other inter-governmental organizations. The Conference of the States Parties decides on matters of substance by consensus. If consensus is not achievable, the Conference decides by a two-thirds majority vote of those present and voting.⁷ The decision-making rules of the OPCW Executive Council differ from that of the Conference. The CWC stipulates that the Council shall decide on matters of substance by a two-thirds majority vote of all its members (see Article VIII, paragraph 29). If a large enough number of members abstain or are absent, a vote cannot be carried in the Executive Council.

However, shortly after entry into force of the Convention in 1997, the rule for decision making of the Council by vote was in practice disposed of and replaced by a consensus rule. A kind of veto power was thereby created: the Council works in strong secrecy; its documents are not publicly available nor are any verbatim records of its proceedings; and there is no NGO presence during sessions or other meetings of the Council. When Council deliberations do not lead to consensus, a Council member is mandated to work as a 'facilitator' in order to find a compromise. The upshot is endless bargaining behind the scenes. Unidentifiable 'veto powers' are sheltered from public criticism. The end result is that agreement in the Council generally becomes set at the lowest common denominator. This is reflected in, for example, the preparation of the annual draft programme and budget of the OPCW and its submission to the Conference of the States Parties. Instead of relying on the professional wisdom of the Technical Secretariat based on objective risk analysis, the Executive Council pre-judges that analysis and by consensus has latterly been agreeing to a zero-growth policy. Endless lists of unresolved issues mark the way of this failed organ.

Fair process. Fair and equal treatment of all states parties shall be ensured when decisions are put into effect. The Action Plan on the Implementation of Article VII is a positive example of effective preparation and cooperation. Most encouraging have been the offers, voluntarily made by 32 States Parties, to participate with their experience and resources in assistance activities. Coercive measures against states not in compliance with their obligations would have been counterproductive and would have damaged the readiness for entering into discourse, co-operation and assistance that are the most effective means for the resolving compliance problems.

However, attention must be drawn to the fact that, almost exclusively, developing countries have been subject to these actions since the only issues of non-compliance to be addressed have been the problems with meeting the obligations in Article VII. A lesser emphasis has been devoted to meeting the obligations in Article IV. Issues related to meeting the obligations in Article I have not given rise to any action.

Asserting the rule of law

It is clear from the foregoing discussion that all four functions of the CWC implementation system are suffering because binding rules are being neglected. Here is what should now be done:

- Restoring the independence of the OPCW Technical Secretariat and enhancing its professionalism in selecting the chemicals and technologies for declaration and routine inspection.
- The yardstick for evaluating information must be the Convention, its function of contributing to the purposes and principles of the UN Charter, and nothing else. The entire system becomes frustrated when the values embodied in the provisions of the Convention become supplanted by fear of behaving in a way that might be considered unfriendly. The flawed confidentiality policy, for example, has degraded the requirement to protect confidential information and has in addition become a tool for excluding critical discussion of compliance issues. It has been stated truly that "the viability of the Convention and its Organization rests on an open discussion of its political and scientific problems and on public support. Sufficient information will nourish a thorough and sober discussion."⁸
- If the system fails to react to issues of non-compliance that are blatant, such as the weaponization of incapacitating toxic chemicals that do not fall within the definition of Riot Control Agents, there is no hope of ensuring compliance under the complex conditions of modern science and technology. To achieve the necessary change, a joint initiative by states, chemical industry associations, the academic community and other relevant parts of civil society may now be essential in order to overcome the present blockage.
- Reacting to delays in the implementation of Article VII and not reacting to compliance issues concerning Articles I and IV is an asymmetric approach that corresponds neither to legitimacy nor to the object and purpose of the Convention. There is now a string of issues bearing the 'too-difficult-to-deal-with' label that signals the involvement of big-power interests and, therefore, that it is advisable not to raise them. An even-handed approach must somehow be adopted.

Universalizing implementation

The humanitarian imperative plays a role in scholars' discussions on arms control and disarmament.⁹ Positive impact could be drawn from the approaches followed in negotiating and concluding the Ottawa Convention on the Prohibition of Anti-Personnel Mines, which is equipped with an efficient and democratic compliance regime. As with the Oslo Process and the creation of the International Criminal Court, the approach to the Ottawa Convention was path-breaking in that it was conducted in a spirit of equal partnership between governments, NGOs, and international organizations, with the International Committee of the Red Cross (ICRC) and the International Campaign to Ban Landmines (ICBL) particularly active participants.¹⁰ This is encouraging. It indicates that there is a real chance and readiness to overcome contemporary threats to our species by common action. International law is not only a result of international governance created and applied (or erased and disrespected) by sovereign states. It can also be created, applied and defended by citizens in a process of democratic inclusion.

The CWC and the BWC face an unprecedented challenge from revolutionary developments in chemistry and biology. Those developments will be of great value to the fight against

serious disease, epidemics and the consequences of poverty and underdevelopment. They may, likewise, if misused for hostile purposes, create additional dangers for the lives and health of human beings world-wide.

A global group of scientists of related professional background should organize themselves in order to give advice and support to the comprehensive implementation of the BWC and the CWC. Inter alia, the group should support scientific activities to prevent the misuse of modern science and technology for hostile purposes and to develop and introduce professional codes of conduct in order to foster the norms prohibiting chemical and biological weapons. The ICRC should be asked to assist this group's independent work.

A cooperative undertaking of states parties, scientists and civil society, including related parts of the industry, is required to enable an implementation of both the CWC and the BWC in a way that would exclude any misuse world-wide.

For the CWC, a conference of a 'New Civil Society Initiative' should convene early next year. Its first task should be to respond publicly to the attempts to open the doors for new 'non lethal' chemical weapons in violation of the prohibitions under Article I. An additional task should be to elaborate, consider and approve a programmatic document on the implementation of the CWC, taking into account, inter alia, the revolutionary developments of science and technology, the issues raised in the present paper, and the manifold activities and experiences that should become part and parcel of a modern CWC implementation system, e.g.:

- the research work of dozens of scientific institutes;
- the flow of information and experience gained by state parties in implementation activities — official ones, as well as those of groups of civil society in the relevant countries, such as the Sunshine Project;
- using and developing self-regulation within the chemical industry (Responsible Care);
- further implementation support programmes by the Technical Secretariat; and
- making use of the possibilities provided by the Convention for solving uncertainties or problems of compliance by consultation, cooperation and fact-finding in accordance with Article IX.

The New Civil Society Initiative could pave the way for overcoming lasting grievances and moving the Convention's implementation practice to a higher level: that of becoming a living system that is able to learn and evolve. Such a response to the new challenges facing the CWC could be achieved by exploiting the creative power of civil society inspired by a humanitarian ethic.

It would be of great importance if the preparatory work for the Initiative were to proceed in harmony with preparations for the Second CWC Review Conference. Since the preparation of the Initiative would at any rate be *inclusive* as far as representatives of states parties are concerned, this would at least partly limit the damage of the *exclusive* working habit of the group entrusted with the preparatory work for the Review Conference. An open information policy, starting this year, would be of key importance to overcoming blockages in the OPCW. And to initiate closer contacts with civil society, the CWC National Authorities might consider establishing Advisory Boards that would engage relevant parts of their civil society in promoting full national compliance.

Two issues in particular demand early attention. One is

how best to elaborate guidelines for preventative action against violations of the prohibitions under Article I. Here, clearly, chemical industry, the ICRC and the WHO should be asked to contribute from their experience in preventative actions.

The other is the elaboration of risk analyses as a basis for adapting the CWC verification system to new scientific developments. While the existing Schedules were established in the light of then-known weapons as well as the dual-use chemicals that might be applied in making them, future change to the Schedules should focus on dual-use technologies (chemicals and plant) in regard to the risk they currently pose to the object and purpose of the Convention. Any such change might be difficult to accomplish and, later, to implement, but their discussion should not now be further postponed.

Notes

- 1 This text is a shortened version of the joint presentation by Walter Krutzsch and Adolf von Wagner at the OPCW Academic Forum in The Hague during 18-19 September 2007.
- 2 For example: Donald A Neill, *Riot Control and Incapacitating Chemical Agents under the Chemical Weapons Convention*, Defence R&D Canada, Centre for Operational Research and Analysis, technical memorandum DRDC CORA TM 2007-22, Ottawa, 21 June 2007.
- 3 See: *ILO Administrative Tribunal*: Judgements No.2032, No.2232, and No.2256.
- 4 CWC, Annex on Implementation and Verification (Verification Annex), Part II, paragraph 11.
- 5 Verification Annex, Part II, paragraph 65.
- 6 Fiona Tregonning, "Progress in The Hague : quarterly review no 42", *The CBW Conventions Bulletin* no 60 (June 2003) pp 15-25 ; editorial, "'Non-lethal' weapons, the CWC and the BWC", *The CBW Conventions Bulletin* no 61 (September 2003) pp 1-2 ; Walter Krutzsch, "'Never under any circumstances' : the CWC three years after its First Review Conference", *The CBW Conventions Bulletin* no 68 (June 2005) pp 1 & 6-12.
- 7 Article VIII, paragraph 18.
- 8 Walter Krutzsch and Ralf Trapp, *A Commentary on the Chemical Weapons Convention*, Dordrecht: Martinus Nijhoff, 1994, page 520 (footnote 11).
- 9 John Borrie and Vanessa Martin Randin (eds.), *Alternative Approaches in Multilateral Decision Making, Disarmament as Humanitarian Action*; United Nations Institute for Disarmament Research UNIDIR, Geneva, Switzerland, 2005.
- 10 Kathleen Lawand, "The Convention on the Prohibition of Anti-Personnel Mines (Ottawa Convention)", in Geir Ulfstein, Thilo Marauhn and Andreas Zimmermann (editors), *Making Treaties Work: Human Rights, Environment and Arms Control*, Cambridge University Press, 2007.

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Report from The Hague

*Katie Smallwood**

The 49th and last of the quarterly HSP reviews Progress in The Hague: Developments in the OPCW appeared in Bulletin 67 (March 2005). We now resume this reporting, but in a differently focused manner, aiming to complement rather than duplicate the OPCW's own reporting in its quarterly, Chemical Disarmament.

For this inaugural *Report*, HSP has reviewed what the OPCW, especially its policy organs, has been doing since April 2007. The focus here is on the two regular sessions of the Executive Council that occurred during this period and also on the Council's preparations for the second special conference to review the operations of the Chemical Weapons Convention (CWC). Our next *Report* will cover the November 2007 session of the Conference of the States Parties (CSP) as well as the meeting of the Executive Council (EC) that was held during the session; and it will also review the general functioning of the Organization during 2007.

This year has seen the tenth year of the CWC's implementation as well as the tenth anniversary of the founding of the OPCW, for which a number of events throughout the year were organised both by the Technical Secretariat and by states parties. The OPCW itself has publicized these happenings, but other important events have had less publicity. Perhaps the most noteworthy are Albania's completing the destruction of its chemical-weapons (CW) stockpile and the ongoing preparations for the just-noted Second CWC Review Conference, which is to be held during 7-18 April 2008. The Chemical Weapons Convention now has 182 states parties, Barbados having acceded on 6 April 2007. Congo is very close to depositing its instrument of ratification with the UN Secretary General, so OPCW membership will soon extend to 183 states.

The 49th Session of the Executive Council

EC-49 took place during 26-29 June 2007. It was chaired by Ambassador Romeo Arguelles of the Philippines.

The customary address by the Director-General, Ambassador Rogelio Pfirter, to the Council raised a variety of issues, among them developments in verification, international cooperation and assistance, universality and external relations, administrative and budgetary issues, the tenth anniversary, anti-terrorism, the Scientific Advisory Board (SAB), and the second CWC Review Conference. The Director-General spoke of progress recently made by four African countries in moving towards ratification of the Convention or accession to it, namely Angola, Congo, Guinea-Bissau and Somalia.

Status of implementation of the Convention

Further to a decision of the CSP at its Eleventh Session on sustaining follow-up to the plan of action regarding implementation of Article VII obligations, the Council noted a Note by the Director-General that summarized developments

on this issue. At the end of the reporting period, the number of states parties that had enacted legislation covering all key areas of the Convention and that had informed the Secretariat accordingly, stood at 74; 108 states parties had yet to enact legislation that covers all key areas of the Convention; and 43 of these 108 states parties had enacted legislation that partly implements the Convention. The current facilitator for Article VII issues, Mr Kimmo Laukkanen of Finland, briefed the Council on this subject and stated that efforts were shifting towards focusing work on the qualitative dimension of the Convention's implementation rather than simply on the establishment of National Authorities.

Regarding the status of implementation of Article X, the Council noted a report first introduced at its forty-eighth session that provided information on: submissions under paragraph 4 (73 states parties as of 31 December 2006); the databank; advice to states parties on protection measures; mobilization and coordination of international response mechanisms; and, the Secretariat's ability to deliver assistance.

The Council encouraged the newly appointed facilitator for Article XI issues, Mr Li Hong of China, to hold informal consultations on the issue and to report to the next session of the Council. It deferred consideration of the Director-General's report on the status of implementation of this Article until the next session.

On the subject of the Technical Secretariat's readiness to carry out a challenge inspection, the Council noted the Director-General's Note on the period between July 2006 and May 2007. The report stated that 149 inspectors were designated for challenge inspections, with between 40 and 68 ready at short notice. Activities in training, field exercises, and exercises in procedures and logistics (the last was in May 2007) were outlined. The observer delegation of The Netherlands briefed the Council on the field exercise they were to hold in Delft during 10 – 14 September.

OCPF site selection

The Director-General introduced an interim adjustment to the methodology for selecting Other Chemical Production Facilities (OCPFs) for routine inspection pending a decision by states parties on the third weighting factor — proposals by states parties (the other two weighting factors being equitable geographic distribution and information available to the Secretariat). The adjustment to the current methodology is designed to redress the imbalance whereby state parties with small chemical industries are proportionately more heavily inspected than states parties with larger industries. The

Director-General also hoped to enhance the effectiveness of the OCPF regime by ensuring that the Technical Secretariat received enough information from states parties to improve the focus of inspections, to avoid unnecessary inspection missions, and to achieve greater elasticity in the percentage of repeat inspections. The Director-General stated that these repeat inspections acted as a necessary and highly effective deterrent. During the general debate a number of delegations addressed the subject of OCPF inspections, particularly in the context of the hierarchy of risks implicit in the Convention.

Destruction issues

The Director-General provided an update on destruction as of 1 June 2007 in which he stated that the United States had completed the destruction of over 45 percent of its category 1 chemical weapons, ahead of its intermediate deadline of 31 December 2007. Russia had destroyed 22 percent of its stockpile, the verification of which was established in a manner consistent with previous Secretariat practice. Subsequent thermal treatment of the reaction mass and the mutilated munitions bodies would be subject to Article IV verification. India had destroyed around 80 percent of its Category 1 stockpile. The state party of withheld identity had destroyed 89 percent of its declared stockpile. Libya had yet to begin destruction activities.

On Albania, the Director-General explained that the Technical Secretariat had received regular and consistent information on progress and technical difficulties in their destruction activities. The Director-General noted with regret that Albania had not met its final deadline of 29 April 2007, observing, however, that Albania had placed every effort into meeting its deadline but that certain uncontrollable factors had been in play. The Director-General requested that states parties consider the exceptional nature of the Albanian situation. The Council took a number of actions after considering Albania's situation: *inter alia* it noted the report by the Director-General on the progress made by Albania in destroying its Category 1 and 2 chemical weapons stockpiles; reiterated its concern at the further delays reported; noted that the completion of destruction was imminent, and requested Albania to take measures to meet its obligation without further delay, and to keep the Council informed on its progress; it noted the contributions of international assistance and the importance of planned, coordinated, targeted, and effectively utilised international assistance; it emphasized the exceptional nature of the case and stressed that it should not set a precedent for the future, nor in any other way affect the legally binding obligations of possessor states parties.

Three plans for destruction were submitted to the Executive Council; two from the United States (Newport and Pine Bluff) and one from Russia. All three were deferred to the next session of the Council.

The Director-General submitted a note on the modalities for states parties to report their destruction activities during the extension period after 29 April 2007, which allows the continuation of implementation of the 90-day reporting requirement. The report was noted by the Council.

The Council noted a Secretariat document on the monitoring of the joint Austria-Germany proposal that had been approved at the forty-eighth session of the Executive Council. This concerned the transportation of three declared old chem-

ical weapons (OCWs) that had been found in Austria to an OCW destruction facility in Munster, Germany, for their destruction. Under the proposal, the OCWs would remain under Austria's ownership and control during the entire process.

Facility agreements

Eight facility agreements were deferred to the fiftieth Session of the Council. The following facility agreements or amendments to facility agreements were considered and approved:

- Amendments to the facility agreement with the United Kingdom regarding on-site inspections at the Single Small-Scale Facility.
- A facility arrangement with Italy regarding on-site inspections at the Schedule 2 plant site Archimica S.r.l., located in Isso.
- A facility arrangement with Italy regarding on-site inspections at the Schedule 2 plant site Sandoz Industrial Products S.p.A., located in Rovereto, Trento.
- A facility arrangement with the United Kingdom regarding on-site inspections at the Schedule 2 plant site Fluon Plant – AGC Chemicals Europe, Ltd, located in Thornton Cleveleys.
- Facility arrangement with the UK regarding on-site inspections at the Schedule 2 plant site Albemarle Chemicals (UK) Limited, located at Avonmouth Works, Avonmouth.
- Modifications to a facility agreement with Iran regarding on-site inspections at a Schedule 1 Protective Purposes Facility.

The conversion and verification of CWPFs

The Council noted a restricted document submitted by the Technical Secretariat on the progress made in converting former chemical weapons production facilities (CWPFs) for purposes not prohibited under the Convention. The Council deferred consideration of a national paper submitted by Russia on the conversion of the former VX-type substance production and filling facility at OJSC "Khimprom".

Technical issues

One list of new validated data for inclusion into the OPCW Central Analytical Database (OCAD) of mass-spectrometry data was considered and approved. The other three lists, on new lists of validated data, mass-spectrometry and gas-chromatography data for analytical derivatives of scheduled chemicals respectively were deferred to the next Session.

The Council considered and approved revisions proposed to the specifications for three items of approved inspection equipment, namely, the sample-collection kit, the GC-MS, and the GC-MS sample-preparation kit.

All issues regarding the Scientific Advisory Board were deferred to the next session of the Council.

Financial issues

The Director General presented his draft budget for 2008, which would be under preliminary discussion during the intersessional period in preparation for its adoption at the Twelfth Session of the CSP. This consolidating budget presented at the level of EU75.0 million, reflects a zero nominal growth over the budget approved for 2007 (this was the third yearly budget in a row reflecting a zero nominal

growth). The draft funds 523 fixed-term posts, resources allocated to Chapter One represent 50.21 percent of the total budget, as against 50.04 percent for 2007, while resources allocated to Chapter Two represent 49.79 percent of the total 2008 budget, as against 49.96 percent for 2007. The draft provided that budgetary allocations for the number of inspections under Article VI would be kept at the same level as for 2007; additionally they would increase the budget for the verification of destruction by 19 percent (EU680,000). The draft allowances for the International Cooperation and Assistance Programme reflected an increase of EU200,000, or 3.6 percent, over the amount approved for 2007. The Council agreed to begin consultations on this issue, facilitated by Diana Gossens of the Netherlands and Dong-gy Lee of South Korea.

The 50th Session of the Executive Council

EC-50 was held during 25-28 September 2007, and was again chaired by Ambassador Romeo Arguelles of the Philippines.

During the intersessional period, the OPCW had resumed its discussions on terrorism within the Open-Ended Working Group on Terrorism, which, under the Chairmanship of Annie Mari of France, will set much of its work in the framework of assistance and protection and through the Secretariat's Office of Special Projects; and coordination also continued with the UNSCR 1540 Committee. The Director General stated that the OPCW is not an anti-terrorism agency, but that it would not shy away from its responsibility to support anti-terrorism efforts.

During the general debate, 17 states parties took the floor, and specific issues raised are noted below. One Member State addressed the general functioning of the Council and raised a concern about the practice of continuously deferring certain items on the agenda, sometimes without even allowing the chance for substantive discussion.

Status of implementation of the Convention

Addressing universality, the Director-General stated that Congo was very close to depositing its instrument of ratification. Technical assistance visits were being arranged with Angola and Guinea-Bissau. In Iraq, Parliament had also passed a bill on accession to the Convention and had requested assistance from the Secretariat. Progress had also been made with Lebanon's preparations for joining the Convention.

The Director-General presented to the Council the current status of the implementation of Article VII and stressed the need for more to be done in this area. The Council noted the Director-General's report on the implementation of Article VII and welcomed progress made whilst noting the need for further work. During the intersessional period there had been three consultations, under the facilitation of Kimmo Laukkanen, that had concluded that further efforts were needed in the area, especially for the benefit of the African states about to join the Convention.

The Director-General briefed the Council on the progress of the 18-month start up phase for sampling and analysis under Article VI. So far, nine inspections have made use of the method, each in a different State Party and each completed successfully within the time-frame stipulated by the Convention.

A number of states parties including members of NAM

called for further attention for the full implementation of Article XI and welcomed the start of consultations under the facilitation of Li Hong of China.

Destruction

Approximately 34 percent of all Category 1 chemical weapons had been destroyed as at 31 August 2007. By possessor state this amounted to: 93 percent of the stockpile held by the state party of withheld identity; 100 percent of Albania's stockpile; 86 percent of India's Category 1 weapons; 23 percent of Russian Category 1 weapons; 45 percent of the United States' Category 1 chemical weapons; and Libya was still preparing its destruction plan.

The Director-General's opening remarks focused on the completion of Albania's destruction operations on 11 July 2007, just over two months past the deadline of 29 April 2007. He commended Albania's achievement as did states parties during the general debate, especially in light of the technical difficulties that Albania had faced. He also acknowledged the constructive role played by the Council, which had demonstrated the OPCW's ability to react flexibly but firmly to extraordinary circumstances. The Director-General paid tribute to the contributions made by the United States under the Cooperative Threat Reduction Program, and thanked Greece, Italy and Switzerland for their support to Albania. As a result of the approach adopted for Albania, the Council reaffirmed that states parties must destroy their chemical weapon within the extended deadlines. It also noted the information Albania had provided to the OPCW on the completion of their destruction.

The three plans for destruction on the agenda were again deferred for consideration at the next session.

Six periodical updates from states parties on the progress of their destruction activities were considered and noted by the Council.

The Council also noted the deferred 2006 Verification Implementation Report (VIR) along with the comments and views received on it.

OCPF site selection

The Director-General elaborated on the comments he made at the previous session of the Council; he noted that no new criteria for selection had been introduced but that the criteria had been adjusted to ensure the adequate focus of inspections. There was consensus from the Council for supporting the adjustment the Director-General had introduced on this subject, for implementing the methodology as soon as possible, and for resuming consultations as a number of issues remained outstanding. On this matter the Council took the following actions: it took note of the Director-General's interim modification to the methodology; it acknowledged that it would come into effect on 1 January 2008; it requested the early resumption of consultations; and asked the Director-General to report on the performance of the methodology at the end of the first year of its implementation.

The conversion and verification of CWPFs

Two national papers on conversion were noted by the Council, the first a Russian paper on measures for the conversion of a former munitions and production facility at OJSC "Khimprom", and the other a Libyan paper on conversion activities at the

former production plant at the two Rabta Pharmaceutical Factories.

Facility agreements

Four of the eight facility agreements that were deferred at the previous session of the Council were again deferred. The other four facility agreements were considered and approved as follows:

- Facility arrangement with the UK regarding on-site inspections at the converted CWPF at Randle Island Landfill Site (formerly ICI Randle), located at Astmore.
- Facility arrangement with the UK regarding on-site inspections at the converted CWPF at Valley Site (formerly ICI Valley), located at Rhydymwyn.
- Facility arrangement with the UK regarding on-site inspections at the converted CWPF at CRP Portreath (formerly Chemical Defence Establishment, Nancekuke), located near Redruth.
- Facility arrangement with the US regarding on-site inspections at the schedule 2 plant site Ciba Speciality Chemicals Corporation-McIntosh-A, Alabama.

OPCW Office in Africa

The Council welcomed the Director-General's initiative on a new programme to strengthen cooperation with Africa, and noted the need for the appointment of a new facilitator and for the Open-Ended Working Group to resume its activities.

Administrative and financial matters

Negotiations on the Programme and Budget during the inter-sessional period took place under the facilitation of Diana Gossens of the Netherlands and Dong-gy Lee of South Korea. The item was adopted on the understanding that voluntary funds would be used to augment programmes under International Cooperation and Assistance.

The Council noted the OPCW's medium term plan for 2008-10, and approved a proposal from Guatemala on a multi-year payment plan to regularise the payments of its outstanding contributions.

The Director-General, in his opening remarks, highlighted the need for the OPCW to stay competitive in the job market and be able to recruit staff of a high calibre. Aligning staff rules with the UN system would help in this respect. The Council considered the Director-General's Notes on the alignment of staff regulations and travel entitlements with those used in the UN, and decided to consider the staff regulation at the Twelfth Session of the CSP and introduce the travel entitlement as a temporary measure.

Scientific Advisory Board (SAB)

The reports of the ninth and the tenth sessions of the SAB, which has in annex the SAB's preliminary report on the Second Review Conference, had been deferred at the forty-ninth session of the Council. It was noted at this session, as were the two responses from the Director-General.

Preparations for the Second Review Conference

As for the First Review held in April 2003, the preparations for the Second Review Conference are taking place within an Open-Ended Working Group (OEWG), this time under

the chairmanship of Ambassador Lyn Parker of the United Kingdom. The preparations for the Second Review Conference began earlier compared to the First Review Conference and have proceeded (so far) at a more accelerated pace; the Working Group has already met thirteen times and contributions from the SAB, the chemical industry, non-governmental organisations, and the Director-General have been made at a much earlier stage than during the First Review process.

Discussions within the OEWG

The Working Group has had a number of substantive discussions, with thematic discussions following the outline of the Convention text and the submission of a number of non-papers by states parties. The Technical Secretariat has also provided, upon request, a number of background papers to the OEWG. In particular, due to be submitted is a comprehensive paper reviewing developments since the First Review Conference. This paper will also outline the Director-General's views on the Second Review Conference and topics to be addressed within its proceedings.

Some trends in the substance of the discussions include: a general agreement on the need for cooperation with other international regimes, particularly in the context of terrorism, assistance and protection, and implementation; consensus on the need for concerted initiatives at different levels to achieve universality; differing views on the level of importance of scientific and technical developments in chemistry and the chemical industry, but agreement on the need to stay aware of these developments; a number of States Parties have pushed for the timely and complete submission of declarations under Article VI and continued improvements in OCPF site selection methodology; agreement on the need for sustained momentum in improving national implementation and a range of views on how this should be achieved; differing opinions have been put forward on the role of challenge inspections and how they should be used; a consensus has emerged on the relevance of provisions for assistance and protection and the need for more to be done; and further attention from a number of States Parties has been given to the full implementation of Article XI and how this could proceed.

At its next meeting, in November, the Working Group is due to discuss the manner in which the General Purpose Criterion has been incorporated into national implementation. In this regard, the Director-General's Legal Advisor will be offering thoughts on his experience on the matter.

The Working Group is about to enter its drafting phase which is to be based on the views expressed over the past meetings and on the non-papers submitted by states parties. During this process the Group will also hear contributions from other bodies as described below.

The Scientific Advisory Board (SAB)

The SAB's mandate is to advise the Director-General. However, in the context of the Review Conference, the Board's findings are being shared by the Director-General with the Open-Ended Working Group. In reaching its conclusions the SAB has strongly benefited from a conference organised by the International Union for Pure and Applied Chemistry (IUPAC) on *Impacts of Advances in Science*

and Technology on the Chemical Weapons Convention held in Zagreb during 22-25 April 2007. The preliminary report of the SAB to the Second CWC Review Conference addresses a number of issues including: the convergence of chemistry and biology; accelerated chemical discovery; nanotechnology; production technology; the schedules of chemicals; sampling and analysis; biomedical sampling; destruction; protection against chemical weapons; assistance and international cooperation; and, education and outreach. During October, two meetings of the Working Group were dedicated to the discussion of this preliminary report and on the shape of further action to be taken with a view to translating some of the scientific conclusions into policy proposals. The SAB's preliminary report is due to be finalised at the SAB's next annual meeting, early in 2008.

The chemical industry

A one-day meeting with the chemical industry took place on 11 June 2007 with the participation of 22 industry associations. The meeting included presentations from Technical Secretariat staff on industry issues and interventions made on behalf of a number of chemical industry associations. The chemical industry addressed *inter alia*: discrepancies in aggregate data and the effects of national thresholds for mixtures; cooperation with other agencies dealing with chemicals and regulatory regimes; the publication of CAS numbers; the relevance of small-scale and adaptable laboratories; the conduct of inspections; the need for the CWC to stay clear of becoming another chemical control instrument; relating industry to Article XI; the reduction of paperwork by coordinating declarations; and the targeting of industry inspections to relevant complex chemicals.

External contributions

In response to the call for papers issued by the OPCW on 22 November 2006, a number of submissions from non-governmental organisations, academics and other international organisations have been received and distributed to all member states.

A meeting with NGOs is scheduled to be held at OPCW headquarters on 19 November 2007 to receive and discuss their contributions for the Second Review Conference. This practice will be a departure from precedent set at the time of the First Review Conference, where such contributions were only made at the time and in the margins of the Review Conference itself. It is anticipated that having contributions from CWC stakeholders at an earlier stage will be beneficial to states parties in setting their policies for the Review Conference.

Future work

The OEWG will soon begin to intensify its drafting efforts and draw again from the input of the SAB in its finalized report. The meetings of the Working Group are soon to increase in frequency and the negotiations for substantive report text is due to begin early in the new year. The extent of NGO participation at the Review Conference itself is still to be decided.

**Katie Smallwood is a University of Sussex doctoral candidate and a member of the Harvard Sussex Program.*

Forthcoming events

19 November 2007

The Hague, Netherlands
NGO Event: Meeting of NGOs with the OPCW Open Ended Working Group on Preparations for the Second CWC Review Conference
By invitation only

8-9 December 2007

Geneva, Switzerland
27th Workshop of the Pugwash Study Group on Implementation of the CBW Conventions, *Moving Forward after the Sixth BWC Review Conference*
By invitation only

10-14 December 2007

Geneva, Switzerland
2007 Meeting of BWC States Parties
Details: www.unog.ch/bwc

4-7 March 2008

OPCW Headquarters, The Hague
52nd Session of the OPCW Executive Council
Details: www.opcw.org

5-6 April 2008

Noordwijk, the Netherlands
28th Workshop of the Pugwash Study Group on Implementation of the CBW Conventions. *The Second CWC Review Conference and After*
By invitation only

7-18 April 2008

OPCW Headquarters, The Hague
2nd Special Session of the Conference of the States Parties to Review the Operation of the CWC
Details: www.opcw.org

24-25 June 2008

OPCW Headquarters, The Hague
53rd Session of the OPCW Executive Council
Details: www.opcw.org

Richard John Dumaresq Gee AM — 16.12.1944 – 29.1.2007

We mourn the passing of John Gee, who died on 29 January 2007. During a wonderfully distinguished professional career, John made a major contribution to supporting the objectives of arms control and disarmament, including a pivotal role in the negotiation of the Chemical Weapons Convention and later in building up the Organization for the Prohibition of Chemical Weapons (OPCW). Throughout this work he was a valued friend of the Harvard Sussex Program.

John commenced his career with the Department of Foreign Affairs in Canberra in 1971, following the award of a Tasmanian Rhodes Scholarship and an Oxford University doctorate in chemistry. After several early overseas postings, including Moscow, in the mid-1980s John was appointed the chemical and biological disarmament desk officer, where he made a substantial contribution to the negotiation of the Chemical Weapons Convention. At that time he was also instrumental in the establishment of the Australia Group, and was responsible as well for a range of nuclear arms control policy issues.

In May 1991, the Secretary-General of the United Nations appointed John to the UN Special Commission (UNSCOM) established under Security Council Resolution 687 to oversee the elimination of Iraq's weapons of mass destruction. His work was central to the establishment and early operational phase of UNSCOM.

In April 1993, John was appointed Director of the Verification Division of the OPCW Provisional Technical Secretariat, which was charged with developing and implementing institutions and procedures necessary to verify compliance with the Chemical Weapons Convention. The Preparatory Commission was a great challenge for John as it involved the establishment from scratch of a completely new international organization in which the verification machinery tasked to him had to be fully operational upon entry into force of the CWC. This was achieved not least through his genial and strong leadership of a powerhouse team of uniquely dedicated people assembled into the Verification Division. During the period of the Preparatory Commission, John also visited many capitals of CWC signatory states to conduct high-level negotiations, which included sensitive discussions in both Washington and Moscow with respect to the various obligations that the USA and Russia had (as the two major possessors of CW-stockpiles) under the CWC to destroy their chemical weapons stockpiles within a set timeframe and under strict verification by the OPCW. In Moscow, in addition to his other skills, John's fluency in the Russian language was an important factor in the success of these complex negotiations.

After the Preparatory Commission concluded its work, John was appointed OPCW Deputy Director-General on 23 May 1997, a position which he held until March 2003. His lasting achievement was his contribution in overseeing the growth of the OPCW into an effective multilateral disarmament agency employing 500 staff including more than 200 inspectors. He acted as Director-General in the

absence of the actual Director-General on many occasions, including during that critical period following the dismissal of the original Director-General. Indeed, John was seen as a very steady influence to the OPCW Member States as well as the staff of the OPCW Technical Secretariat at a most disruptive time so early in the life of the new international organization.

When he returned to Canberra in March 2003, John worked as a consultant WMD analyst in the Office of National Assessments, which included an attachment to Iraq as a special adviser to the US-led Iraq Survey Group to assist in finalizing the assessment of the situation with respect to Iraq's former WMD programmes. However, John resigned from the Iraq Survey Group in 2004 because he thought that the search for weapons was corrupt, there being none to find. He subsequently claimed that the Australian Government had suppressed his resignation letter. In that letter he had detailed interference by the Bush Administration, including the CIA, in reports about the hunt for weapons so as to prevent the conclusion being reached by the Iraq Survey Group that Iraq had not possessed such weapons at the time of the invasion in 2003.

Through his diplomatic skills and his strong sense of dedication (including his willingness to work very long hours and under great pressure), John's efforts greatly enhanced Australia's reputation in the international disarmament and arms control community, and more importantly, from an international security perspective, contributed substantially to reducing the risk of the use of WMD, both in Australia's immediate region and globally.

On 26 January 2007, John was awarded an AM, becoming a Member of the Order of Australia "for service to international relations, notably disarmament and the elimination of weapons of mass destruction". John died from a brain tumour three days later. In a funerary tribute, his former Russian colleague at the OPCW, Mikhail Berdennikov, stated this of John's role: "Today almost one third of the world's chemical weapons and two-thirds of its production capacity have been destroyed. Much of the credit for these truly historic accomplishments, without exaggeration, goes to John Gee. Few can claim such a legacy." And in a letter to the Gee family, Prime Minister John Howard said "John made a huge contribution – as a diplomat, adviser and international public servant – to the cause of disarmament and arms control".

On hearing of John's AM award, former Australian foreign minister Gareth Evans wrote a congratulatory message to John telling him that he had "made a magnificent contribution to the cause of a saner and safer world". And subsequently, in presenting the inaugural John Gee Memorial Lecture in Canberra, Gareth Evans referred to John as "a man of calm, patient, quiet, reserve; someone of enormous strength of character, commitment and conviction, but who achieved what he did throughout his wonderfully distinguished professional career by intelligent, well-informed, good-humoured, patient, subdued but persuasive argument."

What follows is taken from issues 76 and 77 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 HSP Sussex.

4 February North Korea has grown “a vast biochemical weapons arsenal in secrecy”, according to a report in the US monthly *Popular Mechanics*. The journal states: “[A]ccording to intelligence reports, something precious to the North Korean regime may be under cultivation in Chongju. Beyond the shacks stands an installation suspected of being a component in North Korea’s bioweapons research and development program. The effort is steeped in a level of secrecy possible only in a totalitarian state, but it is thought to encompass at least 20 facilities throughout the country. Another 12 plants churn out chemical weapons... The weaponry is thought to have the potential to decimate North Korea’s southern neighbor and the 28,000 US troops stationed there, and to disrupt the regional economy.” The report quotes Daniel Pinkston, Director of the East Asia Nonproliferation Program at the Center for Nonproliferation Studies, Monterey, as saying most assessments of North Korea’s WMD capabilities point to a chemical-weapons stockpile of some 5000 tons of agents, including large amounts of sarin, mustard gas and hydrogen cyanide, which would make it one of the largest chemical arsenals in the world. [See also 13 May 06 and 11 Jan]

5 February US Senator Richard Lugar says he will have to ask Congress to add \$100 million to the \$144.5 million President Bush has requested for next year’s budget to deal with agents of anthrax, plague and other diseases stored in Kyrgyzstan, Armenia, Tajikistan, Moldova and Turkmenistan. Lugar says: “It is in US national security interests to improve the security around these deadly diseases, but it is also in our interests to assist these governments in becoming a more effective partner in stopping the spread of pandemics, detecting their sources and identifying a response”.

5 February In the USA, the International Security Advisory Board, a federal committee established to advise the Department of State, releases *Building International Coalitions to Combat Weapons of Mass Destruction Terrorism*. The report, which was compiled following a request by the Department last March, includes ten specific recommendations to improve the Department’s and government’s efforts to build international coalitions to combat weapons of mass destruction falling into the hands of terrorists.

5 February In Tennessee, a man faces more than seven years imprisonment after pleading guilty to possessing, amongst other things, 5.68 grams of ricin. William Matthews was arrested after authorities, acting on a tip-off from his estranged wife, found the toxin in a sealed baby-food jar, together with two pipe bombs, five firearms silencers, three blasting caps and materials for making explosives [see 20 Jul 06].

5 February In the USA, PBS television broadcasts *The Living Weapon*, a documentary that discusses the history, politics and use of biological weapons. Those appearing on the programme include Matthew Meselson, Harvard Sussex Program; Jeanne Guillemin, Massachusetts Institute of

Technology’; Brian Balmer, University College London; Raymond Zilinskas, Center for Nonproliferation Studies; and Martin Furmanski, Center for Arms Control and Nonproliferation.

6 February In Kansas, a ceremony takes place at the McConnell Air Force Base to mark the inauguration by the US Air Force of a new biological weapon detection system that uses DNA analysis to identify fourteen biological agents, including anthrax and plague.

7 February The US Department of Homeland Security (DHS) Office of Inspector General releases *DHS’ Management of BioWatch Program*, which addresses a number of problems with the Biowatch programme [see also 23 Mar 05] that could have undermined its ability to detect biological agents. The report states: “DHS identified areas for improvement in the operation of the program but did not follow up on these areas... DHS did not enforce the required submission of monthly and quarterly status reports ... which would have enabled it to properly monitor its federal partners.” The report states that action has been taken to address the issues and that all recommendations are now “resolved and closed”.

7 February In Guangzhou, China, over the past two weeks a team of around thirty Japanese officials chemical-weapons experts, and private-sector experts have recovered 461 chemical munitions near the Zhujiang river, 97 of which were abandoned by the Japanese Imperial Army, according to a spokesman for the Japanese Cabinet Office. Yoshinobu Abe says the remaining 364 shells are not Japanese and will be handed over to China. The operation was conducted with the “full cooperation of the Chinese government”, says Abe. [See also 25 Sep 06]

7 February US President Bush issues a directive that sets out how federal medical personnel should respond to a nuclear, radiological, biological or chemical attack. It concludes that authorities should focus on threats that can be dealt with by means of medical counter-measures. The directive states there will be particular focus on research, development and procurement on projects that: “Target threats that have potential for catastrophic impact on our public health and are subject to medical mitigation; yield a rapidly deployable and flexible capacity to address both existing and evolving threats; are part of an integrated [weapon of mass destruction] consequence management approach informed by current risk assessments of threats, vulnerabilities and capabilities; and include the development of effective, feasible and pragmatic concepts of operation for responding to and recovering from an attack.”

8 February Israel is planning to build a large bomb shelter at the new underground railway station currently being constructed in Jerusalem, as a defence against chemical and nuclear weapons, according to a report in the daily *Ma’ariv*. The station is due to be completed by 2011.

8 February In the UK House of Lords, the government is asked several BW-related questions by Lord Astor of Hever. On processes that are in place for monitoring disease outbreaks and the use of biological weapons on food and animals in the UK, and on how the UK is supporting similar capacity-building with other BWC parties, Minister of State for the Department for Environment, Food and Rural Affairs (DEFRA) Lord Rooker says: "To prevent the introduction of a biological disease, the Animal Health Act 1981 and other legislation provide wide-ranging powers to implement and enforce a variety of robust control measures. These include the imposition of quarantine and movement controls on animals and premises, which provide an effective means of protecting the public and other animals [sic] while investigations are carried out. DEFRA also commissions scanning surveillance to identify new and emerging diseases. There is an established network of experts who meet regularly to share information on newly identified conditions. Where necessary, work is commissioned to investigate further, prepare risk assessments and consider possible public health implications. The Food Standards Agency (FSA) has developed 'indices of suspicion' to help identify food contamination threats at an early stage. These include maintaining close contact with the Health Protection Agency, which will alert us to any information from its routine surveillance of human illness which might indicate a biological threat involving food. Similar arrangements exist through the health services in the devolved Administrations. The FSA also has an agreement with the State Veterinary Service and the Veterinary Laboratories Agency to alert the FSA immediately on finding any on-farm incident that may have implications for food safety and public health. States party to the Biological and Toxin Weapons Convention agreed at their sixth review conference in 2006 [see 8 Dec 06] to address the issue of capacity-building, including in the field of disease surveillance, as a part of their inter-session work programme between 2007 and 2010."

Responding to another question from Lord Astor, as to whether the government has undertaken an assessment of any potential gaps in the final declaration of the Sixth BWC Review Conference and the possibility that any such gaps might limit the effectiveness of its stated intentions, Parliamentary Under-Secretary of State, Foreign and Commonwealth Office Lord Triesman says: "The Government believe that the final declaration and the agreed decisions and recommendations of the sixth review conference were all very positive steps which will help strengthen the Biological and Toxin Weapons Convention and met the Government's key objectives for the conference. We would have liked the conference to agree an action plan to pursue national implementation of the convention, but in the event this was not possible. Nevertheless the issue will be addressed this year in the annual meetings of states parties." Asked what assessment the government has made of the suggested inclusion within the BWC of provisions for the verification and monitoring of the compliance of signatories, Triesman says: "Negotiations on the draft text of the verification protocol for the convention failed to reach a consensus conclusion in 2001 and have not been resurrected. The UK and EU remain ready to support a verification mechanism, but at present there are no signs that the international climate has changed enough to permit universal agreement on verification."

Responding to a further question from Lord Astor as to which working arrangements are in place to allow the Health Protection Agency and British biological protection facilities to interface with the United Nations and other intergovernmental organisations in accordance with Article VII of the BWC and paragraph 34 of the draft Final Document of the Sixth Review

Conference; and whether NATO will have a role in any such circumstances, Parliamentary Under-Secretary of State, Ministry of Defence Lord Drayson replies: "Any such interface between UK facilities, the United Nations and other organisations would depend on the circumstances of the time, including decisions taken by the relevant authorities. NATO is not a party to the convention, and its potential role will also depend on decisions by its members."

8 February In London, the Royal Institute of International Affairs releases *The CBRN System: Assessing the Threat of Terrorist Use of Chemical, Biological, Radiological and Nuclear Weapons in the United Kingdom*. The report, by Paul Cornish, head of the international security programme, states: "A good deal of the effect of a terrorist attack in the United Kingdom using CBRN could prove to be self-inflicted by the victims of the attack – the general public, business leaders, and government officials – or magnified by alarmist media... The United Kingdom might prove to be rather brittle in the face of a CBRN attack [...] and it seems reasonable to assume that terrorists might hope for such brittleness in order to expand the effect of their attack... The desired 'effect' might be no more than some hundreds or thousands of deaths or the destruction of a few buildings, all of which would be magnified by terrorists' 'propaganda of the deed'."

8 February Acting Inspector of the US Department of Defense (DoD) Thomas Gimble submits to Congress a report which criticizes the DoD's findings that former Iraqi President Saddam Hussein had links with al-Qaeda. The report concludes that, in reassessing data gathered by the intelligence community, a group led by former Defense Under-Secretary Douglas Feith had "developed, produced and then disseminated alternative intelligence assessments on the Iraq and al-Qaeda relationship, which included some conclusions that were inconsistent with the consensus of the intelligence community, to senior decision-makers".

9 February The Russian Federal Veterinary and Phytosanitary Inspectorate (Rossel'khoznadzor) and the US Defence Threat Reduction Agency (DTRA) have agreed to expand cooperation in the field of biosecurity, so the AMI-TASS medical information agency reports. One of the main points of focus will be on increasing the physical protection of facilities working with pathogenic microorganisms.

10 February In München, Germany, during an international conference attended by a number of defence ministers, Russian President Vladimir Putin accuses the US of pursuing a foreign policy which encourages the proliferation of weapons of mass destruction. Putin says: "Today we are witnessing an almost uncontained hyper use of force – military force – in international relations, force that is plunging the world into an abyss of permanent conflicts... One state and, of course, first and foremost the United States, has overstepped its national borders in every way... The force's dominance inevitably encourages a number of countries to acquire weapons of mass destruction. Moreover, significantly new threats – though they were also well-known before – have appeared, and today threats such as terrorism have taken on a global character."

13 February In Utah, the tenth federal circuit court of appeals overturns a \$1.5 million judgment awarded in favour of a whistle-blower who was formerly employed at Dugway Proving Ground, on the basis that only the executive branch of government can control security clearances and that the

claimant had failed to prove any hostile discrimination. Five years previously, a Labor Department administrative tribunal found that David W Hall suffered discrimination through, *inter alia*, having his security status revoked and suffering at least nine forms of “hostile treatment” after complaining about environmental violations at the facility [see 8 Aug 02]. The appeals court chose instead to reaffirm a subsequent finding by the Labor Department Administrative Review Board which found that Hall had not proven he had suffered discrimination because his claims would require impermissible scrutiny of the Army’s revocation of his security clearance. Hall worked at Dugway as a chemist from 1987 to 1997, when he resigned and sued the Department of the Army, alleging he had been forced out of his job after repeatedly raising concerns regarding hazardous waste, hazardous substances and chemical warfare agents.

13-15 February In San Francisco, the ASEAN Regional Forum conducts a workshop on the implementation of UN Security Council resolution 1540 [see 28 Apr 04]. The aim of the workshop, which is jointly organized by Canada, Singapore and the USA, is to identify how members of the Forum can develop their national implementation plans in such a way as to satisfy the requirements of the resolution.

14 February In Madrid, a parliamentary committee considers, but rejects, a proposal to debate whether Spanish planes dropped phosgene, chloropicrin and mustard gas over towns and villages in Morocco during the 1920s war for control of the Rif mountains [see 26 Jul 05]. The Esquerra Republicana party had proposed a motion calling on Spain to recognise the attacks and pay compensation for damages during the war with Morocco. In an interview with Reuters news agency, Joan Tarda, a member of Esquerra Republicana, says: “The simple fact that it has been discussed in parliament for the first time is already a victory.” Tarda says his party will now aim to attach the motion as an amendment to law already being discussed in parliament.

15 February The US Congressional Research Service releases *The National Biodefense Analysis and Countermeasures Center: Issues for Congress*. The report outlines the organizational structure of the National Biodefense Analysis and Countermeasures Center (NBACC), describes its mission, and sets out the funding that the Department of Homeland Security has received for construction of the facility. It also discusses select policy issues, such as funding for NBACC facility construction, oversight of NBACC research, and the possibility that federal efforts may be duplicated by NBACC and other agencies.

15-19 February In San Francisco, the annual meeting [see 18 Feb 06] of the American Academy for the Advancement of Science (AAAS) takes place. Among those making presentations are Director of Kansas State University National Agricultural Biosecurity Center David Franz, on the subject of *Biosecurity: Protecting Our Livestock Industry*, and Paul Keim, a member of the National Science Advisory Board for Biosecurity (NSABB) [see 4 Mar 04 and Dec 06] on *Criteria and Considerations for Identifying Dual-Use Research of Concern*.

16 February In the Philippines, the US Embassy announces that within a week the USA plans to deliver around \$150,000 worth of chemical detection-equipment, decontamination gear and medical tools to the Philippine fire brigades.

19 February In the USA, the *Deseret Morning News* reports, that under a Freedom of Information Act request, it has obtained a US Army Audit Agency report issued five months previously, which warns that poor project management could prevent the USA from meeting its revised 2023 chemdemil target. The report states that “contractors had little incentive to – and weren’t sufficiently penalized for failing to – prevent or minimize cost and schedule growth”. It urges better oversight of contractors and improved payment methods, including possibly a flat fee for each weapon destroyed.

20 February In Iraq, north of Baghdad, a bomb destroys a lorry carrying chlorine, killing five people and leaving 139 others in need of medical attention. According to Reuters news agency the lorry exploded near a restaurant at a rest stop on the main highway in Taji, 20 km (12 miles) north of Baghdad.

The next day, suspected Sunni insurgents blow up a car containing cylinders of chlorine on a road to Baghdad airport, killing two people and leaving many others suffering respiratory symptoms.

Two days later, the UN Security Council issues the following press statement on the attacks: “The members of the Security Council are following with concern the situation in Iraq, and condemn all terrorist attacks, including the recent chlorine gas and other bombings in and around Baghdad, which have resulted in the death and injury of many innocent Iraqi civilians and others... The members of the Security Council reaffirm the need to combat terrorism in all its forms and manifestations and by all means, in accordance with international law.

Three days later, the London *Daily Telegraph* quotes US military spokesman Christopher Garver as saying: “It’s something that as far as we can tell is relatively new, but it’s not the first time they’ve used the concept of adding additional items to explosives to make it more lethal and injure more civilians and kill more people... In terms of it being a trend, we’ll obviously keep an eye on that. We’re going to be on the lookout for chlorine tanks in the future.”

20-21 February In New York, the UNMOVIC College of Commissioners convenes for its twenty-fifth [see 20-21 Nov 06] regular session. As on previous occasions, observers from the OPCW and the IAEA are also present.

22 February In Japan, police have arrested three employees of the Yamaha Motor Company on suspicion of attempting to export to China, without government approval, a remote-controlled helicopter that could be used to disperse chemical agents, so reports Deutsche Press-Agentur. Yamaha is reported to have previously acknowledged shipping nine of the helicopters to Beijing, but has denied violating Japanese export regulations, saying that the helicopters were intended solely for agricultural use.

22 February The US Government Accountability Office transmits to Congress *Biological Research Laboratories: Issues Associated with the Expansion of Laboratories Funded by the National Institute of Allergy and Infectious Diseases*. The purpose of the report is to respond to a request made a year previously by the House Committee on Science and Technology for information relating to the construction of National Biocontainment Laboratories and Regional Biocontainment Laboratories the funding of which were provided by the National Institute of Allergy and Infectious Diseases in fiscal years 2003 and 2005. It provides background information on requirements and guidance for the laboratories, funding award factors, communication with the public, and research agendas. It also sets out lists of infectious agents

that could potentially be used in bioterrorism, as well as examples of regulations and guidelines applicable to operations and security procedures concerning the laboratories.

23 February At UN headquarters, Secretary-General Ban Ki-moon transmits to the Security Council the twenty-eighth [see 22 Nov 06] quarterly report on the activities of UNMOVIC, for the period 1 December 2006 to 28 February 2007. The report includes an annex that provides details resulting from a review by a panel of external technical experts on the missile provisions of the monitoring and verification plan following the US-led invasion Iraq.

23 February In New York, the United Nations Security Council convenes to discuss the non-proliferation of weapons of mass destruction. Following the meeting, President of the Security Council and UN Permanent Representative of Slovakia Peter Burian states: "The Security Council acknowledges with appreciation the activities of international organizations with expertise in the field of non-proliferation of nuclear, chemical and biological weapons and their means of delivery covered by resolution 1540 [see 28 Apr 04], in particular the International Atomic Energy Agency and the Organization for the Prohibition of Chemical Weapons, especially in providing assistance in the implementation of that resolution, without altering their mandates and responsibilities... The Security Council takes note of the relevant activities of the World Customs Organization (WCO) and the relevant international arrangements. The Security Council also notes with appreciation the seminars and workshops that have been held with countries, regional and subregional organizations, in order to promote experience-sharing and the full implementation of resolution 1540 (2004)... The Security Council is mindful of the need further to explore with international, regional and sub-regional organizations experience-sharing and lessons learned in the areas covered by resolution 1540 (2004), and the availability of programmes which might facilitate implementation of the resolution... The Security Council reiterates its determination to enhance its cooperation with international organizations and to develop preferred mechanisms for cooperating with those organizations on a case-by-case basis..."

25 February In the UK, BBC 2 television broadcasts a documentary in which Norman Baker, a member of parliament, says that he has conducted his own investigations, and is convinced that Dr David Kelly did not commit suicide, rather, his life was "deliberately taken by others" [see 19 May 06]. In 'The Conspiracy Files', Baker also tells how he has obtained letters suggesting the coroner had doubts about the 2003 Hutton Inquiry's ability to establish the cause of death [see 28 Jan 04]. He also says that toxicology reports suggested there were not enough painkillers in Dr Kelly's system to cause his death, and the method he had apparently chosen to commit suicide was not a recognised or effective one. "I'm satisfied it was not suicide. And after that you're left with the conclusion that his life was deliberately taken by others", says Baker. He says he has obtained letters, dating from 2003, between Coroner Nicholas Gardiner and the Lord Chancellor's office, which suggest the coroner was not happy with the Hutton Inquiry's ability to establish the cause of death. Baker obtained the letters, which have not previously been publicly revealed, from Minister for Constitutional Affairs Harriet Harman. On 6 August 2003 Gardiner wrote the following to the Lord Chancellor: "As you will know, a coroner has power to compel the attendance of witnesses. There are no such powers attached to a public inquiry." Gardiner also requested to be allowed to continue with the inquest because "the preliminary

cause of death given at the opening of the inquest no longer represents the final view of the pathologist, and evidence from him would need to be given to correct and update the evidence already received". A week previously, speaking on BBC Radio 5 Live, Baker said he was not ready to reveal all the evidence he has thus far unearthed, but would consider passing a file to the police in due course. The documentary explores a number of alternatives as to how Dr Kelly might have met his death. A former colleague of Dr Kelly, former UN weapons inspector Richard Spertzel, concludes as follows: "I believe that David was probably a victim of Iraqi Intelligence Service because of long standing enmity of Iraq towards David... A number of us were on an Iraqi hit list. I was number three, and my understanding, David was only a couple behind that... And none of the people on that hit list were welcome in Iraq. Immediately after David's death, a number of the other inspectors and I exchanged emails saying, 'Be careful.'" [See also 2 Nov 06]

26 February-2 March In Punta del Este, Uruguay, there is a training course relating to the OPCW assistance and protection project for Uruguay which commenced in 2006. The project provides support in developing the national response capacity to deal with chemical weapons and toxic industrial chemicals. In total, thirty-eight participants from Uruguay attend the course, which is organized by the OPCW.

27 February In the US Senate, testifying before the Armed Services Committee, newly-appointed Director of National Intelligence Mike McConnell says al-Qaeda represents the most serious threat to US interests and that, as regards states, Iran and North Korea were of most concern to the US because there was a risk they could spread weapons of mass destruction. In his testimony McConnell says: "[Al-Qaeda] continue to plot attacks against the homeland and other targets with the aim of inflicting mass casualties. Indeed, al-Qaeda, along with other terrorist groups, continues to seek chemical, biological, radiological and nuclear weapons or materials."

28 February In Cuba, a secret government laboratory on the outskirts of Havana is engaged in an advanced biological warfare programme – creating such agents as plague, botulism and yellow fever – according to Roberto Ortega who, from 1984-1994 was head of Cuba's military medical services [but see 13 Sep 06]. In an interview with The Miami Herald, Ortega, who defected to the USA in 2003, says: "They can develop viruses and bacteria and dangerous sicknesses that are currently unknown and difficult to diagnose... They don't need missiles or troops. They need four agents, like the people from al-Qaeda or the Taliban, who contaminate water, air conditioning or heating systems." Ortega says Cuba is ready to use the biological agents "to blackmail the USA in case of an international incident" such as the threat of a US invasion. Meanwhile, former Chief Scientist and First Deputy Director of Biopreparat Ken Alibek tells The Miami Herald that Soviet scientists had always suspected the Cubans were developing a biological warfare programme, but he doubts whether any Soviet military delegation would have been invited to visit it. He says: "This kind of work was so secretive... These kinds of programs are never shared... If you ask whether the Cubans are capable, I'd say easily... Are they doing it? I can tell you when I was involved in the late 80s, we suspected so."

1 March In Laos, military forces use an unknown chemical against hundreds of ethnic Hmong people, according to the director of the Lao Human Rights Council, which is a US-

based non-governmental organization. In an interview with HuntingtonNews.net some days later, Vaughn Vang, says: "The Hmong were hiding at Phoua Dapho and reported that one single military airplane circled for an hour over the forest where the Hmong were hiding... A day later, more than 200 Hmong people became sick, they started to feel nausea, vomited, came down with severe diarrhea with blood in it... They said that nobody died, but they were severely poisoned from this unknown chemical poison... The military usually attacks with a chemical poison against our people which is visible by a kind of smoke, but this chemical weapon was completely invisible to the Hmong group in hiding. When it must have been sprayed and contaminated the food and water, the group says that they did not see anything falling down from the airplane."

1 March In Israel, Channel 2 television broadcasts a documentary which claims that members of the Israeli armed forces who have in the past been exposed to chemical warfare agents have contracted cancer and other illnesses. However, the government is refusing to accept responsibility. The 'Fact' programme reports soldiers as saying they have also received threatening visits from members of the security department at the Ministry of Defence (MALAMB) after they launched a campaign to have their disabilities recognized for compensation. Avi Meshulam, who worked at the Tzrifin military base that developed and tested protective fabrics against chemical and biological agents, says that for years he was exposed to various chemical agents: "We would simply take fabrics and drip substances such as mustard gas on them", says Meshulam. "We wanted to see how long it took them to penetrate the protective fabrics."

1 March The Kurdistan Workers' Party (PKK) leader Abdullah Ocalan – who has been in prison in Turkey since 1999 – may have been poisoned, according to his lawyers. At a press conference in Rome, Italian lawyer Giuliano Pisapia says Ocalan is suffering a "progressive poisoning" and ruled out the possibility that the metals had entered his body naturally. "There are only two other possibilities – poisoning through his food or through his water", says Pisapia. Another of Ocalan's lawyers, Irfar Dundar, says Ocalan was experiencing breathing and skin problems as well as severe pain which was interrupting his sleep. Ocalan's lawyers – who are also demanding that the United Nations dispatch a medical team to investigate – say they had sent samples of his hair to French toxicologist Pascal Kintz, who found levels of chromium seven times higher than normal, as well as high levels of strontium. Kintz' findings were then confirmed by laboratories in Oslo and Rome.

Five days later, the BBC reports that the Turkish government had sent three experts – including a toxicologist and a psychiatrist – to examine Ocalan in prison. Justice Minister Cemal Cicek says that the government's conclusion is that the claim that Ocalan has been poisoned is a lie.

4 March In the UK, police are monitoring the movement of industrial chlorine amid fears that terrorists are planning to hijack lorries transporting it, so reports *The Guardian* (London). The former head of anti-terrorism for the Metropolitan Police, Stephen Swain, says: "Chlorine's a really nasty material and there's a lot of it about. There is a lot of work being done by the security services to try to track where all this is going. It's a worrying development if it is being used in Iraq [see 20 Feb] because it could be used elsewhere." Swain currently works as a security consultant.

5-15 March In Paris, the fifth [see 16-26 Oct 06] basic training course for personnel of national authorities involved in the national implementation of the CWC takes place at the French Training Centre for the Prohibition of Chemical Weapons (CEFFIAC). The course, which is jointly organized by the French national authority and the OPCW, aims to assist personnel of national authorities to appreciate the obligations of national authorities under the CWC and, more specifically, with the national implementation action plan [see 20-24 Oct 03]. The event also includes table-top exercises on declarations and an inspection exercise at a facility producing unscheduled chemicals. It is attended by 26 representatives of the following 26 CWC parties: Algeria, Armenia, Belgium, Bolivia, Burkina Faso, Cameroon, Colombia, Cuba, Ethiopia, India, Iran, Jordan, Kyrgyzstan, Liberia, Morocco, Mozambique, Nepal, Pakistan, Serbia, Seychelles, Slovenia, Sri Lanka, Suriname, Trinidad and Tobago, Yemen and the Philippines.

6-7 March In Washington D.C., there is a workshop on *Developing Options for Global Biosecurity: Assessing Progress and Evaluating New Mechanisms*. The event is hosted and organized by the Partnership for Global Security, with support from the Carnegie Corporation of New York. Presentations are made by fifteen individuals, followed by a discussion on the second day of the workshop. Those speaking include Don Mahley of the US State Department and formerly head of the US delegation for the BWC [see 20 Oct 06] on the subject of the outcome of the BWC Review Conference [see 8 Dec 06]. Delegates of the World Health Organization and the Organization for Security and Cooperation in Europe are also among the fifteen making presentations.

7 March Barbados deposits its instrument of accession to the CWC with the UN Secretary-General. In thirty days Barbados will become the 182nd [see 23 Oct 06] party to the Convention.

7 March In London, the Foreign and Commonwealth Office organizes a meeting on biological projects related to the G8 Global Partnership. Officials from Canada, France, the European Commission, the UK and the US give briefings on their programmes, budgets and spending priorities. Germany attends as an observer. The participants agree to share information and promote coordination and conclude that there is a need for increased attention in the areas of biosafety and biosecurity.

7 March At UN headquarters, the president of the Security Council, Dumisani Kumalo, says that the USA, the UK and Iraq are drawing up a resolution to dismantle UNMOVIC, though it has yet to be decided how to deal with its staff and database, so reports Reuters news agency. Kumalo, who is also South Africa's ambassador to the UN, says: "There was consensus in the Council that the work of the mandate must be terminated and the file must be closed... [But] the Council would like to further discuss how to retain the expertise and especially the human expertise of the people that have worked in the last four years in this area of weapons of mass destruction." Last year, former US Ambassador John Bolton said UNMOVIC "no longer has a mission" and "it is spending Iraqi money and tying up other funds that could be returned to the government of Iraq" [see 6 Mar 06].

8 March The US Congressional Research Service releases *Project BioShield: Appropriations, Acquisitions, and Policy Implementation – Issues for Congress*. The report

discusses actions taken by Congress and the US administration relating to Project Bioshield [see 21 Jul 04], describes the decision-making process for choosing countermeasures, sets out which countermeasures have been contracted by the Department of Health and Human Services, and discusses accounting discrepancies present in budget documents relating to the project.

8 March In Alabama, the Anniston chemdemil facility destroys the last of its VX-filled M55 rockets thereby successfully destroying its entire stockpile of 35,662 chemical agent-filled rockets. Previously, the facility completed the destruction of its stockpile of GB-filled munitions [see 2 Mar 06]. A statement released by the Chemical Materials Agency (CMA) states: "Though there are still hundreds of thousands of other chemical munitions in depot storage igloos, [the facility] does not store and maintain M55 rockets any longer."

Three months later, the facility commences the incineration of its stockpile of 155mm artillery VX-filled shells. After the 155mm shells have been destroyed, the facility will begin the destruction of land mines carrying VX, followed by munitions loaded with mustard agent. According to a CMA press release, the facility has thus far destroyed 178,090 weapons and 136,835 gallons of nerve agent.

9 March The Vietnam News Agency (VNA) reports that a number of international lawyers, as well as lawyers' associations, have signed an appeal demanding that the USA take responsibility for the injuries to the Vietnamese population caused by the US military's use of Agent Orange and other toxic chemicals during the Vietnam War. The appeal states: "The mere fact of having sent C123 planes to spray defoliants on the forest of a foreign country is a violation of its territorial sovereignty, and in doing so having caused damage and destruction contrary to the humanitarian law, whatever the *modus operandi*, constitutes an illegal act by which the United States has made itself responsible for the consequences and is obligated to rectify them." Signatories to the appeal – which has been sent to the Vietnam Association for Victims of Agent Orange/Dioxin, US President George Bush, the US Court of Appeals, and the United Nations – include the president of the International Associations of Democratic Jurists, the president of the Association of American Continental Jurists, the president of the Union of Romanian Jurists, the secretary-general of the Union of Arab Lawyers, as well as lawyers from Algeria, Bulgaria, Cuba, France, Italy, Japan, Pakistan, South Korea, the UK and the USA.

10 March In the US 'holding facility' at Guantanamo Bay, Cuba, a man believed to have been involved in coordinating the attacks on 11 September 2001 says he also managed al-Qaeda efforts to produce biological weapons and detonate a radiological dirty bomb on US soil. Testifying before a military tribunal, Khalid Sheikh Mohammed, who was arrested in Pakistan in 2003, says: "I was directly in charge, after the death of Sheikh Abu Hafs Al-Masri Subhi Abu Sittah, of managing and following up on the Cell for the Production of Biological Weapons, such as anthrax and others, and following up on Dirty Bomb Operations on American soil." He also claims to have been behind the 1993 bombing of the World Trade Center and a nightclub bombing in Indonesia, as well as plans to kill Pope John Paul II, former US Presidents Bill Clinton and Jimmy Carter and Pakistani President Pervez Musharraf.

12 March In Maryland, the Aberdeen chemdemil facility is now ready to be closed after neutralizing 1,623 tons of mustard agent, decontaminating and disposing of all steel

containers used to hold the agent, and demolishing buildings used during the disposal process [see 30 Oct 06]. Chemical Materials Agency Acting-Director Dale Ormond says: "Today marks a significant achievement in the global chemical weapons disarmament effort. [Aberdeen] is the first chemical weapons disposal facility in the continental US to destroy its stockpile and decontaminate and demolish its plant... It is a model for all the other facilities that will follow suit."

12-16 March At OPCW headquarters, there is an Assistance Coordination and Assessment Team (ACAT) training session, which is organized by the UK under article X of the CWC. During the training, participants received presentations on assessment and management techniques, examples and lessons learned from the field activities and practical exercises. In total, eleven Technical Secretariat staff members participated.

13 March In Tokyo, the High Court rejects an appeal by five Chinese claimants who were seeking around \$684,000 in compensation from the Japanese government for suffering adverse health effects from chemical weapons abandoned in China by the Japanese Imperial Army. In upholding an earlier judgment on the case [see 15 May 03], the court finds that "the Japanese government could not carry out investigation on and recycle the abandoned toxic gas weapons". The court bases this on the fact that it was difficult for Japan to recover the munitions before 1987, because, whilst Japan and China had signed a bilateral peace and friendship treaty in 1978, China did not ask Japan to dispose of the munitions until 1990. Lawyers for the five claimants, who all come from Heilongjiang Province in north-eastern China, say they will appeal to the Supreme Court. [See also 29 Sep 03]

13-16 March At OPCW headquarters, the Executive Council convenes for its forty-eighth [see 7-10 Nov 06] session, which is chaired by Hlengiwe Buhle Mkhize, the permanent representative of South Africa to the OPCW.

The Council approves a request from Iraq, which is not a party to the CWC, to participate in the session as an observer, but reiterates that the decision neither has, nor is intended, to create a precedent, and that any possible future requests of a similar nature shall be considered on a case-by-case basis.

The Council approves the combined plan for phase 3 of destruction and verification of the chemical weapons production facility (CWPF) (Iewisite production), Open Joint Stock Company 'Kapolaktam-Dzerzhinsk', Dzerzhinsk, Russia. It approves the corrections to the detailed plans for conversion of the CWPF (production of a VX-type substance and filling it into munitions), Open Joint Stock Company 'Khimprom', Novocheboksarsk, Russia, as set out in a Note by the Secretariat on the subject. The Council also approves the corrections to the detailed plan for conversion of the CWPF (soman production), Open Joint Stock Company 'Khimprom', Volgograd, Russia as set out in a Note by the Secretariat.

The USA, Russia and India report orally to the Council on the progress they have made in meeting the revised chemdemil deadlines as adopted by the Conference of the States Parties. Russia distributes a supporting document on the progress it has made in this regard.

The Council approves a request by Italy for an extension of the deadlines for the destruction of its old chemical weapons (OCWs) and approved a decision on the request.

The Council notes a report by the Director-General on progress made in implementing the decision taken by the Conference at its eleventh session on sustaining follow-up to the plan of action regarding the implementation of Article VII

obligations. Ambassador Maarten Lak of the Netherlands, the facilitator on the matter, briefs the Council on the progress that has been made during the intersessional period.

The Council approves a Note by the Secretariat on corrections to revised specifications for two items of approved equipment.

The Council notes information submitted by Austria and Germany regarding three OCWs that Austria had discovered on 28 October 2005 and 30 October 2006 and had declared as OCWs in accordance with Article III, subparagraph 1(b)(i), and with Part IV(B) of the Verification Annex to the Convention, and also took note of the technical assessment by the Secretariat that these OCWs pose an imminent danger to the environment. The Council approves the proposal to transport these OCWs to a chemical weapons destruction facility in Munster, Germany, in order to destroy them, on the understanding that: (a) nothing can alter the general obligation of each State Party as stipulated in Article I of the Convention never under any circumstances to transfer chemical weapons, directly or indirectly, to anyone, or the obligation of each State Party that declares OCWs to destroy them under the terms of the Convention; (b) the OCWs discovered by Austria shall remain under the ownership and control of Austria during the process of destruction; (c) these OCWs shall be destroyed as soon as possible but no later than the next regular Session of the Council; (d) the Secretariat will continuously monitor the whole process and report to the Council at its next regular session on the destruction of these OCWs; and (e) this case shall not establish any precedent for any future cases.

The Council concludes an agreement between the OPCW and Chile on the privileges and immunities of the OPCW.

The Council supports the statement made by the Director-General on 23 February 2007 condemning in the strongest possible terms the recent multiple use of chlorine gas in Iraq [see 28 Jan and 20 Feb], and in this context also condemns those attacks in the same terms. The Council firmly rejects the use of toxic chemicals under any circumstances to inflict harm, as demonstrated by the overwhelming international support for the global ban on such weapons. The Council emphasised that such abhorrent acts are contrary to the comprehensive prohibition of the use of toxic chemicals as weapons set out in the Convention.

14 March The London *Daily Telegraph* cites newly declassified documents as showing that, in 1946, UK intelligence officials tried to recruit Gerhard Schrader, known as the 'father of nerve gas', to work at the Chemical Defence Experimental Station, Porton Down. The documents state, however, that the War Office lost interest in Schrader after he said he would work for Britain, but only on condition that it be for peaceful ends. Their attempt to get Schrader to Britain continued for more than a year after he left a German detention camp. By the time a formal offer was made to him in August 1947, he had returned to work for Bayer in Leverkusen and had produced an insecticide against Colorado beetles. In a letter to the UK officials who made him the offer, Schrader said "I am glad to be fully engaged again in the field of plant protection. My work during the war in the field of toxic substances never complied with my wishes... I should like to assist in improving nutrition, but not in inflicting new wounds."

15 March UK Transport Secretary Douglas Alexander announces that over the next two weeks the government will carry out tests to see how toxic substances would spread if used by terrorists on the London underground rail network. The tests, which will take place at St John's Wood underground station in north-west London, will involve the release of sulphur hexafluoride to monitor airflows. Alexander says: "The purpose of the study is to gather data

within a genuine rail environment... It is not a reaction to any threat increase or a measure to enhance security at this or any other station... All the data and feedback gained will merely help to inform future decisions."

15 March In Washington D.C., US Secretary of State Condoleezza Rice and Maltese Foreign Minister Michael Frendo sign a ship-boarding agreement under the Proliferation Security Initiative. The agreement allows officials from the USA and Malta to board and search ships registered with the partner country, and to seize vessels if necessary. It is the seventh such bilateral agreement that the USA has signed with other countries [see 4 Aug 05]. Some 1200 ships carry the flag of Malta, which has the eighth largest shipping registry in the world [see also 3 Jun 04].

17 March In Iraq, over a period of three hours, insurgents attack three lorries carrying chlorine gas, killing at least two police officers and leaving 350 civilians needing treatment for "chlorine gas exposure", according to a statement issued by the US military. Two of the attacks take place south of Fallujah, and one northeast of Ramadi. According to the US military, in the first attack, explosives were detonated in a lorry carrying chlorine at a checkpoint northeast of the provincial capital of Ramadi, wounding one US soldier and one Iraqi civilian. Two hours later, another lorry exploded in Amiriyah, south of Fallujah, killing two policemen and leaving around a hundred civilians with symptoms ranging from minor skin and lung irritations to vomiting. The Associated Press quotes Iraqi authorities as saying that at least six people were killed and dozens wounded when the truck blew up in a line of cars waiting at a checkpoint; however, the US military has not confirmed this. An hour later, three miles south of Fallujah in the Albu Issa region, another suicide bomber detonated a lorry carrying a 200-gallon chlorine tank rigged with explosives. US forces report finding about 250 local civilians, including seven children, suffering from symptoms related to chlorine exposure. According to the Associated Press, four other attacks have resulted in the release of chlorine gas since 28 January [see 20 Feb]. Agence France-Presse quotes Iraqi Interior Ministry Operations Director Abdel Karim Khalaf as confirming the attacks and suggesting they may have been carried out in revenge for recent government successes against insurgents in Ramadi.

Two days later, Michelle Montas, spokesperson for UN Secretary-General Ban Ki-moon, makes the following statement regarding the attacks: "The Secretary-General is appalled by these attacks which are clearly intended to cause panic and instability in the country."

Eleven days later, fifteen US and Iraqi personnel are wounded when Iraqi security forces shoot two suicide bombers in lorries carrying chlorine en route to a government complex in Fallujah, resulting in the explosives detonating.

Thirteen days later, during a press conference, Joint Staff Deputy Operations Director, Department of Defense, Michael Barbero says: "I strongly believe this use of chlorine should not be dismissed merely as a new tactic or as a new trend... Chlorine is a poison gas. It is a poison gas being used on the Iraqi people. Before these attacks, the last time poison gas was used on the Iraqi people was by Saddam Hussein... These acts - the use of poison gas and the use of children as weapons - are unacceptable in any civilized society and demonstrate the truly dishonorable nature of this enemy."

17 March In South Africa, *Pretoria News* runs an interview with Wouter Basson, the former head of South Africa's apartheid-era chemical and biological weapons programme. Basson says: "The trial [see 11 Apr 02] was a very stressful

time for me and my family... But I still maintain that I never did anything that was unethical. It was not unethical under the then government. There is no proof. A competent judge gave his verdict. Why can't people accept that?.. I do not believe that I am one of the best cardiologists in the country, but I am great. I would love to work for the defence force again because I think I am the best that they will ever have. And I think I can make a valuable contribution to the operation." [See also 13 Sep 06]

19 March In Brussels, the Council of the European Union adopts a *Joint Action on Support for OPCW Activities in the Framework of the Implementation of the EU Strategy Against Proliferation of Weapons of Mass Destruction*, in continuation of the same joint action adopted fifteen months previously [see 12 Dec 05]. Under the current joint action – the third of its kind [see 12 Jun 06] – the EU will support the activities of the OPCW by funding seven projects up to a total of EUR 1.7 million. The projects will be aimed in particular at: promotion of the universality of the CWC; support for full implementation of the CWC by States Parties; international cooperation in the field of chemical activities, as accompanying measures to the implementation of the CWC; and support for the creation of a collaborative framework among the chemical industry, OPCW and national authorities in the context of the tenth anniversary of the OPCW. [See also 12 Dec 03]

The Council also adopts a *Joint Action in Support of Chemical Weapons Destruction in the Russian Federation in the Framework of the EU Strategy against Proliferation of Weapons of Mass Destruction*. Under this joint action, the EU will assist Russia in complying with its deadline for the complete destruction of all its chemical weapons stockpiles as provided for by the CWC, by providing equipment essential for the completion of the electricity supply system for the Shchuch'ye chemdemil facility [see 16 Aug 06].

19-21 March In Muscat, Oman, there is an Interpol workshop on bioterrorism prevention for North Africa and the Middle East region, which is attended by representatives of sixteen Arab states. It is the fourth [see 10-12 Jul 04] workshop since the launch of Interpol's Bioterrorism Prevention Programme in 2004 [see 6 Jul 04]. The purpose of the event is to inform senior law-enforcement officials on areas relating to bioterrorism prevention and response, with input from international scientific and legal experts. During his speech on the opening day of the workshop Interpol Secretary-General Ron Noble announces the release of the latest edition [see 10-12 Jul 06] of the Interpol *Bioterrorism Incident Pre-planning and Response Guide*. The guide, which is compiled by experts from Interpol member countries, is designed to help law enforcement agencies prepare for, and deal with, an incident involving bioterrorism. In an interview with *Gulf News* on the sidelines of the workshop, Noble says that the training material recovered from al-Qaeda and information gathered from some of their captured operatives have convinced the world law-enforcement community that al-Qaeda has in the past planned to use chemical and biological weapons. Noble says: "Al-Qaida could use chemical or biological weapons to perpetrate its terrorist actions... Nobody really knows when Al Qaida will strike with chemical or biological weapons but it is just a matter of time before the terrorists believe they are ready... In Iraq there have been no fewer than three chlorine bomb attacks, targeting innocent civilians, in the recent past. It is not difficult to imagine these attacks being extended from chemical to biological." In a separate press statement, Noble says: "I have no doubt that the threat of bioterrorism is real and that we need to do more to prepare countries."

19-23 March In Civitavecchia, Italy, a chemical weapons training course takes place at the military's NBC Joint Logistic Technical Centre. The course, which is organized by the Italian Ministry of Defense, provides ten newly recruited inspectors from the OPCW with an opportunity to develop their on-site inspection skills.

19-23 March In Spiez, Switzerland, an industrial verification training course takes place which is organized by the CWC national authority of Switzerland and the Spiez Laboratory. The course provides twelve newly recruited inspectors from the OPCW with an opportunity to familiarize themselves with the procedures employed when inspecting a chemical industry facility. The trainees include specialists in chemical production technology, analytical chemistry and health and safety.

19-30 March In Helsinki, there is a course for laboratories of CWC parties that are involved, or plan to become active, in the analysis of chemicals related to the CWC, and for those participating, or intending to participate, in OPCW proficiency-testing. The course, which is jointly organized by the Finnish Institute for Verification of the CWC (VERIFIN) and the OPCW, introduces participants from Bangladesh, Argentina, Malaysia and Turkey to the preparation of samples and to theoretical aspects of liquid chromatography-mass spectrometry (LC-MS), enables them to observe demonstrations of LC and LC-MS techniques, to test their skills in practical exercises, and to receive instruction in quality assurance and instrument maintenance.

20 March In Tokyo, police officers and fire-fighters conduct an exercise involving the release of a simulant of a chemical agent on a high-speed train travelling through the underground rail network. The event is timed to coincide with the twelfth anniversary of the sarin attack by the Aum Shinrikyo cult on the Tokyo underground [see 20 Mar 95], and is also aimed at providing preparative training for the 2008 G8 Summit, which is likely to be held in Japan. "Various locations are being considered to host the summit, including Yokohama. And since it is one stop away from Tokyo on a bullet train, we thought it essential to do this operation," says Akihiro Koizumi, the deputy chief of the Takanawa police authority.

20-21 March The Israeli Defence Force organizes what is to date Israel's biggest civil defence exercise, including a chemical attack on a school. During the exercise, sirens are not sounded in northern Israel for fear they could provoke panic, since the border area with Lebanon is still tense following the conflict there [see 14 Jul and 13 Sep 06]. For similar reasons, they are not sounded in southern Israel either, where Kassam rockets fired by Palestinians from the Gaza Strip often fall. Deputy Defense Minister Ephraim Sneh tells reporters that the exercise is designed in part to defend against a possible Iranian missile attack: "We will do everything to defend the Israeli people against all kinds of attack, wherever it comes from... The main threat is Iran and the terror organizations that Iran supports and sponsors."

22 March In Rabat, Morocco, at a press conference three government officials announce details of a foiled plot by twelve suicide bombers to blow up foreign ships at the port of Casablanca and other Moroccan landmarks, and also to use "poison" in the attacks. The daily *Ahdath al Maghribia* report Interior Minister Chakib Benmoussa, his deputy Fouad Al Himma and Benabdallah Oumzazi, a "top" ministry official, as saying that the planned attack was foiled, ten days

previously, in part because of a “lucky accident”. The paper says the poison was a by-product of tetanus pathogenic bacteria and quotes Himma as saying that it is “an indication of the shift in the terrorist plans”.

23 March In Brussels, EU Personal Representative for the Non-Proliferation of Weapons of Mass Destruction Annalisa Giannella meets with the European Commission Director for Policy Coordination in Common Foreign and Security Policy Richard Wright to review the progress of the recently established EU WMD Monitoring Centre. The Centre has convened regular meetings since its establishment, bringing together experts from the Council Secretariat and the Commission to discuss thematic issues, such as activities in the field of the BWC, and to conduct a general exchange of information. Giannella and Wright agree to meet every 3 months.

26 March In London, there is a workshop on the *Second Review Conference of the Implementation of the CWC and the Future Challenges for the Convention*, which is hosted and organized by the Foreign Office. Those speaking at the event, which is timed to coincide with the tenth anniversary of the entry into force of the CWC, include OPCW Director-General Rogelio Pfrirter.

27 March In London, during a visit to the Imperial War Museum, Armed Forces Minister Adam Ingram announces that the UK has successfully destroyed its holdings of 3,812 old chemical weapons at a cost of £10 million, thereby meeting its commitment under the CWC to do so by April 2007. To commemorate the event, Ingram presents a chemical weapon shell from the Second World War to the Museum for inclusion in its permanent collection. He makes the following statement: “Today marks another landmark for our efforts to rid the world of these terrible weapons. We have met our [chemdemil] obligations under the Chemical Weapons Convention and destroyed our old chemical weapons holdings ahead of schedule. The shells have been beyond military use for many years but destroying these heavily corroded and unstable weapons is a dangerous and challenging task. Our Armed Forces bomb disposal teams and the technical experts at Dstl Porton Down who undertake this task deserve our praise and thanks. Our goal is a world without chemical weapons and so we call upon all states to abandon their chemical weapons programmes and destroy their stockpiles, including legacy weapons.” Speaking at the same event, OPCW Director-General Rogelio Pfrirter says: “The United Kingdom has long been an effective and committed advocate and implementer of the global chemical weapons ban. The OPCW is grateful for the United Kingdom’s strong and unwavering support of the Organisation in its mission to eliminate chemical weapons forever through the effective application of the Chemical Weapons Convention by every nation. We commend the United Kingdom on meeting this obligation to destroy old chemical weapons in exemplary fashion.”

28 March In the UK House of Commons, responding to a written question addressed to the Home Secretary as to what studies the Home Office has undertaken regarding the capacity of the UK emergency services to cope with a chemical attack on UK populations and towns, Minister for Security, Counter Terrorism and Police Tony McNulty says: “The Home Office reviews such capacity on a regular and ongoing basis and through a variety of means. These include direct contact with individual area emergency services; exercising of response capability; audits and assessments as part of the Cabinet Office led Capabilities Programme, and analysis of

the results of the National Capabilities Survey.” Replying to the same questioner as to what training exercises have been undertaken by UK emergency services and UK government departments on chemical attacks since 2001, McNulty says: “Of the large-scale live counter terrorism exercises led by the Home Office since 2001, two have had a specific chemical attack element. In addition to such national exercises, a wide range of regional and local counter terrorism and consequence management exercises (both live and table top) are held each year. The Home Office does not collate details of all of these, nor of exercises involving other Government Departments, and does not therefore have information on the total number of such exercises held since 2001 which may have included chemical attack scenarios.

29 March In Washington D.C., speaking at a conference on the CWC organized by Global Green, OPCW Director-General Rogelio Pfrirter says that once the six chemical-weapons possessor states, party to the CWC, have destroyed their stockpiles, the OPCW would continue on as a “watchdog” against chemical weapons proliferation. Pfrirter goes on to say: “We have a final deadline [...] which I as Director-General of the organization have to record as being a sort of sacrosanct commitment for all possessor states... From the perspective of the organization it is crucial that that deadline be met and that therefore no effort be spared for the accomplishment of the cause of the convention... It seems quite clear that the destruction of stockpiles is important not just for the country involved, but is important for the overall credibility of the convention to expect from the other countries [...] to also comply with their obligations in full.”

30 March In The Hague, the seventh [see 31 Mar 06] inspector training course conducted by the OPCW concludes. The eleven-week intensive course was completed by twenty-two inspector trainees from Bangladesh, Brazil, Bulgaria, Canada, China, Cuba, France, Germany, India, Japan, Jordan, Kenya, the Netherlands, Romania, Russia, the UK and the USA. The course was supported by the governments of Belgium, Canada, Italy, the Netherlands, Switzerland, the UK and the USA.

April The US Department of Defense transmits to Congress the annual report on its Chemical and Biological Defense Program. The report is a detailed document of some 350 pages. It includes discussion of new threats in the chemical/biological area. The Whole System Live Agent Testing project is budgeted to resume open-air releases of hot agents after a 30-year Congressional ban on such releases. “For all functional areas”, the report says, “test methods are required to address emerging threats, including NTAs, TIMs and dusty agents”. Regarding NTAs, the Report states that the “number and type of chemical warfare agents, beyond the conventional CWAs, has significantly increased”. A research thrust in the development of medical countermeasures against them is to “develop a therapy that works effectively for all non-traditional nerve agents and conventional nerve agents”. As has become customary, the report includes an annex describing the status of Defense Department efforts to implement the CWC.

2 April In The Hague, the appeal commences of a Dutch national convicted two years ago [see 21 Nov 05] for selling chemicals to Iraq. The chemicals were employed in the manufacture of mustard and nerve agents which were subsequently used against Iraq’s Kurdish population in the 1980s. The Hague District Court sentenced Frans van Anraat

to fifteen years imprisonment for “complicity in violating the rules of war”, but acquitted him of complicity in genocide on the grounds that he did not know specifically that the chemicals would be used against Iraq’s Kurdish population. The court held, however, that he attempted to conceal the transfers through a network of holding companies because he knew he was violating a US export ban and knew that the chemicals would be used for killing. According to the Associated Press, van Anraat is appealing his conviction on the grounds that he was unfairly singled out for prosecution. Meanwhile, the prosecution is appealing against his acquittal for genocide, arguing he continued seeking to sell chemicals to Iraq, even after hearing of the attack on Halabja [see 18 Mar 88].

Five weeks later, the panel of four judges at The Hague Appeals Court increase van Anraat’s sentence by two years to seventeen years. They uphold the complicity in war crimes conviction and agree with the trial judges that he was innocent of complicity in genocide. In a statement the judges say that van Anraat’s sentence was increased because he did not commit the act out of sympathy for the Iraqi regime, but was rather “driven by naked greed”.

4 April In Buenos Aires, the vice-ministers of foreign affairs of the Mercado Común del Sur (Mercosur) and associate states convene – at the initiative of the Argentine government – for a meeting to commemorate the tenth anniversary of the CWC. Attending are the vice-ministers and high-level officials from Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru and Uruguay and Venezuela.

9 April The Department of Homeland Security (DHS) issues an interim final rule on *Chemical Facility Anti-Terrorism Standards*, the purpose of which is to establish risk-based performance standards for the security of US chemical facilities. The rule, the effective date of which is 8 June 2007, requires facilities to prepare Security Vulnerability Assessments, and to develop and implement Site Security Plans, which include measures that satisfy the risk-based performance standards which are identified. In some circumstances, it permits certain facilities to submit Alternate Security Programs as opposed to assessments or plans. The rule also contains provisions addressing inspections and audits, recordkeeping, and the protection of information relating to chemical-terrorism vulnerability. It further provides the DHS with authority to seek compliance through the issuance of orders.

10 April In Chad, the Movement for Democracy and Justice (MDJT) announces that, as a result of investigations undertaken by its intelligence service, it has discovered that government forces are storing chemical weapons in Ndjamena, which they plan to use against the MDJT. The monthly *Alwihda* reports the statement as being made during a meeting of the National Executive Board of the Initiative and Proposition Council of the MDJT in Rome.

10-12 April In Buenos Aires, the OPCW conducts a national-authorities workshop for the Latin American and Caribbean region on training of national inspectors and escorts for OPCW inspections. The event concludes with an inspection exercise at a discrete organic chemical (DOC) facility. Participating are twenty-five representatives from the following twenty-one national authorities: Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Paraguay, Peru, Spain, Saint Lucia, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

11 April In the US Senate, testifying before the Armed Services Subcommittee on Emerging Threats and Capabilities, Senator Richard Lugar says: “[W]hile the [Nunn-Lugar Program] [see 13 Dec 06] continues its important work addressing threats in the former Soviet Union, new challenges are emerging. The world has watched closely as the Six Power Talks on North Korea’s nuclear weapons program have proceeded... If negotiations yield an agreement with Pyongyang to eliminate its weapons of mass destruction and their means of delivery, the Nunn-Lugar program has ready expertise to do this work. It will not be the only program employed, but it is a unique tool that must be available to the President. In 2003, Congress approved and the President signed the Nunn-Lugar Expansion Act. It authorized \$50 million in Nunn-Lugar funding to be used outside the former Soviet Union. This authority has already been put to use in Albania... The Albanian experience reinforced that the Nunn-Lugar program should have the flexibility to adjust to unforeseen contingencies. We should remove the \$50 million limit on work outside the former Soviet Union. We should also give the Secretary of Defense the authority to implement Nunn-Lugar projects in difficult political and strategic environments without the risk that operations could be suspended because of unintended consequences of executive or legislative action.”

In his testimony, Principal Deputy Assistant Secretary of Defense Joseph Benkert says that construction of the facility at Shchuch’ye [see 16 Aug 06] “is now about 50 per cent complete”. He continues: “We expect to amend the agreements and add the final contracts and funding to complete this project very soon.”

14-15 April In Cavtat, Croatia, there is a sub-regional workshop for customs authorities in South-Eastern Europe on the technical aspects of the CWC transfers-regime. The workshop, which is organized by the OPCW, aims to provide customs authorities in the region with an insight into the practical implementation of the CWC transfers-regime and how customs authorities can contribute to strengthening the non-proliferation mechanism of the Convention by helping to prevent or detect illicit transfers of scheduled chemicals. In total, forty-two participants from the following twenty CWC parties attend the workshop: Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Germany, Greece, Italy, Montenegro, Pakistan, Qatar, Rumania, Russia, Serbia, Slovenia, the Former Yugoslav Republic of Macedonia, Turkey and the USA. The Stockholm International Peace Research Institute is also represented.

15 April The UK government transmits to the UN Department of Disarmament Affairs its annual voluntary declaration [see 13 Apr 06] for 2006 of BWC confidence-building measures and also publishes them on the Internet.

16-20 April In Cavtat, Croatia, the fourth [see 17-23 Sep 05] World Congress on Chemical, Biological and Radiological Terrorism takes place, which is jointly organized by the Croatian Ministry of Defence and Applied Science and Analysis (ASA), Portland, USA and sponsored by the OPCW. Attending the Congress are around two hundred government officials, scientists, medical and public health specialists, industry representatives, experts in crisis management and representatives of NGOs, from over forty countries. Discussions focus on scientific, medical and policy aspects of terrorism and on ensuring effective preparedness in response to a crisis. An exhibition devoted to the tenth anniversary of the CWC is displayed during the Congress.

18 April US Department of Health and Human Services Secretary Mike Leavitt announces the release by the Department of its *Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) Implementation Plan for Chemical, Biological, Radiological and Nuclear Threats*. The plan goes hand-in-hand with the release, one month previously, of the Department's *Public Health Emergency Medical Countermeasures Enterprise Strategy for Chemical, Biological, Radiological and Nuclear Threats*, which set out the goals and objectives that the Department will employ to ensure that medical countermeasures are available for effective use against the highest priority CBRN threats facing the USA. The plan sets out the future course for prioritizing the Department's acquisition of vaccines, drugs and medical diagnostic tests, including purchases made under Project BioShield [see 21 Jul 04]. It assesses the current state of medical countermeasure preparedness, and identifies the highest priority research, development and acquisition programs to increase public health emergency preparedness. It further identifies the acquisitions the Department proposes to make under Project BioShield during the remaining five years of that programme as well as priority medical countermeasure programs that will be pursued up through FY 2023. It addresses twelve biological threat agents, a class of chemical threats (volatile nerve agents) and radiological and nuclear threats. According to the Department, it covers "the full spectrum of medical countermeasures-related activities, including research, development, acquisition, storage/maintenance, deployment, and utilization". The plan is designed to be consistent with the *National Strategy for Medical Countermeasures against Weapons of Mass Destruction* [see 11 Dec 02], and *Biodefense for the 21st Century* [see 28 Apr 04]. [See also 31 Jan]

18-19 April In Vilnius, Lithuania, a 'high-level' NATO seminar takes place on the subject of *Restriction on Spread of Mass Destruction Weapons and Related Knowledge: What Measures Should be Taken*. Attending the seminar are representatives of NATO states and their partners, the partners of the Mediterranean Sea Alliance, the Near East, Asia and the Pacific Ocean countries, the United Nations, the European Union, the OPCW, the Organisation for Economic Co-operation and Development (OECD), and other international bodies. In his address, Lithuanian Foreign Ministry Under-Secretary Laimonas Talat-Kelpsa says that "the tightening of international agreements limiting the spread of WMD and their components are highly important qualities."

19 April In Rome, there is an international conference on *The Tenth Anniversary of the Chemical Weapons Convention: Assessment and Perspectives*, which is jointly organized by the Italian Ministry of Foreign Affairs and the Istituto Affari Internazionali. Those making presentations include OPCW Director-General Rogelio Pflirter. The Conference assesses the successes, and analyses the challenges, encountered in the implementation of the CWC over the past decade.

19 April The US Air Force announces that it has developed a strategy for protecting its bases on US territory against biological threats, following a review covering the period from May 2004 through April 2005 of the potential biological warfare threat to Kunsan Air Base in South Korea. In a press release, the Air Force states that the Counter-Biological Warfare Concept of Operations (CONOPS) offers methods for biological threat preparedness, identifying an attack involving pathogens such as anthrax, and reducing the impact

of such a strike. Air Force Deputy Director for Counterproliferation Tom Billick says: "Biological attacks don't just happen overseas; any area where we operate could be a high-threat area." Billick says that a biological attack or disease outbreak could overwhelm an entire base. "For example, implementing quarantine at an Air Force base requires support not only from the medical group, but it will also require significant support from services, security forces, logistics, civil engineers, public affairs, judge advocate and many others," says Billick.

20 April In Russia, Deputy Head of the Federal Industry Agency Victor Kholstov says that Russia has met its second-phase commitment under the CWC to destroy twenty per cent of its stockpile of chemical weapons by 29 April 2007, so reports ITAR-TASS news agency [see also 10 Jan]. Speaking during an official ceremony, Kholstov says: "Russia scrapped 456 tonnes more chemical weapons than was planned by the federal program nine days before the deadline... The Russian Federation realizes that there is still a lot to be done before 2012. Another four disarmament facilities will be built, and the remaining 32,000 tonnes of war gases will be disposed of... Our next target is the disposal of 45 per cent of the overall chemical weapons stock (18,000 tonnes) by December 31, 2009" According to ITAR-TASS, Russia has destroyed 8,456 tonnes of chemical agents; 28 kilograms of lewisite have been destroyed at the Kambarka chemdemil facility, and the last of 4,007 tonnes of "air bombs" have now been destroyed at the Maradykovo facility. Speaking at the same event, OPCW Director-General Rogelio Pflirter commends Russia for its effort to complete the destruction of its chemical weapons and expresses his gratitude to CWC parties that have provided support to Russia's chemdemil programmes through bilateral or multilateral contributions. [See also 27 Mar]

23-25 April In Ha Noi, Viet Nam, there is a sub-regional workshop for south-east Asian customs authorities on the technical aspects of the CWC's transfer regime. Attending the workshop, which is jointly organized by the government of Viet Nam and the OPCW, are participants from the following CWC parties: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, United Arab Emirates and Viet Nam. Myanmar, a non-party, also attends.

24 April Germany incinerates the final two of three old chemical weapons (OCWs) at its chemdemil facility for OCWs in Munster. Austria had discovered the weapons on 28 October 2005 and 30 October 2006 and had declared them as OCWs in accordance with Article III, subparagraph 1(b)(i), and with Part IV(B) of the Verification Annex to the CWC [see 13-16 Mar]. OPCW Director-General Rogelio Pflirter personally triggers the destruction of the last munitions – two 7.5cm artillery shells of German origin containing mustard gas – through a remote computer. The OPCW Executive Council approved the proposal to transport the weapons to Germany for destruction. The facility commenced operations in 1980. In the past ten years, it has destroyed 9,202 items of old chemical weapons under OPCW verification.

24-26 April In New York, INTERPHEX 2007, a showcase for new and emerging pharmaceutical and biological manufacturing and processing equipment and technologies, takes place. Equipment includes autoclaves; centrifuges; dispersing and mixing equipment; drying, fermentation and reaction vessels; and filtration, milling and process control equipment. Among those attending the event are experts from UNMOVIC.

25-27 April In Berlin, there is an international conference marking the tenth anniversary of the entry into force of the CWC. Those speaking at the conference, which is attended by representatives of 41 CWC parties, include OPCW Director-General Rogelio Pfrirer and German Foreign Minister Frank-Walter Steinmeier.

26-27 April In Vilnius and Siauliai, Lithuania, an air exercise takes place under the US-led Proliferation Security Initiative [see 30-31 Oct 06]. Exercise 'Smart Raven' focuses on how the systems of Lithuania would work together with those of e.g., Estonia, Latvia and Poland to intercept a hypothetical air shipment of proliferation materials. Participants from over twenty countries attend the event.

29 April In The Hague, on the occasion of the tenth anniversary of the entry into force of the CWC, OPCW Director-General Rogelio Pfrirer makes the following statement: "The States Parties' unwavering political will and commitment to this unique disarmament enterprise, and their diligence in compliance with the chemical weapons ban, has created a responsive, adaptive and sustainable infrastructure that is freeing the world of these horrific weapons. The CWC is a beacon in multilateral disarmament. Nations that may not find consensus elsewhere have found common ground and work together harmoniously at the OPCW to bring about a world that uses chemistry exclusively for peaceful purposes." Meanwhile, in his message, UN Secretary-General Ban Ki-moon says: "I call upon all possessor States to destroy their chemical weapons stockpiles according to the agreed deadlines... I also urge all governments that have not yet done so to ratify or accede to the Convention without delay." Since the anniversary is also observed as Remembrance Day for Victims of Chemical Warfare, Ban says in his message: "Let us honour the victims of chemical warfare, and redouble our efforts to ensuring that no life on earth will be lost ever again due to the use of chemical weapons."

30 April Syria has constructed a secret underground complex to manufacture and store ballistic missiles, mainly Scuds, capable of striking Israel possibly with chemical warheads, so reports the Tel Aviv *Yediot Ahronot*. According to the paper, Syria has "developed chemical warheads for all its Scuds". The complex reportedly includes thirty reinforced concrete bunkers, production facilities, development laboratories and command posts; the chemical warfare agents are stored in a separate facility. According to the paper, Syria has 200 Scud-B missiles, 60 Scud-C and a certain number of North Korean Scud-D missiles with a range of 700 kilometers.

May The US Counterproliferation Program Review Committee – which is comprised of representatives from the Department of Defense, Department of Energy, Central Intelligence Agency, and the Joint Chiefs of Staff – releases an 'executive summary' of its annual classified report to Congress on *Activities and Programs for Countering Proliferation and NBC Terrorism*. The summary prioritizes areas of counter-proliferation activity within the departments concerned and sets out the Committee's overall ranking of counter-proliferation priorities. It also sets out a series of recommendations, including: "Increase emphasis on intelligence gathering [...] regarding state and nonstate WMD proliferation and development activities... Enhance research and development efforts to address the ability to defeat or destroy WMD materials with little or no collateral effects... Leverage new developments in the medical/genomic and

laboratory sciences to improve medical protection capabilities against emerging biological threats... Place additional emphasis on rapid biological detection, identification, and characterization... [And] place additional emphasis on rapid detection of traditional as well as emerging chemical threat agents."

1 May The New York Police Department has commenced tracking chlorine shipments in and around the city in response to the use of the chemical weapon by insurgents in Iraq [see 17 Mar], so reports *The New York Sun*. Deputy Commissioner Paul Browne, the Department's chief spokesman, says that as the attacks in Iraq became more frequent, officers in the counterterrorism and intelligence divisions began taking a closer look at the issue. Browne says that under Operation Nexus detectives regularly visit hospitals that have equipment with radioactive materials, industrial storage areas, and truck rental agencies, amongst other places. He says that owners of businesses are asked to report any suspicious activity.

1 May In the USA, veterans who report symptoms identifiable as those of 'Gulf War syndrome' have five per cent less cortical brain matter than healthier counterparts, according to the *New Scientist* online. The team of researchers from Boston University School of Public Health, Massachusetts studied eighteen veterans of the 1991 war who reported more than five problems with their health, such as joint pain, fatigue, skin rash, headaches and nausea. The team employed magnetic-resonance imaging technology to scan the brains of these veterans together with eighteen counterparts who also served in Iraq at the same time, but who reported only a few of the symptoms. Subjects were also asked to complete a cognitive test that involved memorizing a list of sixteen words and recalling those words twenty minutes later. Veterans reporting more than five health problems performed about fifteen per cent worse in the test than their counterparts. Team leader Roberta White says, however, that the study does not prove conclusively that the reduction in brain size was caused by exposure to chemicals in the war as it "could be a pre-existing vulnerability or an exposure-outcome relationship".

The next day, the University of Texas Southwestern Medical Center reports that a team of its researchers, led by Head of Epidemiology at the Center Robert Haley [see 12 Apr 01, 18-19 Jun 02 and 1 Oct 04], have found that damage to the parasympathetic nervous system may account for nearly half of the typical symptoms – including gallbladder disease, fatigue, depression, joint pain, chronic diarrhoea and sexual dysfunction – of veterans claiming to suffer from Gulf War syndrome. The team used a technique that monitors changes in approximately 100,000 heartbeats over 24 hours and measures changes in high-frequency heart rate variability. After plotting the changes in heart function using a mathematical technique called spectral analysis, they found that parasympathetic brain function, which usually peaks during sleep, barely changed in veterans with Gulf War syndrome even though they appeared to be sleeping. The functionality of the brains from a group of veterans not suffering such symptoms, who were tested for comparison, were found to increase normally. Haley says: "The parasympathetic nervous system takes care of restorative functions of the body. During sleep it's orchestrating that process, which is why we feel refreshed when we wake up... Its failure to increase at night in ill Gulf War veterans may explain their unrefreshing sleep."

Both studies are to appear in the October 2007 issue of *The American Journal of Medicine*.

2 May In Haifa, Israel, researchers at the Grand Water Research Institute at the Technion-Israel Institute of Technology are being co-financed by NATO to undertake research on protecting water supply systems against biological and chemical terrorism, according to the *Jerusalem Post*. The research involves integrating mathematical models for the placement of monitoring stations with technology able to identify and neutralize chemical and biological contaminants. Israel Schechter of the Faculty of Chemistry says: "In the wake of the discovery of al-Qaida documents and plans in Afghanistan, the FBI was alerted that the organization was planning a terror attack on water sources. It became apparent that water distribution systems in the US, Israel and the rest of the world's developed nations are totally exposed." The other financiers of the project are Israel's Water Commission, the Technion Institute for Future Security Research, and the Grand Water Research Institute itself.

6 May In Amman, the Court of Cassation overturns death sentences passed by the State Security Court against nine men, including the late Abu Mus'ab Zarqawi, for plotting a chemical attack in Jordan, and returns the case to the State Security Court for reconsideration [see 15 Feb 06]. The *Jordan Times* reports that the Court of Cassation rules that since the prosecutor for the State Security Court, Mahmud Obaydat, was one of the defendants' targets when they plotted their attacks, the fact that he was then responsible for interrogating them and preparing their charge sheets violated an article of the penal code that states a person cannot be personally involved in a case and at the same time a judge or part of the investigation process. Speaking to Agence France-Presse following the ruling, Mohammad Mehyar, the defendants' lawyer, says: "We are very happy with the decision taken by the Cassation Court."

6 May Former Director of US Central Intelligence George Tenet says – with regard to information provided to former Secretary of State Colin Powell that appeared in his speech to the UN Security Council on Iraqi WMD [see 5 Feb 03] – "we let the secretary down and we undermined the credibility [and] nobody regrets this more than I do" [see also 29 Jan]. Tenet makes his comments during a press briefing at which he discusses his book, *At the Center of the Storm*. Speaking on Fox News, Vice President Dick Cheney responds to Tenet's claims thus: "I haven't read George's book, but to state that somehow the president didn't spend a lot of time thinking about this or talking about it – we had extensive conversations. Maybe George wasn't included in those, but the fact of the matter is this decision was weighed as heavily and given as careful consideration as any I've ever been involved in, and I've worked for four presidents."

6 May The US Air Force releases an 'instruction' on *Disease Containment Planning Guidance*, which provides policy and guidance for mitigating the effects of a contagious disease. The instruction gives general background information on the characteristics of biological agents, modes of transmission, methods of protection, and incubation periods, and refers to the Air Force Counter-Biological Warfare Concept of Operations in the context of preparing for and responding to a biological event. The instruction implements provisions contained in the Air Force policy directive on *Counter-Nuclear, Biological, and Chemical Preparedness Operations*, and supports guidance contained in the Air Force instruction on *Emergency Health Powers on Air Force Installations*.

7 May France has agreed to contribute more than \$8 million for the development of a second weapons disposal

line at the Russian chemdemil facility at Shchuch'ye on top of the \$8 million it has pledged for environmental monitoring there [see 27 Dec 05], so reports Interfax news agency. The UK is currently managing international efforts to develop an electric power system for the facility [see 18 Jul 06]. [See also 16 Aug 06]

7 May In Brussels, the recently created European Union WMD Monitoring Centre [see 23 Mar] convenes for its first meeting to exchange views on proposals received from the World Health Organisation regarding joint biosafety and biosecurity projects. The meeting also serves as a platform to exchange information on export control outreach activities.

9 May In Tokyo, the Supreme Court upholds previous rulings that a group of Chinese claimants who assert that they were subjected to biological experiments at Unit 731 are not eligible to claim compensation from the Japanese government [see 19 Apr 05]. The claimants, who included relatives of the victims, had demanded \$186,000 each and an official apology from the Japanese government. The court confirms the earlier rulings that the claimants lost their rights to war compensation from Japan under the 1972 Japan-China Joint Communiqué, in which the Chinese government declared it "renounces its demand for war reparation from Japan". Since commencing their claim in 1997, 55 of the claimants have died.

Nine days later, more than forty of the claimants release a statement condemning the ruling thus: "The ruling by the Japanese Supreme Court ignores the judicial responsibility of the Japanese government for biological warfare activities carried out in China... [It] had full knowledge of Japanese biological warfare during World War II, one of the most despicable war crimes ever committed." Wang Xuan, who is representing the group of claimants, says the victims will continue to seek publicity for their cause. "We will set up NGOs and appeal to the UN Commission on Human Rights", says Wang.

10 May In Baghdad, in his ongoing trial, Ali Hassan al-Majid, also known as 'Chemical Ali', says he had no role in authorizing the use of chemical weapons in Operation Anfal, so reports the Associated Press. "As for the chemical weapons... I did not use or issue order to use them. I do not know who used them if they were ever used", says al-Majid. He says that the Anfal campaign was necessary to prevent Kurdish rebels from helping Iranian forces enter northern Iraq while the two countries were at war. "I did what should have been done at that time", he says. [See also 21 Aug 06 and 31 Dec 06]

10 May In the US House of Representatives, the Armed Service Committee includes \$42.7 million in its FY 2008 budget request to help complete the Russian chemdemil facility at Shchuch'ye and criticizes the Department of Defense for not requesting the funding, so reports RIA Novosti news agency [see 7 May].

10 May In Richmond, Kentucky, a scientist who oversaw chemical weapons storage operations at the Blue Grass chemdemil facility has filed a lawsuit after he was fired for reporting violations there, so reports the *Lexington Herald Leader*. Kim Schafermeyer, who was dismissed in July 2006, reported violations of requirements for worker safety as well as environmental and data integrity violations. He claims that chemical agent was expelled from testing equipment and vented directly into laboratory areas occupied by workers and visitors; that air and waste water samples were handled improperly; that monitoring data protocols were flawed; that

certified officials with no identifiable qualifications were employed at the facility; that congressionally appropriated funds earmarked for equipment upgrades were misused; and that managers made threats in order to stifle reports of any problems.

12 May In Tehran, Deputy Foreign Minister Mahdi Mostafavi says that Iran has commenced the filing of lawsuits against all legal entities involved in facilitating the production of chemical weapons, or of helping Iraq to use CW against Iran. In an interview with Mehr news agency, he says a dossier of such entities has been compiled through a coordinated effort by the judiciary, the Intelligence Ministry, the Foreign Ministry, the Supreme National Security Council and the Defence Ministry. Mostafavi says that the recent ruling in the Netherlands to increase the sentence of Dutch businessman Frans van Anraat, who had previously been convicted of providing banned chemicals to the Iraqi government for its chemical weapons programme – from 15 years to 17 years, was a necessary action [see 2 Apr].

Six weeks later, in Tehran, during a ceremony to unveil a new stamp commemorating the tenth anniversary of the entry into force of the CWC, Mostafavi says Iran will take its case to domestic and international courts to convict those involved in past chemical attacks on Iran.

14 May In Jakarta, Indonesian Minister for Political, Legal and Security Affairs S P Agustiadi and Canadian Ambassador to Indonesia John Holmes sign an agreement under which Canada will provide Indonesia with equipment to respond to a terrorist WMD attack. The Antara news agency quotes Agustiadi as saying: "It is believed the terrorists have become more progressive and are continuing to develop various CBRN devices which have greater impact and are more lethal than conventional equipment" Holmes says the agreement was reached in accordance with a joint statement signed by Canada and Indonesia in 2004, since which time the two countries have collaborated on four CBRN training exercises in Indonesia.

14-18 May In Brussels, around two hundred specialists from sixteen countries convene for the tenth [see 15-18 May 06] annual chemical weapons demilitarization conference. Topics addressed include managing chemdemil facilities, including personal health and safety issues, and laboratory and analytical techniques.

14-23 May In Geneva, the World Health Assembly convenes for its sixtieth [see 22-27 May 06] annual meeting. On day five, the Assembly decides to defer until 2011 a decision on whether to destroy the last known remaining samples of the smallpox virus. A resolution passed by member states of the World Health Organization recognizes "that unknown stocks of live variola virus might exist, and that the deliberate or accidental release of any smallpox viruses would be a catastrophic event for the global community." They also reaffirm "the decisions of previous Health Assemblies that the remaining stocks of variola virus should be destroyed". They call on the organization "to undertake a major review" of the smallpox retention issue in 2010 to prepare the following year's summit for a decision on setting a time for destroying the last virus samples in Russia and the USA.

15 May In Israel, Channel 2 television broadcasts 'Uvda' (Fact), an investigative programme, which claims that numerous members of the Israel Defense Force (IDF) have suffered adverse health effects since participating in secret Defense Ministry tests aimed at developing an anthrax vaccine. The report reveals that since the tests began in 1999,

some of the 800 test subjects have developed skin tumours, severe lung infections, serious migraines, bronchitis, and epilepsy symptoms. One of the subjects, unidentified, says "They said that one group would receive the American vaccine, and the other group would receive the experimental Israeli vaccine. They specifically explained to us that the vaccine is not dangerous and that we were not being injected with the actual virus, not even the dead virus. Instead, they said they would inject us with the altered DNA of the virus. They said it was very advanced." Following the broadcast, the Defense Ministry issues the following statement: "[T]he research was conducted in preparation for the protection of the population of Israel from a strategic threat. It was conducted under the approval of the Helsinki committee [for human experimentation] and was carried out with the help of soldiers who volunteered, who were kept under very strict medical observation. They were told in detail about the research and given the option to quit at any time." Meanwhile, former IDF Chief Medical Officer Giora Martinovich tells Israel Radio that the tests had been ordered amid fears of an anthrax attack by Iraq under Saddam Hussein, and because foreign-made vaccines were not available. "It seemed clear that the Iraqis would use it [anthrax] against us... It is not possible to buy, abroad, a large quantity of vaccine, which exists only in the United States or in England. Therefore the state of Israel had to develop its own vaccine." Today, Israel has an excellent ability to protect its citizens in the event of an anthrax attack, says Martinovich. He adds that the tests were undertaken on a strictly voluntary basis and minor side-effects were recorded on four of the subjects.

15 May In Brussels, the Belgian government and the Royal Institute for International Relations convene an international colloquium, *Chemical Weapons: Does Prohibition Work?*, to mark the tenth anniversary of the entry into force of the CWC. The keynote address is by OPCW Director-General Rogelio Pflirter.

18 May At UN headquarters, there is a training seminar for technical staff of the United Nations on rapidly determining the presence of micro-organisms and biological toxins, using new and sensitive immunological methods.

19 May In Arkansas, the Pine Bluff chemdemil facility completes the destruction of the last of its sarin-filled munitions, having commenced the destruction some two years previously [see 29 Mar 05]. The inventory included 90,409 GB rockets and two, 1-ton containers of the liquid nerve agent, which accounted for over 12 per cent of the chemical weapons stored at the facility. A press release by the facility says that it will commence the destruction of its stockpile of VX-filled rockets in the autumn, followed by the disposal of VX-filled land mines.

20 May In Zangoura, Iraq, a lorry laden with chlorine gas explodes before ramming into a police checkpoint. As a result, eleven people require medical treatment, says Reuters news agency, quoting "a spokesman for an association of local tribes in western Anbar province fighting al-Qaeda militants". Faleh al-Dulaimi says that police opened fire on the lorry, whereupon it exploded before running into the checkpoint.

Two weeks later, sixty-two US soldiers are taken ill after being exposed to chlorine gas released by a car bomb in Diyala province. According to the *Los Angeles Times*, the soldiers exposed to chlorine suffered dizziness and nausea, but all returned to duty the same day. [See also 17 Mar]

20 May In London, the first in a series of tracer gas trials takes place as part of the Home Office's chemical,

biological, radiological and nuclear (CBRN) Science and Technology Programme. The trials, which will take place over a four to six week period, will involve the release of small amounts of non-toxic, odourless gases in the Marylebone area of London. The Home Office says the purpose of the trials is to improve understanding of the movement of air-borne material in the urban environment so as to enhance the development of public protection. Earlier the Department of Transport undertook similar trials with a view to better understanding the movement of air-borne material through the London underground railway network [see 15 Mar].

21-25 May In Tshwane, South Africa, the third [see 8-12 May 06] assistance and protection workshop for African CWC parties takes place. The workshop, which is jointly organized by the government of South Africa and the OPCW, provides training to twenty-five participants from African CWC parties, including: South Africa, Algeria, Burkina Faso, Burundi, Ivory Coast, Ethiopia, Libya, Malawi, Mauritius, Morocco, Mozambique, Senegal, Sudan, Swaziland, Uganda and Zimbabwe. Training is provided on: planning for and building a support team for civilian protection and defence; rescue and decontamination operations in contaminated areas; and appropriate responses and counter-measures in the event of incidents involving chemical-warfare agents or toxic chemicals.

22 May The USA and other permanent members of the UN Security Council are drafting a resolution to terminate the mandate of UNMOVIC, so reports *Arms Control Today*, quoting Ben Chang, a spokesperson for the US mission to the United Nations. Speaking at a press conference seven days previously, US permanent representative to the UN Zalmay Khalilzad, though making no mention of a resolution, said that "the time has come to move to bring this to a close appropriately. And I believe that there is an emerging consensus to do that". [See also 7 Mar]

22 May The UK Crown Prosecution Service (CPS) announces that it is to demand the extradition from Russia of a former KGB agent to face charges over the murder of Alexander Litvinenko [see 11 Nov 06]. Head of the CPS Sir Ken Macdonald says: "I have today concluded that the evidence sent to us by the police is sufficient to charge Andrei Lugovoi with the murder of Mr Litvinenko by deliberate poisoning." In a statement, Attorney-General Lord Goldsmith says: "The CPS decision was reached after they had consulted me, which is the usual practice in serious and complex cases. They have concluded that there is sufficient evidence to prosecute Mr Lugovoi for murder and it is in the public interest to do so." BBC Online quotes an unidentified spokesman for the office of the prosecution in Russia as saying that there was "no way" Lugovoi could be extradited because of constitutional constraints. However, a Russian citizen who had committed a crime in another country "should be prosecuted in Russia with evidence provided by the foreign state".

Seven weeks later, Russia formally rejects the CPS request saying instead that it is instead prepared to put Mr Lugovoi on trial in Russia if the evidence is forwarded to them.

Two weeks thereafter the UK orders the expulsion of four Russian diplomats in response to Russia's refusal to hand over Lugovoi, a move which is subsequently reciprocated by Russia.

22-27 May In Gothenburg, Sweden, there is the ninth [see 2-6 Jun 04] *Symposium on Protection against Chemical and Biological Warfare Agents*, which is attended by around a thousand participants and a hundred exhibitors. Topics

addressed include the detection and identification of chemical and biological agents, forensic analysis, protection, filters and respirators, decontamination, developing technologies and international operational standards in the field.

23 May The Yemeni army plans to use chemical weapons in areas where it has failed to penetrate through tough opposition resistance, so reports Press TV. The recently launched Iranian-based news network says that "reliable sources" have quoted Yemeni opposition leader Yahya Badr-al-Din al-Huthi as saying that the army purchased a consignment of chemical weapons from Pakistan last week, and has since placed them at the disposal of the country's fifteenth armoured brigade.

23 May In The Hague, the OPCW releases an update on the current status of national implementation of the CWC as compared to its status at the time of the adoption of the follow-up to the plan of action [see 7-11 Nov 05]. Currently 172 (95 per cent) of the 182 parties have designated or established a national authority, compared to 147 (84 per cent) as at 11 November 2005 when the Convention had 174 parties. Article VII(5) submissions have now been received from 105 (60 per cent) of parties; on 11 November 2005 117 (64 per cent) had made such submissions. The number of parties that have enacted legislation covering all key areas is currently 59 (34 per cent), as against 74 (41 per cent) on 11 November 2005.

23-24 May In New York, the UNMOVIC College of Commissioners convenes for its twenty-sixth [see 20-21 Feb 07] regular session. As on previous occasions, observers from the OPCW and the IAEA are also present. There is broad support for maintaining the roster of inspectors even after the termination of the mandate of UNMOVIC [see also 22 May]. The commissioners acknowledge, however, that a new source of funding needs to be sought if such expertise is not to be lost. The College also determines that once dispersed, it would be difficult and more costly to revive such expertise. It is agreed that it would be important to ensure an orderly termination of the mandate of UNMOVIC once decided to do so.

24 May The British Medical Association (BMA) Board of Science releases *The Use of Drugs as Weapons: The Concerns and Responsibilities of Healthcare Professionals* [see also 25 Oct 04]. The purpose of the report is to consider the role of healthcare professionals who could be called on to manage and treat the consequences of pharmaceutical weapons, as well as considering the use of biomedical knowledge in the development of drugs as weapons. The report concludes that the use of drugs as weapons is "not feasible without generating a significant mortality among the target population" and that research and deployment of such agents "would inevitably result in their reaching the hands of state or nonstate actors for whom lethality among those targeted is not of concern". The report makes a series of recommendations targeted at national organizations representing healthcare professionals. In his foreword to the report, Chairman of the BMA Board of Science Charles George says: "The BMA is fundamentally opposed to the use of any pharmaceutical agent as a weapon. The BMA is concerned equally by the promotion of the use of drugs as weapons under the banner of 'nonlethal' weapons and by the ways in which this promotion could lead to weakening [of treaties banning biological and chemical weapons]." The report emanates from a round table meeting on the subject last year, which was hosted by the BMA. At the meeting, participants discussed whether, or how, the

medical profession should react to the development and potential use of pharmaceutical agents as weapons in armed conflict, peace-support missions, hostage crises or law enforcement. [See also 25 Oct 04]

24 May US Deputy Assistant Secretary of the Army for the Environment, Safety and Occupational Health Tad Davis announces that in three months' time the Army, in partnership with the University of Hawaii, will undertake a \$2.3 million underwater survey to try to locate nearly 600 tons of chemical weapons believed to have been dumped five miles south of Pearl Harbor in 1944. The *Honolulu Star Bulletin* quotes the Army as saying that it believes around 16,000 M47A2 bombs containing nearly 600 tons of mustard agent were dumped in the area around 1 October 1944. Each chemical bomb weighs 100 pounds and is nearly 32 inches long. The depth of the sea where the weapons were dumped is estimated to be between 1,000 and 1,500 feet. Davis tells reporters that as a result of "the largest research project" ever undertaken, the Army now believes that as well as the Pearl Harbor site there are two other chemical weapons dumpsites off the Hawaiian coast. As regards the Pearl Harbor site, the greatest quantity of weapons, i.e. nearly 2,000 tons of lewisite, mustard, hydrogen cyanide and cyanogen chloride, is believed to have been dumped in an area 10 miles west of the Waianae Coast; an additional 29 tons of mustard were disposed of 10 miles south of Pearl Harbor.

27-29 May In Koper, Slovenia, exercise *Adriatic Gate 2007* takes place under the US-led Proliferation Security Initiative. The aim is to promote collaboration between Slovenia, Croatia, Montenegro and Bosnia-Herzegovina. The scenario for the exercise involves the interception of a suspicious cargo carrying nuclear and/or chemical materials intended for use as weapons. [See also 26-27 Apr]

28 May The Russian Federal Customs Service suspends, until further notice, the export of all human medical biological materials as a result of a report produced by the Federal Security Service (FSB) on bioterrorism. The report alleged that western nations have been developing "genetically engineered biological weapons" for use against the Russian population. *Kommersant* quotes unidentified sources as saying that in recent months FSB officers have visited major medical facilities in Russia that participate in clinical research for pharmaceutical companies, and have requested the names of the drugs, the names of the partners in the research, the length of the trials, and the sources of financing for the studies. The list of organizations purportedly working on the weapons includes the Harvard School of Public Health, the American International Health Alliance, the Environment and Natural Resources Division of the US Department of Justice, the Swedish Karolinska Institute and Agency for International Development, and the Indian Genome Institute. *Kommersant* quotes one of its sources as saying that "the report contains a wealth of fantastical details about the development of 'ethnically oriented' biological weapons capable of rendering Russia's population sterile and even killing it off".

Nine days later, *Echo Moskvy* quotes Russian Health Minister Mikhail Zurabov as saying that research into creating biological weapons is underway in the world, even though the definite facts of targeting such weapons at Russia are as yet unknown, though it is technically possible. Zurabov says that the Health and Social Development Ministry and Federal Customs Service will shortly issue a document setting out the procedures for issuing permits for exporting samples.

Twelve days later, the export of samples resumes after the Federal Customs Service, the Health Oversight Agency

and pharmaceutical companies reach a compromise. According to *Kommersant*, doctors and pharmaceutical companies say the ban has hampered the treatment of 40,000 people whose samples were being sent abroad to verify the diagnosis, to search for a marrow donor, or to be used in research for new drugs.

28 May Mexico creates a high-level government committee tasked with improving antiterrorism efforts, including matters relating to chemical, biological and nuclear weapons, so reports the *Orlando Sentinel*. It is intended that the work of the committee will lead to the more efficient implementation of domestic measures and the enhancing of international co-operation.

29 May At UN headquarters, Secretary-General Ban Ki-moon transmits to the Security Council the twenty-ninth [see 23 Feb 07] quarterly report on the activities of UNMOVIC, for the period 1 March 2007 to 31 May 2007.

Regarding the recent use of chlorine gas by militants in Iraq [see 20 May], the report states: "To date there have been at least ten reported attacks using various quantities of chlorine, while several other attempted attacks using chlorine and other toxic products have reportedly been foiled by the security forces... Given the current security situation in Iraq, it is possible that some non-State actors will continue to seek to acquire toxic agents or their chemical precursors in small quantities. In addition to using the available supplies of chlorine spread throughout Iraq, non-State actors could also seek to acquire other, more toxic agents that are either indigenously produced or procured from abroad... The possibility of this scenario is due to a number of factors in Iraq. One is the existence of chemical weapons-related expertise in the country, with hundreds of scientific and technical personnel having been involved in the past chemical weapons programme. Another factor is related to the availability and possibility of misuse of dual-use chemical production equipment previously monitored by the Commission."

Annexed to the report is a compendium on *The Issue of Small Quantities of Biological and Chemical Warfare Agents*, which was "conducted only in an empirical way" and based on the estimated quantities used by Iraq in the past for research and development purposes". The compendium was compiled in response to "several well-known incidents worldwide in which biological and chemical agents were acquired and used against unprotected populations by non-State actors". These attacks "which varied in both the agents used and their dispersion models, revealed that biological or chemical warfare agents used in small quantities can be lethal, deeply alarm public opinion and caused a sharp increase in security measures".

29-30 May In Kingston, Jamaica, there is a workshop on *Implementing United Nations Security Council Resolution 1540* [see 28 Apr 04] in the Caribbean, which is organized by the United Nations Office for Disarmament Affairs and sponsored by the European Union and the governments of Canada and Norway. More than thirty government officials, mainly from the Caribbean, participate in the seminar together with representatives of international, regional and sub-regional, non-governmental and industry organizations. Participants discuss the current implementation status of resolution 1540 in the Caribbean region, focusing in particular on reporting, trans-shipment and border controls. Special emphasis is also given to the requirements and opportunities for international cooperation and assistance for implementing all aspects of resolution 1540 and resolution 1673 [see 27 Apr 06], by which the UN Security Council extended the mandate of the 1540 Committee by two years.

29-31 May In Santiago, Chile, the eighth [see 22-23 May 06] regional meeting of Latin American and CWC national authorities takes place. Attending the meeting, which is jointly organized by the government of Chile and the OPCW, are thirty-three representatives of the following CWC parties: Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay and Venezuela. A representative of the Dominican Republic, which has not yet ratified the Convention, also attends. The meeting provides a platform for parties to present their requirements for assistance under the national implementation action plan, as well as to offer specific forms of assistance to other parties. Subjects discussed also include improving the capacity of national authorities to identify and declare industrial activities, and the role of customs authorities in carrying out the import and export provisions of the Convention.

30 May The US Institute of Medicine releases *Long-Term Health Effects of Participation in Project SHAD (Shipboard Hazard and Defense)*. The study concludes that there is no clear evidence that specific long-term health effects are associated with participation in Project SHAD tests [see 11 Dec 03 and 6 Dec 05]; however, because of limitations in the study response-rates and the size of the study, the authors caution that their findings should not be misconstrued as clear evidence that there are no possible long-term health effects related to participating in Project SHAD. The study compared mortality rates and causes of death among deceased SHAD participants and those from a control-group of veterans, by reviewing death certificates and other records. To compare health status of former service members, a questionnaire was used, to which around 61 per cent of SHAD participants and 47 per cent of the control-group veterans responded. Though the overall death rates among SHAD participants were comparable to those among those in the control-group, SHAD participants suffered a higher rate of mortality from heart disease. The study concludes, however, that it is not possible to say whether exposure to chemical agents used in Project SHAD is linked to increased risk of heart disease, because the data on exposure levels is limited. Deaths relating to cancer were also higher among those SHAD veterans who were potentially exposed only to triethylphosphate, however a lack of data on other risk factors prevents any conclusions being drawn therefrom. Veterans who were only potentially exposed to triethylphosphate, or to multiple simulants, did report moderately higher rates of psychological, psychosocial, and behavioural problems. Those SHAD participants who were potentially exposed to active agents such as sarin and Q-fever reported medical symptoms and conditions at rates no greater than the control veterans. The study was sponsored by the Department of Veterans Affairs.

31 May In Tokyo, the High Court dismisses an appeal by Seiichi Endo – a former member of Aum Shinrikyo – against the death penalty handed down to him following his conviction five years ago [see 11 Oct 02] for his role in making sarin for use in the attacks in Matsumoto [see 28 Jun 94] and Tokyo [see 20 Mar 95]. Endo had argued that his sentence was too severe since the cult had brainwashed him into aiding preparations for the attack on the Tokyo subway network, and because he was not involved in the actual execution of the attack. Presiding judge Osamu Ikeda disagreed thus: “The subway sarin incident was an atrocious and vicious act of violence that was dangerous and unprecedented in our

country’s crime history... The defendant Endo was proactively involved in sarin production and his criminal responsibility is in no way lighter than that of others who carried out the crime.” So far, thirteen former members of Aum Shinrikyo have been sentenced to death for the attacks, two of whom have now exhausted the judicial appeals process [see 18 Aug 06, 4 Sep 06 and 15 Sep 06].

June The Australia Group publishes *Fighting the Spread of Chemical and Biological Weapons: Strengthening Global Security*. The document provides a historical account of how the Australia Group came into existence, what its objectives are and the mechanisms it uses to meet those objectives. In addition, it contains an updated set of guidelines relating to the transfer of sensitive chemical or biological items.

1 June In Russia, customs officials have launched an investigation into an attempt to smuggle abroad technical documents that could have been used to produce weapons of mass destruction, so reports RIA Novosti news agency, quoting an unidentified “customs service spokesman”. The official is quoted as saying: “Members of the Urals customs service have opened two criminal cases [into the smuggling] of technical documents that could be used in weapons production.” According to the Federal Customs Service, the “28 booklets of technical documents and reports” were worth \$3.6 million. RIA Novosti states that it is not clear whether anyone has been detained and where exactly the documents were seized.

2 June The US Department of Defense plans to test a biological agent sensor system at the Pentagon. According to the *Washington Examiner*, a lorry will be used to disperse a harmless dust in the car park, exposing up to fifty volunteers to a simulated biological agent. Officials will then use sensory equipment to screen the volunteers. The exercise is part of a five-year effort which will culminate in the installation of a biological detection system that can automatically adjust the Pentagon’s air-circulating systems if sensors detect a lethal agent.

4 June In Brussels, there is the third session of the EU-US Dialogue on Verification and Compliance, which was established under the 2005 Joint Programme of Work on the Nonproliferation of Weapons of Mass Destruction. Participating are US Assistant Secretary for Verification, Compliance and Implementation Paula DeSutter and representatives of EU Member States.

4 June The US Department of Health and Human Services (HHS) announces that it has signed a \$500 million contract with Denmark’s Bavarian Nordic for twenty million doses of modified vaccinia Ankara (MVA). According to the HHS, the vaccine could provide protection following a smallpox outbreak for the estimated ten million people who have impaired immune systems and could suffer serious side effects through use of the standard vaccine. MVA is a weakened version of the vaccinia virus, and unlike the standard vaccine does not contain the live form of the virus. In a press statement HHS Secretary Michael Leavitt says: “Acquiring a stockpile of this new smallpox vaccine is a key step toward protecting even more members of the American public against a smallpox release.” Bavarian Nordic says the deal could be worth as much as \$1.6 billion if HHS exercised options to purchase up to sixty million more doses and to support additional clinical studies of HIV-infected patients, children and the elderly. [See also 19 Dec 06]

6-8 June In Minsk, Belarus, the sixth [see 29-30 May 06] regional meeting of national authorities of CWC parties in eastern Europe takes place. The purpose of the meeting, which is jointly organized by the Belarusian government and the OPCW, is to increase awareness of the practical aspects of national implementation of the Convention, with particular regard to the transfer regime. It brings together participants from the following nineteen CWC parties: Albania, Armenia, Belarus, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Serbia, Slovakia, Ukraine and Uzbekistan. Topics discussed include: national experience in monitoring and controlling scheduled chemicals transfers; promoting awareness in chemical industry and the academic community about the restrictions on scheduled chemicals and the associated reporting requirements; and the electronic processing and submission of declarations.

6-8 June In Heiligendamm, Germany, the leaders of the eight industrialized nations – the UK, Canada, France, Germany, Italy, Japan, the USA, and Russia – convene for the annual [see 15-17 Jul 06] G8 Summit to discuss, amongst other things, the proliferation of weapons of mass destruction. A statement on non-proliferation issued at the end of the Summit states: “We reaffirm our commitment to the multilateral treaty system which provides the normative basis for all non-proliferation efforts. The strengthening and universalisation of WMD related treaties, in particular the [BWC, CWC and NPT] are [...] a key priority... We reiterate the key role of the United Nations Security Council in addressing the challenge of proliferation. In this regard, we underline the importance of full implementation by all States of the UNSC Resolution 1540 [see 28 Apr 04] and we reiterate our support for the efforts of the 1540 Committee, including the sharing of best practices... The Global Partnership against the Proliferation of Weapons and Materials of Mass Destruction [see 26-27 Jun 02] is a unique and successful joint effort. At the midpoint of its lifespan we have reviewed the progress made so far and assessed the state of the cooperative projects undertaken. We acknowledge the progress that has been made since the launch of the Partnership in 2002 but more has to be done to increase the efficiency of our cooperation. We remain firmly committed to completing the Kananaskis goals. We will discuss in due course whether the Partnership should be extended beyond 2012 and if so how to allocate the means for expanding its scope to address threat reduction and non-proliferation requirements worldwide, including those mandated by United Nations Security Council Resolution 1540. We will discuss how other states, both donors and recipients, could be included in an expanded Global Partnership... We welcome the outcome of the Sixth Review Conference of the BTWC [see 8 Dec 06], which made a significant contribution to strengthening the effectiveness of the Convention. We are committed to fully comply with the decisions taken by that conference and to work for successful outcomes of the meetings during the intersessional period leading to the next Review Conference in 2011.”

7 June In the USA, the Center for Arms Control and Non-Proliferation releases an analysis of *Federal Funding for Biological Weapons Prevention and Defense, Fiscal Years 2001 to 2008*. The Center reports that the US government has spent, or allocated, over \$40 billion to address the threat of biological weapons since September 2001. The Bush administration is seeking \$6.77 billion in funding for FY 2008, a \$550 million increase from FY 2007. If approved by Congress, that amount would bring the US total to more than \$48 billion

since FY 2001. According to the Center, funding continues to focus primarily on research, development, acquisition, and stockpiling of medical countermeasures and protective equipment, with over \$31 billion devoted to such functions through FY 2008. Medical surveillance and environmental detection of biological weapons agents totals over \$3 billion, and improving state, local, and hospital preparedness totals over \$9 billion through FY 2008. Less than 2 per cent (or \$875 million) of all federal funding for biological weapons through FY 2008 is devoted to efforts to prevent the development, acquisition, and use of biological weapons by states and non-state terrorist actors. Director of the Center's Biological and Chemical Weapons Control Program Alan Pearson says: “Prevention is inherently less expensive than preparedness and response, but the administration's particularly low level of funding for prevention reflects the low priority it accords bioweapons prevention efforts in general.”

8 June In Moscow, the Council on Biological Security of the Russian Academy of Medical Sciences convenes for a meeting at the Gamaleya Institute of Epidemiology and Microbiology.

8 June Libya has threatened to pull out of a contract signed six months ago with the USA under which the latter agreed to provide Libya with \$45 million to eliminate its stockpile of mustard agent, i.e. 75 per cent of the destruction costs. Reuters quotes an unidentified “US official” as saying that in a recent letter to the State Department, Libya cited the reasons for pulling out of the contract, which is due to take effect in six days time, as being “dissatisfaction with the US refusal to pay for the entire [chemdemil] effort as well as unacceptable legal requirements raised during contract negotiations between the private contractor (hired to do the destruction work) and the Libyan government”. According to Reuters, since Libya pledged to eliminate its WMD programmes [see 19 Dec 03], around 3,500 chemical munitions have been destroyed. Libya, it reports, is still believed to possess 23 metric tons of mustard agent and 1,300 metric tons of precursor chemicals.

8 June The US military considered, but subsequently rejected, a proposal by the Air Force in 1994 to develop a ‘gay bomb’ that could turn enemy soldiers into homosexuals, thus making them more interested in having sexual intercourse than fighting, according to officials from the Department of Defense, speaking on CBS 5 television. The admission is made in response to Edward Hammond, of the Sunshine Project, announcing that, under the Freedom of Information Act, he had obtained documents relating to the proposal from the Air Force's Wright Laboratory in Dayton, Ohio. One document entitled *Harassing, Annoying and Bad Guy Identifying Chemicals* includes several proposals for the military use of chemicals that could be sprayed on to enemy positions, e.g.: “one distasteful but non-lethal example would be strong aphrodisiacs, especially if the chemical also caused homosexual behaviour”. CBS quotes an unidentified Department of Defense “spokesperson” as saying that the Department “is committed to identifying, researching and developing non-lethal weapons that will support our men and women in uniform”, but that the ‘gay bomb’ idea was quickly dismissed. Hammond says: “The notion was that a chemical that would probably be pleasant in the human body in low quantities could be identified, and by virtue of either breathing or having their skin exposed to this chemical, the notion was that soldiers would become gay... The truth of the matter is it would have never come to my attention if it was dismissed at

the time it was proposed... In fact, the Pentagon has used it repeatedly and subsequently in an effort to promote non-lethal weapons, and in fact they submitted it to the highest scientific review body in the country for them to consider.”

10 June The US Department of Homeland Security has allocated \$10 million to develop strategies to counter terrorism that have been conceived by science fiction writers, so reports the London *Sunday Telegraph*. It quotes an unidentified Department spokesperson as saying: “Fifty years ago, science fiction writers told us about flying cars and a wireless handheld communicator. Flying cars haven’t evolved, but cell phones are now a way of life... We need to look everywhere for ideas, and science fiction writers clearly inform the debate.” The *Telegraph* says that one month previously, during a conference in Washington D.C., six authors met with officials to discuss some of their ideas. Author Jerry Pournelle says he advised former President Ronald Reagan on the Strategic Defense Initiative, a concept relating to national missile defence. “I helped devise Star Wars, which helped win the Cold War,” says Pournelle.

11 June At OPCW headquarters, the OPCW hosts a meeting between for CWC parties and representatives of chemical industry associations and the chemical industry. Representatives of the following forty CWC parties attend the event: Argentina, Australia, Belgium, Cameroon, Canada, Chile, China, Cuba, Czech Republic, Finland, France, Germany, Guatemala, India, Indonesia, Iran, Ireland, Italy, Japan, Kenya, South Korea, Latvia, Malaysia, New Zealand, Netherlands, Pakistan, Portugal, Qatar, Russia, Serbia, Singapore, South Africa, Sudan, Sweden, Switzerland, Tunisia, Turkey, Ukraine, the UK and the USA. In total, twenty-two Industry Associations and individual chemical concerns are represented. During the meeting, the chair of the open-ended working group for the preparation of the Second CWC Review Conference [see 11 Dec 06], Ambassador Lyn Parker of the UK, updates the participants on the preparations for the Second Review Conference, which will be held in April 2008.

11 June The UK Home Office releases *The United Kingdom Security & Counter-Terrorism Science & Innovation Strategy*. The Strategy – which is intended for use by government, business, academia and end-users such as the emergency services, international colleagues, and the public – states: “We aim to optimise the benefits of science and innovation to reduce the risk from terrorism so that people can go about their business freely and with confidence. We will do this in the following four ways: expanding a cross-departmental operational analysis approach to identifying government’s research priorities; horizon-scanning for future threats and new scientific developments and inventions to counter such threats; working more effectively with business and academia to ensure that research is delivered and exploited through the cultivation of a strong and innovative counter-terrorism research market; and collaborating with international partners, allowing increased sharing of knowledge and technology.”

11-15 June In Kruševac, Serbia, a basic chemical-weapons response capacity-building training course for North African CWC parties takes place at the Nuclear, Biological, Chemical Defence Personnel Advancement Center. The course takes place in the context of the OPCW project to promote regional chemical weapons response capacity for Algeria, Libya, Morocco and Tunisia, which is supported by the European Union through its third Joint Action in support of OPCW activities [see 12 Dec 05].

Three days later, a four-day advanced course is held at the Center.

14 June Russian Federal Industry Agency Deputy Chief Viktor Kholstov says western nations have failed to meet their commitments to fund Russian chemdemil efforts [see also 12 Dec 06]. In an interview with *Rossiyskaya Gazeta* Kholstov says: “Several states have officially pledged to Russia gratuitous financial assistance of \$2.2 billion. Meanwhile, the Americans have stated that they will allocate half this sum... How are these international obligations being met? With great difficulty. Of all the announced assistance, we have received a total of \$450 million, and from the United States, as of the present time, work has been completed for only \$258 million of the promised billion-plus.” Kholstov also criticizes the French and UK contributions thus: “The UK stated that it would allocate to us at least £100 million but as of today has allocated only £5.6 million. France promised us EUR 750 million, but so far we haven’t received a cent. In 2003, Italy promised to begin financing construction of a site in Pochep, Bryansk Oblast, having allocated EUR 360 million. But the money has never gone to that site.

Eleven days later, State Duma deputy Nikolay Bezborodov says that at the beginning of this year foreign financial assistance accounted for less than ten per cent of the budget funding allocated to the federal chemdemil programme. In an interview with Interfax-AVN, Bezborodov says that, according to figures received by the State Duma from the Audit Chamber, the actual amount of foreign aid promised was around 34.2 billion roubles [about £1.3 billion].

15 June In Bayannaer City, China, a number of construction workers suffer from temporary nausea and dizziness after being exposed to a ruptured mustard gas munition, probably originating from the Japanese Imperial Army, so reports Xinhua news agency. The workers uncovered the munition whilst excavating an area land on which the construction of a residential building is planned. [See also 21 Jun 05]

15 June In Geneva, the revised International Health Regulations, which were adopted by the World Health Organisation (WHO) two years ago [see 16-25 May 05], enter into force. The revised regulations cover a broader range of public health emergencies than the original regulations adopted in 1969, including emerging diseases. Diseases, the occurrence of which must be notified to the WHO, include smallpox, polio, SARS and human influenza caused by a new sub-type. In addition, the regulations call for reporting several other diseases, including cholera, pneumonic plague, yellow fever, and viral hemorrhagic fevers (such as Ebola and Marburg), if they cause a serious public health impact or pose a risk of international spread. Under the old rules, only cholera, plague, and yellow fever had to be reported. The revised regulations also require countries to report natural, accidental, or deliberate use of biological or chemical agents or radionuclear material.

15 June The US Food and Drug Administration (FDA) announces that it has developed computer software that can assess the food industry’s vulnerabilities to chemical, biological, and radiological contamination. The software is called ‘CARVER+Shock’: the first word standing for ‘criticality, accessibility, recuperability, vulnerability, effect, and recognizability’; “Shock”, refers to the serious psychological effects expected following a terrorist attack on the food supply. FDA Acting Supervisor Donald Kautter, says that currently government inspectors need two to three days to question up

to thirty plant employees. "What we've done is taken that face-to-face interaction and put it into a software program so that the questions and discussion are posed by the computer," says Kautter. The FDA says that once downloaded from its web site, it should take a facility less than a day to complete the process. It includes more than a hundred questions and prompts employees about vulnerable areas within their facility and the food production process while pinpointing the greatest threat type.

18 June In New York, a federal court commences hearing an appeal by the Vietnamese Association for Victims of Agent Orange/Dioxin (VAVA) against Dow Chemical, Monsanto and 35 other US chemical companies for their role in manufacturing chemicals that were later used by the US military during the Vietnam War. The lawsuit was dismissed two years previously, when a district court ruled against VAVA on the grounds that no international or domestic law prevented the use of herbicides in conflict [see 10 Mar 05]. The lawyer representing VAVA, Jonathan C Moore, tells the three-judge panel that the defendants "knew how [the herbicide] was going to be used, and they had reason to believe the effect would be disastrous and they did it anyway". According to BBC News Online, the case is expected to last several months.

18-19 June In Algiers, there is a workshop to promote universal adherence to the CWC in Africa and to encourage its full and effective implementation in the region. It is supported by the European Union's Joint Action with the OPCW [see 19 Mar]. In addition to the representatives of states not yet parties to the CWC, i.e. Angola, Congo, Egypt and Guinea-Bissau, representatives from a large number of African, as well as non-African, CWC parties attend the workshop. Experts and representatives from the European Union, the League of Arab States, the United Nations Department for Disarmament Affairs and the 1540 Committee also attend. During the meeting, OPCW Director-General Rogelio Pflinter meets privately with representatives of the four states not yet parties with a view to accelerating the process of them joining the Convention.

18-22 June In Seoul, South Korea, there is an international assistance and protection course, which is being jointly organized by the government of South Korea and the OPCW. The course provides training to participants in planning and building a support team in civil protection, civil defence, and decontamination operations in contaminated areas, as well as in appropriate responses and countermeasures in the event of incidents involving chemical-warfare agents. Representatives from the following eleven CWC parties attend the course: Armenia, Bangladesh, Georgia, India, Indonesia, Iran, Malaysia, Mongolia, Singapore, South Korea and Uzbekistan.

19 June From Brussels, the General Secretariat of the Council of the European Union releases its latest [see 9 Jan] six-monthly progress report on the implementation of the EU strategy against the proliferation of WMD. The report summarises events in the first half of 2007, such as the adoption of a new EU Joint Action in support of the OPCW [see 19 Mar] and one in support of Russian chemdemil activities [see 19 Mar], EU support to the commemoration of the 10th anniversary of the CWC [see 29 Apr] and two regional seminars under the EU Joint Action in support of the BWC in Costa Rica and Senegal. The report also notes that EU Member States have been preparing contributions to the first BWC Meeting of Experts in August through its "BTWC e-task force". Additionally the report states that the EU Personal Representative for the Non-Proliferation of Weapons of Mass

Destruction Annalisa Giannella has established contacts with the Director-General of the World Health Organization (WHO) to discuss collaboration in the area of biosafety and biosecurity. The report says that EU member states are considering a draft project proposal from the WHO with a view to preparing a Joint Action.

19 June US Department of Health and Human Services (HHS) Secretary Michael Leavitt announces the creation of a public health advisory panel to provide HHS with guidance on "trends, challenges and opportunities" relating to the prevention of, preparation for, and responses to chemical, biological, nuclear or radiological incidents. The National Biodefense Science Board – which will comprise thirteen members selected from the fields of science, public health and medicine – could also be called upon to offer recommendations on research and development. Leavitt says: "Planning responses to incidents involving chemical, biological, nuclear or radiological agents requires state of the art science... This new advisory board will add a wide range of expertise and viewpoints from outside the government to help inform HHS decision-making processes." The Pandemic and All-Hazards Preparedness Act [see 19 Dec 06] authorized the creation of the panel.

21 June At UN headquarters, the Secretary-General transmits to the Security Council a summary of UNMOVIC's compendium of Iraq's proscribed chemical, biological and missile weapons programmes [see 28 Feb 06]. The summary provides a broad view of the establishment, evolution and operation of UNMOVIC in Iraq with any "sensitive information" removed.

Six days later, a redacted version of the 1,500 page compendium is released. The compendium is divided into the following eight chapters: Building a UN verification regime; the organizational structure of Iraq's proscribed weapons programmes; Iraq's chemical weapons programme; Iraq's missile programme; Iraq's biological weapons programme; procurement; interlinks between Iraq's weapons programmes, personnel in past proscribed programmes and relative size of the WMD programmes; and, observations and lessons learned. The compendium is intended to provide a detailed technical analysis of Iraq's past WMD programmes and to explore issues of uncertainty. It sets out what Iraq declared as well as assessments, comments and judgments made by UN inspectors. It makes references to documents, inspection reports or interview testimonies that are not available in the public domain since they are "internal documents supplied by Iraq such as various declarations and the documents from the Haidar Farm in 1995, as well as information contained in inspection reports". In compiling the compendium, UNMOVIC relied on all information resources available to it, including "various sets of declarations submitted by Iraq, reports of inspections conducted by both UNSCOM and UNMOVIC, notes of discussions and interviews with Iraqi personnel, documents provided by Iraq and those found independently by inspectors during the course of inspections, suppliers, overhead imagery, and information provided to UNMOVIC by governments". The document states: "Much of the data provided by Iraq to the United Nations, in terms of production of agent, weaponization, and usage was stated to be estimates or based on other information from recollection. Such uncertainties do not contribute readily to a full 'material balance' approach whereby raw materials, inputs and production can be balanced against usage, waste, destruction and remaining stocks. The imprecise data related to production and weaponization lead to a 'residue of uncertainty' in the overall verification results. [The] implemented policy of unilateral

destruction which included physical evidence of the past WMD programmes as well as supporting documentation [...] hindered verification through the material balance approach. By using a number of techniques [...] however, United Nations inspectors were able to fill many gaps and obtain what they believe is a reasonably comprehensive picture of the extent of Iraq's past WMD programmes although there are still some aspects which are not fully known or understood."

21 June The US Chemical Materials Agency announces that 45 per cent of the country's stockpile of chemical weapons has now been destroyed [see 16 Feb 05]. The Agency's acting director, Dale Ormond, says: "We successfully met the 1, 20 and 45 percent destruction milestones specified by the treaty while maintaining an outstanding safety record... It is a tribute to the United States' leadership in developing and implementing chemical demilitarization technology." Ormond says that the Agency is "still in the hunt" to complete the destruction process by the deadline under the CWC, as extended [see 5-8 Dec 06], and this "is achievable", but "it's going to be close at a couple of the sites. As of three days previously, the Army had destroyed more than 13,775 tons of mustard agent and sarin, and VX nerve agents, along with more than 1.6 million weapons and containers.

24 June The Iraqi High Tribunal sentences Ali Hassan al-Majid – also known as 'Chemical Ali' – and two other former Iraqi officials to death after finding them guilty of genocide, crimes against humanity and war crimes for *inter alia* ordering the use of chemical weapons during Operation Anfal [see 18 Dec]. Also sentenced to hang are former defence minister Hashim Ahmad al-Tai and former Iraqi armed forces deputy operations director Hussein Rashid Mohammed. The defendants had argued that the weapons were used against Kurdish rebels who were aiding Iran during its war with Iraq from 1980 to 1988. Meanwhile, military intelligence chief Sabir al-Douri and former military intelligence eastern regional office head Farhan Mutlaq Saleh receive life sentences for their roles in the operation. Former Iraqi president Saddam Hussein had also been a defendant in the case, however, charges against him were dropped following his execution after the Tribunal found him guilty of ordering a massacre in Dujail [see 30 Dec 06].

Three weeks later, Iraqi Deputy Prime Minister announces, during a meeting with the Halabja Victims' Society, an NGO – that al-Majid will be executed in the Kurdish town of Halabja notwithstanding that a nine-member panel is currently considering his appeal.

25 June The Maryland Department of the Environment has officially approved the closure of the Aberdeen chemdemil facility under the federal Resource Conservation and Recovery Act, according to a press release by the Chemical Materials Agency. The approval makes the facility, which has already been demolished [see 30 Oct 06], the first to be certified as closed by a state agency under the Act. The Agency says that for a facility to be certified as closed the operator must develop and gain government approval for the closure plan, which must be adhered to during decontamination and elimination of contaminated equipment and soil. Sampling analysis and reporting is required for any potentially contaminated material. The appropriate agency at the end of work must receive a report confirming removal or remediation of contaminated equipment and proving that the closure plan had been followed. The Agency says that, in accordance with the Act, the Johnston Atoll chemdemil facility, which finished operations seven years ago [see 29 Nov 00],

is currently undergoing the process of "permit closure". [See also 12 Mar]

25-29 June In Spiez, Switzerland, the tenth [see 26-30 Jun 06] Chemical Weapons Protection Chief Instructor Training Programme (CITPRO X) takes place at the NBC Training Centre. Attending the course, which is jointly conducted by the Swiss government and the OPCW, are representatives of the following 25 CWC parties: Albania, Algeria, Bangladesh, Brazil, Cook Islands, Cuba, Dominica, Guyana, Iran, Jordan, Kyrgyzstan, Morocco, Nigeria, Pakistan, Poland, Romania, Trinidad and Tobago, Tunisia, Turkey, United Arab Emirates, Uganda, Uruguay, Viet Nam, Yemen, and Zambia.

26 June In Karachi, the son of former Baloch leader Nawab Akbar Khan Bugti says that the Pakistani government used chemical weapons to kill his father, so reports Asia News International (ANI) news agency. Speaking at a conference on the subject of *Karachi Baloch: Social Economic Problems*, Nawabzada Jamil Bugti says his father was targeted during a large-scale military operation in the Bhambore Hills on 26 August 2006, which targeted 50 to 80 of his closest family members and top commanders. [See also 23 Jan 06]

26 June The US Central Intelligence Agency (CIA) releases previously classified documents that catalogue numerous past CIA operations, such as failed assassination plots – including a failed attempt by the Mafia on the life of Fidel Castro in the early 1960s – and mind-control experiments. An undated memorandum states that the CIA requested commercial drug manufacturers to forward samples of medicines rejected for commercial sale "because of unfavorable side effects". CIA scientists then tested some of the drugs on monkeys and mice and any that showed promise "were then tested at Edgewood, using volunteer members of the Armed Forces". Another document, dated 8 May 1973, refers to CIA scientists administering hallucinogens such as LSD on "unwitting subjects" in 1963. Also known as the "Family Jewels", the nearly 700 pages of documents were compiled in 1973 after CIA employees were requested to report activities they thought might be inconsistent with the Agency's charter. In a press release, the CIA states that in 1974 it provided the documents to the Rockefeller Commission and to the Church and Pike Committees in Congress. Parts of the collection were released to the public in subsequent years. The current release stems from a Freedom of Information Act request dating back to 1992.

26-29 June At OPCW headquarters, the Executive Council convenes for its forty-ninth [see 13-16 Mar] session [see *Report from The Hague*, pp 18-22 above, for further detail].

27-28 June In Jordan, the fifth regional seminar – organized by the Council of the European Union in support of the Joint Action to promote universalization of the BWC and to ensure full national implementation of its provisions [see 27 Feb 06] – is scheduled to take place. Previously, the Council organized a regional seminar targeted at Latin American and Caribbean states, which took place in San José, Costa Rica in January this year. Attending the seminar were representatives of thirteen Latin American and Caribbean BWC parties, and one non-party, i.e. Trinidad and Tobago. Attending the fourth seminar, which took place in Senegal in April this year, were seven BWC parties from the West and Central African region, together with eight out of the ten target countries, i.e. Angola, the Central African Republic, Chad, Côte d'Ivoire, Eritrea, Gabon, Guinea, and Liberia.

28 June Kazakhstan deposits its instrument of ratification of the BWC in Moscow, thereby making it the 157th [see 3 Jun 06] party to the Convention.

Six weeks previously, when the Kazakh Parliament passed a law approving the ratification of the Convention, ITAR-TASS news agency quoted “lawmakers” as saying that joining the BWC “will become another proof of Kazakhstan’s constructive policy in nonproliferation of weapons of mass destruction”. Three weeks thereafter Kazakh President Nursultan Nazarbayev signed a bill approving ratification.

28 June In Luxembourg, the Council of the European Union adopts a *Common Position relating to the 2008 Review Conference of the [CWC]*. Amongst other things, it states that the European Union will “promote” the “reaffirmation of the comprehensive nature of the prohibition of chemical weapons as laid down in the General Purpose Criterion” by:

“Reconfirming that the Convention’s prohibitions apply to any toxic chemical, except where such a chemical is intended for purposes not prohibited by the Convention and as long as the types and quantities are consistent with such purposes, and thus take into account the developments in science and technology since the First Review Conference;

“Underlining the obligation of States Parties to reflect the General Purpose Criterion in their national implementation legislation and administrative enforcement practice;

“Emphasising the obligation of States Parties to declare riot control agents”.

The document also states that the European Union will “promote” the “implementation of the provisions of the Convention on consultations, cooperation and fact-finding, in particular the challenge-inspection mechanism, which remains an indispensable and readily available instrument as well as a viable and usable tool of the OPCW’s verification regime, stressing the legal right of States Parties to request a challenge inspection without prior consultation and encouraging the use of the mechanism as a matter of course where appropriate”.

28 June At UN headquarters, the Security Council adopts resolution 1672 under which it “decides to terminate immediately the mandates of UNMOVIC and the IAEA under the relevant resolutions”. The resolution, which was submitted by the UK and USA [see also 22 May], was adopted by a vote of fourteen in favour to none against, with Russia abstaining. The resolution also “invites the Government of Iraq to report to the Security Council within one year on progress made in adhering to all applicable disarmament and non-proliferation treaties and related international agreements, notably the [CWC], an Additional Protocol to its Safeguards Agreement, and on progress made by the National Monitoring Directorate and the Government of Iraq with regard to dual-use controls and harmonizing Iraqi export legislation with international standards”. Annexed to the resolution is a letter from the Secretaries of State of the UK and USA dated one day previously, informing the Council that all appropriate steps had been taken to “secure, remove, disable, render harmless, eliminate or destroy” Iraq’s known weapons of mass destruction, and all known elements of its programmes to develop such weapons. A letter from the Foreign Minister of Iraq dated 8 April 2007, also annexed to the resolution, requests the termination of the UNMOVIC and IAEA mandates. Prior to the adoption of the resolution, the Council heard a briefing from Acting Executive Chairman of UNMOVIC Demetrius Perricos, who said it was up to the Council to exercise its judgment in accepting a “residue of uncertainty” in closing the file on Iraq’s weapons of mass destruction. He added: “In the present security environment of Iraq, the possibility should not be

discounted that non-state actors may seek to acquire toxic agents or their chemical precursors in small quantities. One recent example is the reported use by insurgents in Iraq of toxic industrial chemicals, previously under UN monitoring, such as chlorine, combined with explosives for dispersal [see 20 May]. Explaining Russia’s decision to abstain, Russian Ambassador to the UN Vitaly Churkin, speaking to the press after the vote, says there had not yet been a definitive statement about the existence of weapons of mass destruction in Iraq.

29 June In Iran there are memorial events to mark the National Day Against Chemical and Biological Weapons. A particular focus is the twentieth anniversary of the Iraqi air attack on the border town of Sardasht during which large numbers of non-combatants fell victim to mustard gas [see 11 Mar 03 and 28 Jun 06]. There are reported to have been five thousand CW casualties including 169 civilian deaths.

29 June The Russian State Duma Defence Committee has drawn up a draft budget for 2008-2010 that includes around \$2.92 billion for chemdemil activities, so reports Interfax-AVN military news agency, quoting an unidentified Committee official. The budget earmarks \$1.1 billion for disposal programs in 2008, \$1.1 billion for 2009 and \$763 million for 2010. “The funds allocated will allow five chemical weapons disposal facilities to become operational,” the official is quoted as saying. Richard Weitz of the Hudson Institute says the budget would allocate almost \$1 billion more for chemdemil than the previous spending plan.

30 June Russia TV broadcasts a report on a team of Russian ecologists who are currently undertaking underwater research near the Danish island of Bornholm in the Baltic Sea to establish the danger presented by dumped chemical munitions [see also 2 Mar 06]. Director of the Russian Academy of Sciences Shirshov Institute of Oceanology Vadim Paka says: “We can now say fairly confidently that there are no signs of the situation developing catastrophically.”

2 July In Canberra, the Chemical, Biological, Radiological and Nuclear Data Center opens. The government facility – which comprises two laboratories for conducting forensic and scientific analysis, an ‘evidence recovery triage unit’ and a mobile unit – has as its purpose the collection of information on possible terrorist threats to Australia.

2 July Russia plans to install equipment necessary for the detection of WMD and related technologies at all its border crossings by 2011, so reports Interfax-AVN military news agency. An unidentified “law enforcement” source is quoted by Interfax-AVN as saying: “At present, it is practically impossible to detect chemical and biological elements necessary for the production of relevant types of weapons without opening the containers because of the lack of the necessary equipment.” The source says that border crossings currently have no more than sixty per cent of the technical equipment required.

2-6 July In Madrid, there is an advanced course for personnel from Spanish-speaking CWC national authorities [see also 3-13 Jul 06]. The aim of the course, which is jointly organized by the Spanish national authority and the OPCW, is to help CWC parties to comply with their obligations under the National Implementation Action Plan. It is attended by representatives of the following fifteen parties: Argentina, Bolivia, Chile, Costa Rica, Cuba, Ecuador, El Salvador,

Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay and Venezuela.

5 July Australian Prime Minister John Howard launches *Australia's National Security: A Defence Update 2007* during the Global Forces 2007 conference, run by the Australian Strategic Policy Institute. The document sets out the government's strategic outlook and the security measures the government is taking with regard to national security. Regarding proliferation of WMD, it states: "WMD are the ultimate asymmetric threat. We know that terrorist groups, al-Qaeda among them, are interested in buying or developing rudimentary WMD. Increasingly we see that military capabilities which were once available only to states are being used by terror groups and other non-state actors. Nowhere is this more worrying than when it might involve WMD. Non-state groups, particularly extremist, decentralised, cellular networks, are unlikely to be deterred from using such weapons by the threat of retaliation. So Australia has an over-riding interest to prevent the spread of WMD by backing arms control agreements and applying active counter-measures with our allies – such as the Proliferation Security Initiative [see 27-29 May] – where proliferation is discovered... Globalisation, terrorism, the challenges posed by fragile states and the threat of WMD proliferation all continue to shape our security environment. We also need to take into account relations between the major powers in our region and the changes in the use of force by states and terrorists. Because of their importance to our interests and their potential to reshape global security, the Middle East and Asia-Pacific will continue to focus our attention for some time."

5 July In Israel, during a parole board meeting of the Israel Prison Service, the State Attorney's Office says that both the Israel Security Agency (ISA) and the Mossad have submitted opinions opposing the early release of Nahum Manbar [see 5 Dec 00] on the grounds that he remains a threat to national security and because his release would damage public confidence in the law enforcement system. The board decides to adjourn the hearing and to reconvene in August. Manbar was convicted of selling military equipment – including equipment and information intended for use in building a mustard and nerve gas factory – to Iran and of other security offences, including helping the enemy in its war against Israel and passing information to the enemy with the intention of harming state security [see 17 Jun 98]. He was sentenced to sixteen years imprisonment [see 15 Jul 98]. According to *Haaretz*, the arms deals brought Manbar into contact with those responsible for Iran's missile and chemical-weapons programmes. After several meetings, primarily in Vienna, Manbar agreed to supply Iran with more than 120 tons of chemical material that could be used to make chemical weapons.

8 July In Oregon, the Umatilla chemdemil facility destroys the last of its 155mm sarin-filled shells, having commenced the process six months previously [see 3 Jan 07]. In a press release, the Chemical Materials Agency says: "The GB agent disposal campaign included destroying more than 155,000 munitions and about 1,010 tons of agent. It began [two years ago] [see 16 Aug 04]. It is the first of three major agent disposal campaigns. Munitions containing VX nerve agent and mustard blister agent remain stored at the depot."

9-11 July In Tshwane, South Africa, a sub-regional workshop takes place for the representatives of CWC national authorities in the region of the Southern African Development Community. It is attended by thirty-nine representatives of

the following fourteen CWC parties: Botswana, the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, the Netherlands, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. Angola, a non-party, also participates. The aim of the workshop, which is jointly organized by the government of South Africa and the OPCW, is to raise awareness of parties' obligations under the CWC; and to provide participants with an opportunity to share experiences; and to assist and to support one and other in addressing challenges relating to national implementation of the Convention.

10 July In Libya, the director of the Ghadaffi Foundation announces that it has helped broker a compromise agreement with the parents of the 438 children whom five Bulgarian nurses and a Palestinian doctor (who now also has Bulgarian nationality) were convicted three years ago of infecting with HIV, and were subsequently sentenced to death [see 6 May 04]. Fifty-six of the children infected have since died. Salah Abdessalem says the deal "satisfied all the parties and puts an end to this crisis", adding that the deal was between the families and a special aid fund for victims set up by Tripoli and Sofia in 2005 under EU auspices.

The next day, the Supreme Court dismisses appeals by Snezhana Dimitrova, Nasya Nenova, Valya Chervenishka, Valentina Siropulo, Kristiana Valcheva and Ashraf Juma Hajuj against the death penalty, which had been upheld last year [see 19 Dec 06].

Six days later, the Supreme Judicial Council, a semi-political body, accepts the terms of the compensation agreement – under which the families of those infected will receive \$1million per child – and commutes the death sentences to terms of life imprisonment. According to Reuters news agency, under a 1984 prisoner-exchange agreement with Bulgaria, Libya can transfer the medics to Bulgaria, where government officials have said they could be pardoned. Speaking to reporters in Sofia, Bulgarian Foreign Minister Ivailo Kalfin says: "Tomorrow morning we will start working on implementing the transfer of the medics... For us the case will end once they come back to Bulgaria."

Thirteen days later, the six medics arrived back in Bulgaria to serve out their sentences, but are immediately pardoned by President Georgi Parvanov. Meanwhile, speaking at a news conference in Paris, French President Nicolas Sarkozy says that no money had exchanged hands to secure the release of the six: "Neither Europe nor France has made the smallest financial contribution to Libya", says Sarkozy. BBC News Online quotes unidentified EU "officials" as saying that the agreement centred on the full normalization of EU relations with Libya, including the opening of the European market to Libyan farm and fishery produce, technical assistance for the restoration of archaeological monuments, and EU grants for Libyan students.

11 July Albania is certified by the OPCW as having destroyed its stockpile of 16,678 kilograms of chemical-warfare agents, which included mustard, lewisite, mustard/lewisite mixture, adamsite, and chloroacetophenone agents. In a press release, the OPCW states that Albania is now the first nation "completely and verifiably to destroy all of its chemical weapons". In congratulating the Albanian achievement, OPCW Director-General Rogelio Pflirter also extends his appreciation to Greece, Italy, Switzerland and the USA for the support they provided to Albania in its chemdemil effort. Speaking at a press conference in Tirana, Albanian Deputy Minister of Defence Karabina says: "[T]oday we announce that with the destruction of weapons and chemical agents, we make the country more secure and at the same

time fulfil the duty for achievement of NATO-required standards... I point out that cooperation and support from the United States, through the global threat reduction programme, in the framework of fight against terrorism, launched and supported by the honoured US Senators Nunn and Lugar, has been a major factor in its success." Karabina points out that although the project was funded by the USA, the inspection costs had been covered by Switzerland and Greece.

11 July In Brussels, the European Commission publishes a 'green paper', the purpose of which is to stimulate a debate and launch a process of consultation on how to reduce biological risks, and ways of enhancing preparedness and response with a view to improving security, the prevention of deliberate criminal acts and accidents, and the response to naturally-occurring outbreaks. The 17-page paper reflects recommendations emerging from two seminars held by the Commission last year on European bio-preparedness and a workshop on transport and traceability of bio-materials. Announcing the release of the paper, Commissioner Franco Frattini says: "Although in the past terrorists used explosives or improvised explosive devices, they may in the future resort to non-conventional means such as biological weapons or materials... Therefore, risks from dangerous biological materials and pathogens have to be reduced and preparedness fostered in Europe through a comprehensive approach aiming at achieving a better preparedness in this area." A period of public consultation on the paper will now take place until October.

11 July In the US House of Representatives, testifying before the Armed Services Committee, Deputy Director of National Intelligence Thomas Fingar says that although the USA continues to receive intelligence on attempts by al-Qai'da to acquire chemical, biological, radiological or nuclear weapons, the use of conventional explosives continues to be the most likely scenario of an attack. He says that after the threat of terrorism, concerns about the proliferation of unconventional weapons is the second most urgent concern, and that controlling access to sensitive dual-use technologies as well as the scientific knowledge to turn them to weapons-related purposes has become more difficult since the end of the Cold War. Fingar says: "Globalization is the defining characteristic of our age and has more positive than negative consequences... But globalization does facilitate the terrorist threat, increases the danger of WMD proliferation, and contributes to regional instability and configuration of power and influence, especially through competition for energy."

11-12 July At UN headquarters, there is a meeting, organized by the Office for Disarmament Affairs, for states and international organizations to discuss efforts made to advance implementation of Security Council resolution 1540 [see 28 Apr 04 and 27 Apr 06] and ways of enhancing communication and coordination among those providing assistance. Participating in the workshop are representatives of around twenty-five UN member states, the IAEA, the OPCW and the European Union. In addition, representatives from six non-governmental organizations brief members of the Committee on measures they have taken to further the implementation of the resolution. The meeting, which is the first of its kind, came about on the initiative of the Chairman of the 1540 Committee, Peter Burian of Slovakia.

12 July In Liberec, Czech Republic, an exercise on emergency preparedness and response to a chemical or radiological terrorist attack takes place at the Tipsport Arena and at an army barracks. The event comes at the end of a

one-week seminar on chemical and radiological terrorism, which was organized by the Czech Defence Ministry and attended by representatives from all 26 NATO member states.

12 July US Department of Health and Human Services (HHS) Assistant Secretary for Preparedness and Response Craig Vanderwagen announces that, five months after announcing its creation, HHS has now introduced the Pandemic Severity Index. The purpose of the Index is to calibrate the severity of viral outbreaks on a scale of one to five. Speaking at a meeting of the National Infrastructure Advisory Council, Vanderwagen says: "We can talk about a category one which would be basically a seasonal flu which is maybe a little more than the usual seasonal flu up to a category five, which would be a 1918-like event or maybe even more severe than that."

12 July In the USA, the Chairman of the Joint Chiefs of Staff of the Departments of the Army, Navy Marine Corps, Navy, Air Force, and the Coastguard releases *Homeland Defense* [see also 2 Oct 06]. The purpose of the document is to provide military guidance for the exercise of authority by commanders and to prescribe joint doctrine for operations and training, as well as providing military guidance for use by the Armed Forces in preparing their appropriate plans. Though not providing specific guidance with regard to chemical and biological weapons [but see 2 Oct 06], the document does make the following statements: "Adversaries have or are obtaining WMD and the means to deliver them, including long-range ballistic missiles. The terrorist attacks of September 11, 2001 illustrate an adversary's capabilities and willingness to use asymmetric approaches. Successfully countering symmetric and asymmetric threats and reducing risks requires a concerted and coordinated effort by DOD and other federal agencies; state, tribal, and local governments; and every citizen... In spite of intensive counter-proliferation and arms control efforts, the likelihood that adversaries will employ WMD against the United States or its interests has increased. A CBRNE (chemical, biological, radiological, nuclear material or high yield explosives) attack could come in a variety of forms, from release through conventional means such as a ballistic missile to unconventional means (e.g., a 'suitcase' radiological device)."

12-13 July In Jakarta, police officers from ten Association of the Southeast Asian (ASEAN) countries convene to discuss preventing and responding to acts of bioterrorism. Also participating are experts in bioterrorism from Interpol and other ASEAN countries.

12-13 July In Washington D.C., US-China Economic and Security Review Commission holds a hearing on *China's Proliferation and the Impact of Trade Policy on Defense Industries in the United States and China* [see also 24 Jul 03 and 14 Sep 06]. Those testifying before the Committee include Deputy Assistant Secretary of State for International Security and Nonproliferation Donald Mahley.

13 July In Tokyo, the High Court upholds the conviction of Tomomasa Nakagawa, a former member of Aum Shinrikyo, who was found guilty of being involved in the sarin attacks in Matsumoto [see 28 Jun 94] and Tokyo [see 20 Mar 95]. In denying his appeal, the court said there was "no particular reason to refrain from giving the death penalty even though [Nakagawa] has shown remorse and offered an apology". Nakagawa, who was convicted four years previously [see 29 Oct 03], is one of many former members of the cult

who have been sentenced to death, though to date none have been executed [see 18 Aug 06, 4 Sep 06 and 15 Sep 06].

Eleven days later, Nakagawa lodges an appeal against the ruling with the Supreme Court. [See also 31 May]

16 July *The* (London) *Times* reports that the Ministry of Defence has submitted a planning application to build a new “centre of expertise” at its Porton Down research facility, which will involve building new laboratories, offices, roads and car parks. The *Times*, quotes an unidentified “spokesman” for the Ministry of Defence as saying: “It will help to fight the terrorist threat and also any outbreaks of deadly diseases. It will be a biological science park.” If approved by the local council, the facility could become operational in two years time.

17 July In The Hague, the OPCW announces that 173 of the 182 CWC parties have now established, or designated, national authorities. It gives these figures in the context of issuing a press release to the effect that Montenegro has now designated its Ministry of Foreign Affairs as its national authority.

17 July In the USA, the Director of National Intelligence presents to President George Bush and Congress a National Intelligence Estimate on *The Terrorist Threat to the US Homeland*. Included in the unclassified ‘key judgments’ is the following statement: “We assess that al-Qa’ida will continue to try to acquire and employ chemical, biological, radiological, or nuclear material in attacks and would not hesitate to use them if it develops what it deems is sufficient capability.” [See also 11 Jul]

18 July In Tokyo, the High Court overturns a previous landmark ruling [see 29 Sep 03 and 26 Apr 04] that ordered the Japanese government to pay around \$1.56 million in compensation to thirteen victims and relatives of people killed by chemical weapons unearthed at construction sites in China’s Heilongjiang Province between 1974 and 1995. While confirming that Japanese troops had indeed abandoned the weapons in China, the judge said that the deaths could not necessarily have been prevented even if Japan had told the Chinese government about the weapons. A joint statement issued following the ruling by two associations offering legal services and a human rights group, i.e. All-China Lawyers’ Association, China Legal Aid Foundation, and China Foundation for Human Rights Development, states: “Against this background, the ruling by the Tokyo High Court turned a blind eye to the victims’ human rights and betrayed judicial fairness. We strongly condemn it.” The head of All China Lawyers Association’s (ACLA), Yu Ning, says that ACLA will work with the claimants to appeal the ruling.

Four months previously, a group of five Chinese claimants lost a court battle seeking compensation for injuries from abandoned chemical weapons going back as far as 1950 [see 13 Mar]. Two years previously similar appeals were also rejected [see 19 Apr 05 and 19 Jul 05]

19 July Trinidad and Tobago deposits its instrument of ratification of the BWC, thereby taking the total number of parties to 158 [see 28 Jun].

20 July In Tokyo, the Supreme Court rejects an appeal by Masato Yokoyama, a former member of the Aum Shinrikyo cult, against the death penalty for his earlier conviction [see 30 Sep 99 and 19 May 03] for his role in the sarin attack on the Tokyo underground railway network [see 20 Mar 95]. [See also 13 Jul]

20 July At OPCW headquarters, the eighth [see 21 Jul 06 – 29 Sep 06] associate programme commences. In total, representatives of the following twenty-two CWC parties attend the programme: Bangladesh, Belarus, Bosnia and Herzegovina, Brazil, Burkina Faso, Burundi, Cameroon, Cote d’Ivoire, Eritrea, Ethiopia, India, Malawi, Mexico, Nigeria, Philippines, Sri Lanka, Tanzania, Thailand, Uganda, Uruguay, Yemen and Zambia.¹ The purpose of the programme is to facilitate national implementation of the CWC in relation to the chemical industry; to enhance national capacities in member states by offering training to personnel from industry, academic institutions, and government in chemistry, chemical engineering, and related areas; to facilitate trade in these areas through the adoption of sound practices in the chemical industry; and to broaden the pool of human resources from which the national authorities and the OPCW can draw in the future. The programme is scheduled to conclude on 28 September.

22 July The Iranian Foreign Ministry dismisses as a “media game” a report the previous day of a secret arms deal with Syria under which Iran would provide \$1 billion to Syria for advanced weapons procurement, assistance with nuclear research and the development of chemical weapons in return for Syria not holding peace talks with Israel. One day previously, the London *Asharq al-Awsat* Arabic language newspaper reported that the agreement had been signed two days before during the visit of Iranian President Mahmoud Ahmadinejad to Syria. Speaking at a press conference, Mohammad Ali Hosseini, a spokesman for the Ministry, says: “This is a media game... It is not confirmed.”

23 July In Chile, a judge charges thirteen medical staff and former members of the National Intelligence Directorate with thirty-five offences relating to the murder of Manuel Jesus Leyton with sarin nerve agent in March 1977. According to *The Santiago Times*, those charged include four doctors: Horacio Taricco, Pedro Valdivia, Osvaldo Leyton, Vittorio Orbietto, and three nurses of Santiago’s London Clinic, where the medical staff allegedly cooperated with the detention, poisoning and eventual death of Leyton. Leyton, who was also a member of the National Intelligence Directorate, was allegedly killed because he was on the verge of informing Chilean police about the theft of detainees’ vehicles in order to help finance the actions of the Directorate’s operative groups. In his ruling, Judge Alejandro Madrid, who is also presiding over the case of the murder of former Chilean president Eduardo Frei Montalva [see 23 Jan], says that although at the time Leyton’s family was told by the Army that he had died of “natural causes”, based on the information provided, the death was “a result of exposure to sarin gas”. Madrid says that after the death of Leyton the army transferred the corpse to the Legal Medical Service where the autopsy report and various other tests were seized and replaced with forged documents.

In a separate case, Judge Madrid charges former Chief Military Prosecutor Fernando Torres Silva and his second-in-command Enrique Ibarra Chamorro for their involvement in the abduction and murder of Eugenio Berrios who had worked as a chemist for the Directorate [see 6 Apr 04 and 18 May 06]. Madrid states that both men participated in ‘Operation Control de Bajas’, which involved the clandestine removal of possible high-level Army informants from Chile.

25 July In Pataskala, Ohio, a man is arrested after police discover a consignment of castor beans together with model rocket fuel whilst searching his house during an investigation relating to charges of sexual assault. Though no ricin is uncovered, Police Chief Chris Forshey says that Stanley Elliott “may have had the intent to process the ricin [sic]” and

that he “may have intended to kill some animals with it”.

Six days later, the *Columbus Dispatch* reports that police have obtained a witness statement saying that Elliott had been collecting the beans for years, that he had made ricin before, and that he was planning to make more and use it on a neighbour’s dog. [See also 5 Feb]

26 July In the US Senate, testifying before the Foreign Affairs Subcommittee on Terrorism, Nonproliferation, and Trade, Government Accountability Office (GAO) Director of Acquisition and Sourcing Management Ann Calvaresi-Barr presents a statement on *Export Controls: Vulnerabilities and Inefficiencies Undermine System’s Ability to Protect US Interests*. The statement focuses on weaknesses and challenges that have created vulnerabilities in the US export-control system; inefficiencies in the export licensing process; and the lack of assessments on the effectiveness of their controls by the Department of State and Department of Commerce. It concludes thus: “[An] export control system needs to clearly define what should be controlled and how, so that it is understandable by exporters and enforceable by the government. The system should also be efficient and well managed. Our work in this area demonstrates both the ineffectiveness and inefficiency of the system – a key concern that compelled GAO to designate the effective protection of technologies critical to US national security interests as a new high risk area. It is, therefore, time to step back, assess, and rethink what type of system is needed to best protect US national security, foreign policy, and economic interests in a changing environment.”

26-27 July In Bogota, Colombia, there is a regional meeting for representatives of national authorities and parliamentarians in Latin America and the Caribbean, which is jointly organized by the national authority of Colombia and the

OPCW. Attending the meeting are parliamentarians directly involved in adopting national implementing legislation with a view to gaining an insight into parties’ obligations under the CWC, including the adoption of comprehensive implementing legislation.

27 July The US Institute of Medicine releases *Veterans and Agent Orange: Update 2006*, which was compiled by the committee established to review the health effects in Vietnam veterans of exposure to herbicides [see also 2 Mar 04]. The report concludes that there is a possible link between exposure to Agent Orange and other herbicides used during the Vietnam War and an increased chance of developing high blood pressure and AL amyloidosis in some veterans. It states that although studies of veterans who handled Agent Orange and other dioxins indicated that they have higher rates of high blood pressure than those who did not, there is no actual evidence of an association between herbicide or dioxin exposure and increased high blood pressure[see 8 Jul 05]. Because of the inconsistent results, the report concludes that the evidence seems to suggest that exposure to the herbicide leads to high blood pressure, though there is insufficient evidence to conclude this with certainty.

31 July The Czech Republic despatches a chemical warfare unit to join a Czech field hospital team at the international base in Kabul, Afghanistan.

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

Historical Note no. 6

Civilians and the introduction of mustard gas in 1917

Ian Kenyon

When considering the vulnerability of unprotected civilians to chemical weapons the first example that comes to many peoples’ mind these days is Halabja. However, this summer saw the ninetieth anniversary of another example, which has since been largely forgotten — Armentières. On 28 and 29 July 1917 this small French town on the border with Belgium south of Ypres was attacked by German artillery using both high explosive and the then-new ‘Lost’, or mustard gas. There were upwards of a thousand noncombatants in the town at the time and casualties among them were heavy. The town Archivist reports that there are no precise overall figures. Victims were evacuated to hospitals at Estaires, Aire sur la Lys, Saint Pol and Hazebrouck. One hundred and fifty-five of those sent to Hazebrouck died. The Armentières ‘Golden Book’

lists 328 civilians who died from enemy action during the war and whilst this number will have included victims of conventional bombardment it does not include the many refugees from nearby villages, particularly Ploegstreet. The Archivist suggests that the total for fatal gas casualties from the 28 to 29 July attack is probably of the order of 500. The attack was reported in the *New York Times* of 8 September 1917, datelined Paris, Aug. 11 (Associated Press). “Armentières is the first town in the annals of history to have been literally poisoned to such a degree that its civil population has had to be removed lest it should be entirely destroyed”. The article then graphically describes the new weapon and its effects and gives the authorities’ suggestions for protective measures.

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Book Reviews

Ian Kenyon

Chemical Warfare: Secrets Almost Forgotten, James S Ketchum, MD, Chembooks Inc, Santa Rosa CA, 2006.

Secret History of Chemical Warfare, N J McCamley, Pen & Sword Military, Barnsley 2006.

A Poisonous Affair: America, Iraq and the Gassing of Halabja, Joost R Hiltermann, Cambridge University Press, 2007.

James Ketchum's lavishly produced volume is described on its title page as "a personal story of medical testing of army volunteers with incapacitating chemical agents during the Cold War (1955-1975)". It combines autobiography with a detailed history of activities at Edgewood Arsenal during the period when the author was a senior participant in the search by the US Army for a useable non-lethal chemical weapon. Extensive scientific material relating to different substances tested is contained in an appendix, including chemical structures and graphs of effect over time. The book is well illustrated with photographs and diagrams, many of them in colour. The autobiographical format is somewhat unusual for a work on chemical weapons and much space is given to the administrative and logistical details of the programme but, overall, a fascinating picture emerges of the difficulties facing those who seek the holy grail of "humane" chemical weapons. The author is at pains to demonstrate that the human subjects of the experiments were for the most part genuine volunteers (even if some of them were in prison at the time!) and that great care was taken to protect them from serious harm. The appendix in addition to details of research results on a range of potential incapacitants contains some fascinating snippets such as the finding that a below lethal dose of VX is an effective antidote to BZ! There are also some interesting findings on the effect of ethyl alcohol on cognitive performance. Altogether a useful addition to the literature.

N J McCamley describes his book as having examined 'slightly selective evidence' 'with varying degrees of discrimination' to

discover why huge resources were poured into the search for and production of chemical weapons after the end of World War One, which were not used in World War Two and subsequently became a major disposal problem. The dust jacket tells us that his research into British underground storage depots has been a thirty year obsession and the book offers much fascinating detail on the production, storage and, to a 21st century reader, environmentally disgraceful disposal of chemical weapons in Britain. Much of the remainder of the book is a general (and definitely selective) history of chemical weapons in the 20th century. For example there is much detail on the Italian campaign in Ethiopia in 1936. It is unfortunate that efforts to put legal constraints on chemical weapons are not as well covered. A section headed 'Washington and Geneva 1921-5' discusses the political debate in the United States for and against CW and gives much detail to the 1922 Washington Treaty negotiations but only a few lines to the 1925 Geneva Protocol. The US failure to ratify the Protocol is mentioned on page 72, the later change of heart and the 1975 ratification appears only on page 147. The destructive effect on the Protocol of the reservations, making it a 'no first use' instrument, are made much of but there is no mention of the fact that most reservations were withdrawn in the latter part of the century as negotiation proceeded which ultimately led to the Chemical Weapons Convention. The CWC barely figures in the text at all and there is no mention of OPCW. There are several errors of fact which could be simply the result of typing mistakes. For this reviewer the statement that the United States ratified the CWC in October 1996 drew a heartfelt 'if only'. In fact, the delay in the US ratification until only days before the April 1997 entry into force caused huge problems for the Preparatory Commission. For all its slightly strange structure this book has much to offer the specialist reader, although complete absence of references diminishes its value. It might not be the best primer for a newcomer to the subject.

There has been a tendency since the end of the Cold War for authors writing on chemical weapons to dismiss them as a phenomenon of that political era, more needed for deterrence

than for potential use and to suggest that their military value has been overblown. Both the books reviewed above fall into this trap in their final conclusions. That this is a very dangerous line to take is demonstrated by the case of Iraq (which neither of them mention.) *Joost Hilterman* provides an excellent corrective. Drawing upon official United States documents obtained under freedom of information legislation and a very wide range of interviews with involved policy makers and eye witnesses from the US, Iraq and Iran he provides a very comprehensive picture. Some subjective judgement is necessary to sort truth from honest but inaccurate assessments and deliberate disinformation but this reader is led to share Hilterman's finding that Iraq gained very significant military advantage over Iran on the battlefield, particularly in the final stages of the war. It also seems clear that Iran did not use chemical weapons although they put considerable effort into building a capability which could have been used had the ceasefire not come when it did. A large part of the book is devoted to Iraq's use of CW in a genocidal campaign against part of the Kurdish population, of which the Halabja attack on 16 March 1988 was only one episode, and the efforts of the United States Government to 'spin' this against Iran so as to justify their continuing 'tilt' in favour of Iraq. It is clear that they not only tied themselves in knots but seriously damaged their own non-proliferation policy. This book is necessary reading for all supporters of permanent chemical disarmament.

The Future of the Bulletin, 3

This issue of the *Bulletin* will be the last before we re-launch it in a new form, hopefully in the middle of next year. The editors have been putting off change for far too long: this issue may be a bit fatter, but it looks much the same as its predecessors did, right back to our inaugural issue almost twenty years ago. As we approach that encouraging anniversary, we shall therefore pause in order to decide how best to continue and, once again (see *Bulletin* 66 and *Bulletin* 68), to consult our readers on whether we have or have not been misjudging their needs and expectations. With resumed subscription charges, we shall then do our best to react accordingly. So we now invite readers to give us their views - your views - on whatever aspect of the *Bulletin* they choose, preferably by e-mail to j.p.p.robinson@sussex.ac.uk. Please do so if you possibly can.

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HSP is an inter-university collaboration seeking to insert the traditions, practice and benefits of scholarship into the formation of public policy on issues involving chemical and biological weapons. It supports efforts to eliminate these weapons globally and to promote effective governance of 'dual use' technologies applicable to them. University-based research and publication, other forms of international communication, constructive association with people in policy-making and policy-shaping circles, and training of young people are the means HSP uses to these ends. HSP has accordingly nurtured widespread networks for information, discourse, study and consensus-building on CBW that engage scientists and other scholars with one another and with officials of governmental and intergovernmental bodies.