

CHEMICAL WEAPONS CONVENTION BULLETIN

News, Background and Comment on Chemical and Biological Warfare Issues

ISSUE NO. 31

MARCH 1996

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

CRIMINALIZING BW

In November, representatives of states parties to the Biological Weapons Convention will assemble in Geneva for the Fourth BWC Review Conference. Proposals for measures to verify compliance — declarations and on-site measures — and their inclusion in a legally binding instrument or protocol will receive much attention. Deservedly so. On these measures, however, there is sure to be wide diversity of views, as discussed in the guest article by Alexander Vorobiev in this issue of the Bulletin.

But there is one worthwhile measure for strengthening the treaty that, if accorded a place on the agenda, should command wide agreement. That measure would require all parties to the proposed protocol to have domestic legislation criminalizing BW.

Devastating biological weapons are within the reach of non-state entities and even individuals. Yet the BWC, like most international treaties, imposes its obligations on states, not on individuals or on commercial, political or other non-state organizations. Making individuals and groups who commit acts prohibited by the Convention subject to criminal penalties requires domestic legislation.

Criminalizing BW under domestic law can provide a direct and unambiguous threat of criminal prosecution and punishment to deter terrorist and irresponsible groups and individuals from producing and trafficking in biological weapons. Moreover, it can increase the vigilance and authority of governments in combatting such activities, and can facilitate international legal cooperation and coordinated action to detect and deal with them.

True, Article IV of the BWC does require states parties to “take any necessary measures to prohibit and prevent” actions in violation of the BWC anywhere under their jurisdiction. But this stops short of requiring states to have penal legislation. Each state party is left to decide for itself whether to criminalize BW.

All three previous BWC Review Conferences have urged states parties to provide the UN with information about their “necessary measures”. So far, fewer than 40 of the 135 states parties have done so and the information thus declared is highly variable. Some, including the US, the UK and the Russian Federation, have enacted domestic legislation making it a crime to develop, produce, acquire or transfer biological weapons. But many others have no such law.

The Chemical Weapons Convention does have such a criminalizing provision. Article VII.1(a) of the CWC requires each state party to prohibit natural and legal persons under its jurisdiction from undertaking any activity prohibited by the Convention, “including enacting penal legislation with respect to such activity”. The value of such legislation is apparent, for example, in the case of Japan, which enacted its CWC implementing legislation only after the nerve gas attacks at Matsumoto and Tokyo. Had such a law been in place beforehand, the police would have had clear authority to investigate earlier indications that the Aum Shinrikyo cult was seeking chemical weapons, and might then have averted the loss of life and terrorization of the public that ensued.

Considering that the 160 signatories of the CWC, comprising a wide diversity of governments, legal systems and traditions, have agreed on a legally binding provision to criminalize chemical weapons, it is certainly appropriate for the states parties to the BWC to do so for biological ones.

For now, the need is to bring the anti-BW regime up to the same standard of domestic prohibition as provided for in the CWC. But for the longer term, thought should be given to seeking international agreement that using or knowingly aiding in the production, acquisition or use of biological weapons is a crime under international law. Those who do such things could then be exposed to the threat of indictment and prosecution by an international court, either an ad hoc tribunal or, should it come into existence, an international criminal court. That would place criminal responsibility where it really belongs, with individuals high or low who perpetrate such crimes against humanity.

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WORKING ON THE COMPLIANCE REGIME FOR THE BWC

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The 1972 Convention on the Prohibition of Biological and Toxin Weapons was the first international treaty banning a whole class of weapons of mass destruction. However, at the time it was negotiated the establishment of an effective mechanism to verify compliance was out of the question. The time which has elapsed since then has shown that the absence of such a mechanism is a major shortcoming of the Convention.

Efforts to improve the effectiveness of the Convention were made by the states parties during the Second and Third Review Conferences in 1986 and 1991, respectively. The Second Conference adopted a number of confidence-building measures and the Third Review Conference expanded that list of measures. The implementation of CBMs has played and continues to play a positive role in strengthening confidence in compliance with the Convention. However, due to the nature of CBMs, they are not considered as mandatory by all states parties, nor are they comprehensive. Regrettably, less than a third of the states parties participated in them.

Important work was done by the Ad Hoc Group of Governmental Experts to Identify and Examine Potential Verification Measures from a Scientific and Technical Standpoint (VEREX) which had been established at the Third Review Conference. The group identified a whole series of potential verification measures, evaluated their capabilities and limitations, and analyzed their impact on scientific research and coöperation, industrial production and other permitted activities. The governmental experts came to an important conclusion that some of the identified potential verification measures would contribute to strengthening the effectiveness and improve the implementation of the Convention. The findings of the VEREX group, recorded in its final report, constitute valuable research material and laid the basis for full-scale negotiations on the establishment of a verification mechanism.

The Special Conference of the States Parties, convened in September 1994, considered the VEREX report and established, as a follow-up action, an Ad Hoc Group of the states parties with the mandate to develop appropriate measures to be included in a legally binding instrument. In this context, the group is mandated to examine four major sets of issues:

- definitions of terms and objective criteria, where relevant for specific compliance measures;
- incorporation of existing and enhanced CBMs into the future regime;
- a system of compliance measures; and

- specific measures designed to ensure the implementation of Article X (scientific and technical coöperation) of the Convention.

So far the group has held three sessions. The first one (4–6 January 1995) was a short organizational session, while the other two (10–21 July and 27 November–8 December 1995) were devoted to issues of substance. Though there were only four weeks of substantial discussions, this in fact accounts for half of the time that the group has at its disposal before it is due to report to the Fourth Review Conference at the end of 1996, since at the last session, after intensive deliberations, the group was able to reach an agreement on having only two more sessions of two weeks each in 1996 – one in July and the other in September (with a possible third week in September/October). Thus it is essential at this juncture to consider the progress of the group and make some projections regarding its future efforts.

If anybody had any doubt about the immense divergence of views of the states parties on the future compliance regime (not that the VEREX exercise provided any reason for such doubts), they were quickly dispelled once the group plunged into its activities. While the majority of the delegations are willing to proceed expeditiously in negotiating a verification protocol to the BWC, others argue that it is not spelled out in the mandate of the group that its final product should be such a protocol and not something else, e.g., “legally binding CBMs”. They also maintain that in order to resolve this problem, additional discussions of basic approaches and further technical study are needed (repeating VEREX?).

Another fundamental issue of discord is whether verification as such is feasible in the BWC context. The predominant approach was voiced, for example, by the European Union. The EU statement at the Special Conference read that “the VEREX results have convinced the European Union that verification of the BTWC is possible”. It was also said that “the nature of the compliance procedures in other recent agreements on arms control and disarmament should set the standard for our efforts. This applies, *inter alia*, to the Convention on the Prohibition of Chemical Weapons”. The other approach is that due to the dual-use nature of nearly all BW-related facilities, equipment and materials, the maximum that can be achieved by the future regime is “enhanced confidence in compliance” and “pursuance of specific activities of concern”. Naturally, in this case the verification provisions of the existing arms control and disarmament treaties, notably the CWC, are of little relevance to the future regime under the BWC.

The outcome of the above-mentioned debate is pertinent to the issue of whether any agreement on objective criteria

and strict procedures for the future regime is feasible. Such criteria may include the following: lists of biological agents and toxins, of key equipment and of activities incompatible with the Convention, threshold quantities, specific requirements for biodefence programmes, work under high containment levels, etc. The issue of objective criteria remains one of the most controversial since the time of VEREX. At present the views, going from one end of the spectrum to the other, may be presented in the following manner. Some delegations propose that objective criteria should be elaborated before any substantial work on the compliance measures is done. Others are content to work in parallel on these two and insist that definitions and lists are essential for all the compliance measures. Another group of countries argues that the list of agents and toxins is relevant only to mandatory declarations, while some in the group maintain that even in that case the list should be of a circumscribed and secondary nature. It is evident, that the whole issue of definitions and lists has been highly politicized from the beginning and consensus can only be gradually achieved in the course of negotiations.

The issue of definitions and lists is essential for determining the fundamental character of the future regime — whether it will be a regime with “loose” elements and parameters which will be negotiated on a case by case basis (something along the lines of UNSCOM activities, in which inspectors can, to a certain extent, improvise on the spot or seek instructions from headquarters, should the need arise), or whether the rules and procedures will be set in advance and be uniform for all (the usual arms control approach). With all due respect to the attempts to solve the problem of the dual-use nature of BW-related activities by providing the future regime with a distinct ad hoc character, it is highly unlikely that such an approach can command consensus among the states parties because of common concerns that countries with more “political weight” will acquire greater “bargaining power” within such a regime which, as a result, will become discriminatory. This is a familiar dilemma in multilateral arms control.

At the same time, widespread concerns about “limiting the scope of Article I of the Convention” by way of introducing strict criteria should be taken care of. First of all, in order to deal with such concerns, simplistic approaches (i.e., “BW means the following agents and toxins...”) should be avoided. Sufficient flexibility should also be built into the regime, e.g., lists should be of illustrative character and be subject to revision. The regime should be capable of prompt readjustments in accordance with developments in biology and biotechnology.

Despite these fundamental differences, the group managed to achieve substantial progress in some areas. Thus, there is apparent convergence of views on the point that the future regime should include mandatory declarations, as well as on their contents. Of course, to a large extent this can be attributed to the fact that such declarations could be built on the existing CBMs and constitute a relatively non-intrusive and, hence, politically non-contentious measure. Nevertheless, it is noteworthy that the Friend of the Chair

on compliance measures was able to produce a detailed paper on declarations which contains some specific formulae commanding wide support. Moreover, at the last session the delegations of France and Germany tabled a joint discussion paper “Declarations in a BTWC-Verification Protocol” (BWC/ADHOC GROUP/WP.9) where, on the basis of integration of the elements in the FoC’s papers and on the existing CBMs and their further development, they managed to present the entire picture of a possible declaration regime. The next step should be to further develop these elements and examine how they would work under real life circumstances.

An even more remarkable achievement of the group is the compilation of the list of 42 human pathogens as well as criteria for their inclusion in the list. A number of national working papers also contain specific proposals regarding the list of animal and plant pathogens and relevant criteria. So the group should not experience any lack of background material once it ventures into this area.

The amount and profundity of material presented in the national working papers is a clear sign of interest and intensive work in many capitals. During the third session alone the group was presented with 52 working papers covering all four major sets of issues under consideration. Some of the papers contain comprehensive proposals on certain components of the future regime that can be used as major building blocks.

The paradox of the situation is that much of this material is destined to remain practically unexplored in the near future since the time available to the group during the whole year of 1996 is extremely limited. The major arguments put forward in favour of having only two additional sessions were that there could be no overlap between the work of the Ad Hoc Group and other disarmament forums, and that during the first half of 1996 disarmament negotiators will be preoccupied with their deliberations regarding the comprehensive nuclear test ban treaty.

The credibility of both arguments notwithstanding, there is a certain feeling *dans les coulloirs* that serious political factors also obstruct progress in the group. Putting aside the possibility that certain countries may wish to conceal their activities in violation of the Convention, it is suggested, *inter alia*, that there is a preference among some of the states parties to see first the results of the CWC implementation and only then to take major decisions regarding the BWC regime. (The international monitoring system and on-site inspections envisaged under the CTBT presumably should not lead to the same level of transparency as the CWC and BWC verification.) Concerns are also voiced that implications of the BWC regime for national budgets and industries may pose too heavy a burden compared to the “insufficient” results that may be possible to achieve as far as effectiveness of the verification is concerned.

The flaws in the above-mentioned rationalizing are evident since the task of strengthening compliance with the BWC should be considered on its own merits. Recent de-

velopments in the Gulf have shown that the BW threat is by no means illusory. While no present arms control regime is absolutely foolproof, the world will be better off with the future protocol to the BWC as a deterrent even if it does not guarantee a hundred percent detection of possible violations. So decisions should be made in national capitals and instructions given to the negotiators to find the possibility to proceed intensively with the elaboration of the BWC verification regime.

All attempts so far to find enough time slots in the disarmament calendar for the Ad Hoc Group meetings have failed, so the only workable solution is to establish an open-

ended (in order to take care of the difference in the BWC and CD membership) Ad Hoc Committee of the Conference on Disarmament or to make the necessary arrangements for the Ad Hoc Group sessions to be incorporated in the CD schedule of meetings. Another major step forward for the Group would be to start working as soon as possible on the rolling text of the Protocol or at least parts of it, e.g., on mandatory declarations, instead of wasting time and effort on finding consensus language for the FoCs' reports. Common understanding on these and other issues should be found during the time remaining before the Fourth Review Conference.

Progress in The Hague

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Building the Organization for the Prohibition of Chemical Weapons

Forty-eight states have deposited their instruments of ratification of the Chemical Weapons Convention, only 17 short of the trigger point of 65. As preparations for ratification are at an advanced stage in many other countries it becomes increasingly likely that this point will be reached by mid-year — the current formal planning assumption of the Preparatory Commission. However, it remains difficult to predict precisely when the trigger point might be reached, and this, plus the fact that the United States and Russian Federation have yet to ratify, complicates preparations for entry into force. In a discussion paper distributed by the Executive Secretary at a planning meeting on 7 March, a suggestion was put forward whereby an additional session of the Commission could be scheduled when the number of deposited ratifications comes closer to the threshold of 65. Reflecting the increased sense of urgency created by the impending trigger point, the Executive Secretary also took the opportunity to propose an amendment to the current method of work which would allow more time for discussion, outside expert group meetings, of well-defined outstanding political issues. This has been put forward in an effort to provide a better mechanism to resolve key issues which remain outstanding. It is anticipated that these proposals will be thoroughly discussed at the Commission's forthcoming thirteenth session scheduled for 18–22 March.

Actions by the Provisional Technical Secretariat

Procurement of inspection equipment The Secretariat has already taken delivery of some items of inspection equipment for evaluation of their performance capabilities. The Secretariat has requested member states to assist in some cases, because it does not have sufficient resources to evaluate all of the equipment. In particular, assistance is needed to evaluate: hand-held detector/monitor; IR spectrometer; GC/MS neutron induced prompt photon spectroscopy; ultrasonic pulse echo; and acoustic resonance spectrometer.

First official inter-laboratory comparison test With the completion of the third OPCW/PTS inter-laboratory comparison test (trial proficiency test), the Commission decided at its eleventh session that the next inter-laboratory comparison test would be counted as the first official proficiency test. The Executive Secretary has now advised that this is expected to commence in mid-May 1996. This will be the first of three inter-laboratory proficiency tests conducted in 1996 and will count towards designation. (See also Expert Group on Inspection Procedures, below.)

Inspection logistics workshop This was held during 26–28 February. The aim of the workshop was to focus on practical aspects of implementing the Convention relating to moving inspectors and equipment from The Hague to and from various inspection sites in the territory of states parties as well as fostering a constructive interrelationship between the future OPCW and the states parties in relation to conduct of inspections. The Executive Secretary, in his opening remarks, pointed out that a primary objective of the workshop was to examine the multitude of tasks involved in an inspection in order to enable planning to take place. This move to actual logistics and practicalities reflects the planning assumption that the trigger point of the Convention will be reached around mid-1996.

Inspector recruitment process The recruitment of future OPCW inspectors proceeds on schedule with interviews being completed in November and candidates advised of the outcome by late January. (This round of interviews relates to the first group of inspector trainees, which is to be trained prior to entry into force. A second group of 80 will be trained within the first six months of entry into force.) From a total of 1692 applications, 341 candidates were interviewed. Of those, 158 applicants were placed on an "active list". Subject to successful medical and language screening, they will be offered a position on the General Training Scheme, which must be satisfactorily completed

prior to final appointment. A further 45 applicants have been placed on a "reserve list", meaning that they are sufficiently qualified to be transferred to the active list in the event that a candidate on that list fails the medical or language requirements or is unable to accept an offer. Training for the successful candidates is expected to commence in August/ September. In the meantime medical and language screening will take place.

Of the 158 active candidates, 60 are from the West European and Others Group; 42 from Asia; 30 from Eastern Europe; and 13 from each of the African and Latin American regions. The candidates come from 57 member states, only 29 of which have already deposited their instruments of ratification. The fact that many of the successful candidates come from countries that have yet to deposit their instrument of ratification (including China, Russia and the United States), may have serious implications for the entire recruitment and training process because candidates from non-ratifying states cannot be employed by the OPCW.

Regional seminars The government of Austria hosted a regional seminar on the Convention and its national implementation during 6–8 March. The primary aims of the seminar were to highlight the structure and tasks of the National Authority, the legal aspects involved in the work of the National Authority and the responsibilities of the chemical industry. The seminar included a one-day trial inspection held at a chemical plant. The Islamic Republic of Iran intends to hold a regional seminar on implementation of the CWC on 22–25 April in Tehran organized with the coöperation of the Provisional Technical Secretariat. The first day of the seminar will involve training of National Authority personnel. The last day will feature a trial inspection and a visit to the Centre of Chemical Casualties.

Courses for personnel of National Authorities The Secretariat plans to hold two courses for personnel of National Authorities during 1996. The first of these is to take place at the Defence Research and Development Establishment in Gwalior, India from 15 April to 3 May. The government of India will host the course. The course will closely follow the curriculum proposed by the Expert Group on Technical Cooperation and Assistance for three-week courses. It is directed towards National Authorities from member states with no chemical weapons and covers subjects such as rights and obligations of states parties, identification of declarable activities and facilities, protection of confidential business information, communication with the OPCW, and procedural and practical aspects of receiving inspections. The venue and dates of the second course to be held by the Secretariat have not yet been decided.

Other activities The President of Costa Rica, H.E. José María Figueres Olsen paid a visit to the Provisional Technical Secretariat on 4 March and held discussions with the Executive Secretary and other senior officials of the Secretariat. The President provided the Executive Secretary with a copy of Costa Rica's instrument of ratification which is to be deposited with the UN Secretary-General shortly. Senior officials of the Secretariat paid a number of official vis-

its to signatory states to meet relevant government authorities and/or representatives of the chemical industry to discuss issues of national implementation. Other visits were made for recruitment purposes, to finalize training agreements, to prepare for National Authority training courses and to participate in CWC-related seminars, meetings and workshops. The Secretariat hosted a second Trainee Performance Evaluation Workshop on 6–7 March.

Actions in Brussels

Two workshops on national implementation and legislation of the Convention were held on 16 February in Brussels for member states of the Commission with representations based in the Belgian capital. The workshops were organized by the Secretariat with the assistance of the ACP House (venue for meetings of a grouping of the African, Caribbean and Pacific countries) and the Harvard Sussex Program. The first workshop, at NATO headquarters, was attended by representatives from three East European member states. The second workshop, at the ACP House in Brussels, was attended by representatives from 19 member states. In addition, two non-signatory states participated. Representatives from the Secretariat, the Harvard Sussex Program and the SIPRI–Saskatchewan–Frankfurt Group attended both workshops.

Participants expressed the view that one of the main obstacles to effective implementation is the lack of resources available in their countries. It was felt that these workshops assist in the process of implementation by providing practical information needed to prepare the required legislation.

As is the usual practice, the Secretariat plans to hold a briefing in Brussels on the intersessional activity of the Preparatory Commission prior to the thirteenth session of the Commission commencing on 18 March.

Actions by member states

Ratifications Three member states have deposited their instruments of ratification during the reporting period: Côte d'Ivoire, on 18 December, Morocco on 28 December 1995 and the Czech Republic on 6 March 1996. Many member states report progress in their internal ratification procedures. Costa Rica is about to deposit its instrument of ratification. Cameroon has finalized all internal measures necessary to ratify and is expected to deposit shortly, as have Brazil and Papua New Guinea. In the United Kingdom, the legislative process is in its final stage and the government has said that ratification will take place shortly after the bill is enacted. The Convention is also being discussed in the legislatures of Belgium, Ethiopia, Gabon and Mali.

Table-top exercise in Germany The German Federal Export Office conducted a table-top exercise relating to inspection of industrial sites on 16 January. Representatives of the German and Swiss chemical industries participated as well as a representative of the German chemical industry association and staff representing the Secretariat. The exercise confirmed that there seems to be no obvious gaps in the proposed draft model agreement for Schedule 2 plant sites

(dated 27 September 1995). However, the exercise also revealed that much work remains to be done in terms of industry outreach programmes to make industry aware of its rights and obligations under the Convention.

Regional training course in Argentina A training course for escorts for the inspection teams of the OPCW is being held in Argentina during 4–29 March 1996. The objective of the course is to prepare and train National Authority personnel from states in the region to work as escorts in the course of inspections by the OPCW. In addition to attending lectures, participants will take part in various inspection practices including a routine inspection exercise in a military explosives factory, a challenge inspection exercise and a technical visit to a petrochemical plant.

Actions by subsidiary bodies of the Commission

Committee on Relations with the Host Country The committee held formal meetings on 19 January, 1 and 20 February. In addition, the Friend of the Chair held meetings on 18 January, 19 February and 1 March.

Despite intensive negotiations between the Commission, host country and the developer, outstanding issues relating to the OPCW building continue to delay the start of construction. However, in other areas, progress has been made. Concerns that had been raised in relation to the proposed open-air theatre to be built adjacent to the OPCW building site would seem to be satisfactorily addressed. The main concerns of the Commission were that the open-air theatre would pose new and serious security problems to the OPCW building; that it would therefore involve additional costs; that there would be an increase in noise levels and traffic in the area of the OPCW building and that the proposed design would have a negative impact on the aesthetic appearance of the building. The Municipality of The Hague have taken into account these concerns and agreed that a fence and a pond must be constructed between the theatre and the OPCW building to enhance security; that the number of events held in the theatre will be very restricted and that the Municipality will compensate the OPCW for any additional security costs involved.

Negotiations continue in relation to securing interim accommodation for the Secretariat. One suggestion has been that the building directly opposite the building which currently houses the Secretariat could be leased.

Fit-up work has commenced at the Laboratory and Equipment Store at Rijswijk, with all licences and permits being obtained. It is hoped that work would be completed in May.

Working Group A The chairman of Working Group A (Budget and Administration) held consultations on 19 February in the course of which the working group was updated on progress in the expert groups and on priorities for the next intersessional period.

Expert Group on Data Systems This met on 8 February to consider the report of the Task Force on Data Systems evaluating the *OPCW IMS Security Study*. The task force

had agreed that the study represented a reliable basis for the establishment of the security environment and could serve as a guide for the Secretariat in the process of developing and implementing the Information Management System. In particular, the study recommended that an IMS security model should feature a strong separation between the critical and uncritical parts of the system. No classified information would be stored or processed in the uncritical part of the IMS and a trusted gateway would separate these parts. The critical part of the system will operate on a need-to-know basis only with an extensive auditing and control of printer output, use of floppy disk drives, etc. The expert group concurred with the conclusions of the task force, and recommended that Working Group A take note of the expert group's report. The expert group requested the Secretariat to develop, on an urgent basis, a plan for establishing by the end of 1996 a "minimum" IMS, which would take into account the conclusions of the security study.

Expert Group on Administrative, Financial and Personnel Matters This held two formal meetings during the period reported here. The first meeting was held during 22–24 January in which the group completed work on the draft *OPCW Financial Regulations* and recommended that the Commission forward them to the first session of the OPCW Conference of States Parties for consideration and adoption. The group also discussed some proposals to amend the *Staff Rules* and agreed that the proposed amendment relating to dependent spouse allowance (Staff Rule 3.4.02(a)) was consistent with the relevant *Staff Regulations*.

The group continued work on the *Basic OPCW Staff Policy*, agreeing that fixed-term contracts should be offered to staff members of the OPCW, with initial contracts being for a period of no less than three years. Renewal of contracts should be based on the performance of the individual staff members and the requirements of the OPCW. The group agreed to continue its work at its next meeting.

The group also completed its work on the draft *Letter of Appointment for Inspector Trainees* and forwarded the final version, together with an attached draft *Secrecy Agreement*, to the Executive Secretary for use. The group continued its discussion on the top structure of the OPCW and received a further option for the top structure entitled "Option 7: Executive Secretary's Suggestions". The group also exchanged views on the question of privileges and immunities of experts in the context of investigations of alleged use.

The group's second meeting on 20 February focused on the bilateral arrangements to be concluded between the Commission and those member states providing facilities for conducting the General Training Scheme for inspectorate training. The group recommended that the Commission authorize the Executive Secretary to conclude these arrangements on a bilateral basis with the relevant member states on behalf of the Commission.

Finance Group This group met during 13–16 February 1996 and in its official report expressed concern at the lack of support by the Secretariat for its activities. In particular, the group pointed out that key papers remained unavailable to the group prior to their meeting and that a major paper

was presented to the group one day into the meeting, resulting in limited time to provide a complete and thorough assessment of that paper. Further, the group was unable to consider issues relating to interim accommodation, the security study and the draft *OPCW Financial Rules on Reimbursable Expenses* because the appropriate documentation was not available.

Despite these difficulties, a great deal of work was achieved. The group reviewed the draft *OPCW Financial Rules on Procurement* and recommended that the Expert Group on Administrative, Financial and Personnel Matters take note of their comments. In particular, the Finance Group agreed that the draft rules provide adequate controls and transparency for the procurement process but noted that the rules need to be further refined. For example, a set of definitions should be prepared which would define key terms used in the rules themselves. It was also suggested that the issue of open tenders versus restricted tenders should be considered further with a view to reconciling the need for openness and equal opportunity with the need for efficiency. Another issue to consider in the light of achieving this balance, is whether or not the monetary threshold above which tendering is required is appropriate. The current threshold is Dfl 50,000 — that is, where an item costs less than this, there is no requirement to go through the formal tendering process.

As requested by the Executive Secretary, the group reviewed the Secretariat discussion paper on expected underfundings in Parts I and II of the Budget. The underfundings are expected to arise because of unforeseen, non-discretionary expenses in the areas of salary and common staff costs, information management systems and security requirements. While these costs (Dfl 8,060,753 in total; Dfl 2,626,650 in Part I and Dfl 5,434,103 in Part II) will have to be met in 1996, no appropriations or insufficient appropriations exist in the Budget. The group felt that it was not appropriate to determine whether these activities are essential because that is a matter for the Commission's substantive and political bodies. However, the group set forth several options for financing these needs: funding from savings within the approved budget; using the 1995 provisional cash surplus; and the use of supplementary budgetary proposals. The group also suggested that costs associated with the final, post-entry-into-force phase of the Commission's life might best be funded through the 1997 Budget.

The group reviewed intra-programme transfers made by the Executive Secretary and advised that they were made in accordance with the *Financial Regulations*. The group requested that the Secretariat provide a periodic report on transfers so that the impact on the Budget could be better assessed. The group recommended that further proposed transfers between the External Relations Division and the Legal and the Verification Division be approved by the Commission.

The group also made observations on the following issues but did not have the time to undertake a detailed and complete analysis: that the P-3 Legal Officer post, previously authorized by the Commission, "subject to any savings within the 1996 Budget", now requires specific supplemental authorization by the Commission in the light

of the shortfall in the budget; and that further explanation is needed for the cost estimate for travel of inspector trainee selection. The group was unable to consider the issues relating to the IMS because the relevant Secretariat paper was not available.

Expert Group on Programme of Work and Budget

This met during 21–22 February and considered the ninth report of the Finance Group, taking note of the concerns of that group regarding lack of Secretariat support, urged the Secretariat to take appropriate measures. The group discussed the Secretariat's paper on possible underfundings in the budget and requested the Executive Secretary to provide the Finance Group with an updated assessment as to how the potential shortfall can be addressed. The group noted the Executive Secretary's intention to reduce expenditure by one million guilders from the 1996 budget and recommended that in using those savings, highest priority should be given to increased salary costs for professional staff. The group also asked that the Secretariat prepare a security budget for 1996, consolidating all security-related elements of the approved Budget and to prepare in a single document all elements of the approved 1996 Part II Budget.

The group considered the chairman's non-paper on the *Methodology and Assumptions for the First OPCW Budget* and agreed to discuss it further at the next meeting, at which time, the group agreed, it would be necessary to discuss the parameters of the 1997 budget and to that end, requested the Secretariat to prepare a paper on the issue.

Consultations on Visa Matters Consultations were held on 1 March to continue discussions relating to unresolved issues and possible solutions for visa and travel documents for OPCW inspectors. Topics discussed included visas for inspector trainees, visas for inspectors and what travel documents are to be used. It was suggested that the consultations should take on a more formal character and the hope was expressed that all matters could be resolved by mid-year.

Working Group B The chairman of Working Group B (Verification and Technical Cooperation and Assistance) held consultations on 19 February and 1 March. At the first meeting, the Executive Secretary addressed the group, describing developments with inspection selection and recruitment, training, procurement of equipment, the OPCW Laboratory and Equipment Store, inter-laboratory proficiency testing and inspection planning. He stressed that progress in the expert groups is lagging far behind timing requirements based on the assumption that the Convention will enter into force around the end of the year, and that once Phase II starts, the Secretariat will not be able to continue to provide such support as in the past. He therefore expressed the hope that all outstanding issues would be resolved by mid-year. The group also discussed the work methodology of the Commission, the need to set clear work priorities and allocation of meetings for the forthcoming intersessional period.

Expert Group on Old and Abandoned Chemical Weapons This met on 17 January and discussed the sections of the *Declaration Handbook* which relate to old chemical weapons (OCW) and abandoned chemical weapons (ACW). There are differing views in the Group as to relationship between the declaration requirements for OCW and those for chemical weapons. In an attempt to resolve these differences, a further version of the required forms was prepared and interested delegations have been asked for comments.

The group received a draft chairman's paper entitled *Proposed Guidelines for Usability of Chemical Weapons Produced Between 1925 and 1946*. Both the Convention (Part VI(B), paragraph 5 of the Verification Annex) and the Paris Resolution (paragraph 12(n)) require that criteria be developed to determine the "usability" of chemical weapons produced between 1925 and 1946, that is, whether such weapons have deteriorated to the extent that they can no longer be used as chemical weapons. Following discussion by the group, the guidelines proposed by the chairman are to be revised for further discussion.

The group also discussed declaration, destruction and verification requirements for abandoned chemical weapons and were assisted in that regard by a chairman's paper dated 17 January, *Regime for Abandoned Chemical Weapons*. There are differing views on the responsibilities of the territorial and the abandoning state with regard to ACW and environmental issues. The chairman recommended that further negotiations might be more usefully conducted on a bilateral basis between the two most concerned delegations.

The group also discussed the issue of liability for verification costs associated with old and abandoned chemical weapons. Debate focused on the need to first resolve the extent of verification under Part VI(B) of the Verification Annex required for old and abandoned chemical weapons before dealing with the issue of liability for costs.

Expert Group on Chemical Weapons Issues This met on 18–19 January but, as in the previous two intersessional periods, did not issue a report. The lack of progress in the group is a matter of concern given that this expert group is one of the most important subsidiary bodies of the Commission. Both within the expert group and outside it, the view has been expressed that the lack of progress reflects a lack of both political will and the flexibility to consider solutions to outstanding issues, and that alternative methods of work must be found to enable the group to move forward.

The group spent time discussing the concept of "levelling out" in the context of the order of destruction of chemical weapons production facilities as required by the Convention. As the concept of levelling out is not defined in the Convention itself, it is necessary for the expert group to agree to guidelines which would allow each state party to destroy their facilities at the same rate. With this aim, the Friend of the Chair for Chemical Weapons Production Facilities proposed a solution using a points system whereby standard and specialized buildings and standard and specialized equipment are weighted in order to be able to measure production capacity. This proposal was discussed by the group and some amendments proposed. The revised text will now be forwarded to capitals for consideration.

The group also returned to the issue of what costs of verification are chargeable to a state party under Articles IV and V. Many delegations support the proposition that a cost is payable by the OPCW if such a cost would be incurred regardless of whether or not an inspection took place while the Inspected State Party would be liable for costs incurred because an inspection is undertaken. However, there is no consensus on this view and the Group could reach no further understandings in the course of the meeting. The view was expressed that an underlying issue is whether or not the bilateral agreement of June 1990 between the Russian Federation and the United States would be in force as this will impact on the resources available to the OPCW. This is because the Convention explicitly provides that the OPCW will pay for complementary monitoring.

The Friend of the Chair for the *Declaration Handbook* reported to the group on progress being made as regards Section D of the handbook. Although work on this section has been completed, it has not been possible for the group to reach agreement on the text as it is not clear whether or not this section applies to old chemical weapons (1925–46). In an effort to achieve resolution, a reduced version of this section has been drafted and distributed to those delegations most directly concerned for comments. One delegation reminded the group of its concern that the issue of the definition of chemical weapons remains to be resolved.

The group discussed again the draft *Model Facility Agreement for Chemical Weapons Destruction Facilities* but consensus was not reached. Further work was undertaken in consultations held on 19 January, and this is continuing.

Expert Group on Inspection Procedures This met on 12–13 February and 16 February. The group considered the report of the Specialist Task Force on Inspection Equipment Issues and on the basis of the task force's recommendations, the group adopted the operational requirements and technical specification of the Team Decontamination Kit. The group also approved the technical specifications for the Alleged Use Sample Collection Kit pending comments received by the Secretariat by medical experts in member states and further review by the expert group. The group revisited the issue of the use of the hydrogen concentration measurement (HCM) non-destructive evaluation (NDE) equipment and agreed that the issue should be discussed further by the task force. Work remains to be completed on the following items of inspection equipment: occupational health equipment, X-ray equipment as well as possible devices for on-site determination of acetylcholinesterase activity. It was agreed that private consultations will be held among those delegations with a particular interest prior to the next meeting of the task force.

The group also received and discussed the report of the Specialist Task Force on Analytical Issues. On the basis of that report, the expert group recommended that the Commission take note of the *Standard Operating Procedure for Evaluation of Results of OPCW/PTS Proficiency Tests* and adopt the *Criteria for the Conduct of OPCW/PTS Proficiency Testing*. The group noted that Finland and the United States have established a joint evaluation protocol for on-site sample preparation methods for use with GC/MS

analysis and report back to the expert group at a future meeting. The group also considered the budgetary implications of laboratory proficiency testing and noted that the Secretariat is working on the assumption that three official tests will have to be conducted by entry into force or shortly thereafter. For the first of these tests, Switzerland and Finland have agreed to undertake the work, at no cost to the Secretariat. However, there appears to be limited support for the other two tests. The Republic of Korea has made an offer of assistance and France has indicated it may be able to help. The group requested those member states with experience in this area to provide assistance if possible. To avoid future difficulties with regard to funding, the Secretariat will request that provision be made in the OPCW budget to cover the costs of proficiency testing.

The group also received and discussed the report of the Specialist Task Force on OPCW Analytical Databases. In accordance with the recommendations of the task force, the group approved the results of the evaluation of the additional NMR and MS spectra. The group also requested the Secretariat to undertake several tasks including: assembling databases for the evaluation of analytical inspection equipment and for training purposes; producing a background paper containing options for the validation of the central OPCW analytical database and the on-site analytical databases; and forwarding information on the on-site data analysis software systems to the task force. The group also requested the Secretariat to report, at its next meeting, on the progress in the development and integration of the central OPCW analytical database.

The group discussed the criteria to be used for the designation of laboratories and, in particular, the precise meaning of the phrase (adopted by the Commission in PC-VI/22) that such laboratories should "have obtained accreditation by an internationally recognised accreditation body for tasks for which they are seeking designation". The group requested member states to provide available information, and requested the Secretariat to approach the European Cooperation for Accreditation of Laboratories and the International Laboratory Accreditation Council so that the issue can be further discussed by the Task Force on Analytical Issues at its next meeting.

Expert Group on Challenge Inspection This met on 14–15 February. As requested by the group at its last meeting, a background discussion paper was prepared and distributed prior to this meeting dealing with issues relating to the possible abuse of the right to request a challenge inspection. The group discussed an *Illustrative List of Objective Indicators to Facilitate the Executive Council in Addressing any Concern, in Accordance with Paragraph 22 of Article IX, whether the Right to Request a Challenge Inspection has been abused*. While these indicators are to facilitate the Executive Council's consideration of the issue, they are neither comprehensive nor prescriptive. The indicators include: the result of the Executive Council's consideration, if any, of whether the request was within the scope of the Convention; information relating to the inspected site available prior to the request; whether any information submitted as part of the inspection request was shown to be false; the results, if available, of any efforts by the request-

ing state party to seek to clarify or resolve any doubts concerning compliance, if that state party elected to exercise its options in accordance with paragraphs 1 through 7 of Article IX; whether the conduct of the observer, if any, named by the requesting state party was cause for concern, including on matters related to confidentiality; whether previous challenge inspection requests, not resulting in an Executive Council conclusion that there was a need for further action to redress a compliance concern had previously been made by the same requesting state party *vis-à-vis* the same inspected site, and if so, their frequency and number.

The group also discussed cost aspects in the case of abuse of the right to request a challenge inspection, but reached no conclusions. This issue emerges from the provisions of Article IX.23 which provides that the Executive Council, in cases of abuse "shall examine whether the requesting State Party should bear any of the financial implications of the challenge inspection."

Expert Group on Safety Procedures This met on 1 February to complete its work on the draft *OPCW Health and Safety Regulations*. The group approved the draft regulations and agreed to forward them to the Commission for consideration and adoption at its thirteenth session, bringing to an end the long-standing disagreement relating to the conduction of safety evaluations on inspected sites. In approving the regulations, the group stated that it understood that subparagraph 4.2 (relating to detection and monitoring during inspections), does not prejudice the obligation of inspected states parties to provide available data based on detection and monitoring. All the tasks assigned to this expert group by the Commission have now been completed.

Expert Group on Technical Cooperation and Assistance This met on 9 February to continue its consideration of outstanding issues relating to Articles X and XI. Following on from the last meeting of the group, in relation to the setting up of an internet website, the group considered a proposal by the Secretariat setting out guidelines for the Secretariat's internet website. On the basis of that proposal, the group agreed to guidelines and recommended that they be forwarded to the Commission for approval at the forthcoming thirteenth session. The guidelines provide, *inter alia*, that the website's objectives would be to provide governments, in particular their National Authorities, and mass media, international organizations and institutions working in related fields with timely and correct information on the Convention. Material available on the website would be governed by the draft *OPCW Policy on Confidentiality* and the draft *OPCW Media and Public Affairs Policy*. It has also been suggested that the Executive Secretary might establish a website review group. The expert group concluded that the utility of the website had been demonstrated in its experimental stage, and proposed that Working Group B should consider recommending to the Commission that the website be made permanent.

The group continued its discussion on ways to facilitate information exchange in relation to Article XI requirements. In particular, the group considered a background paper issued by the Secretariat evaluating an end-user survey of information requirements to facilitate such ex-

change. The group concluded that it would be worthwhile to establish, on an experimental basis, an information service covering fields of “dangerous properties of chemicals”, “producers and suppliers of chemicals” and “producers and suppliers of technology and/or equipment for the production, processing and handling of chemicals”. The group also concluded that an evaluation of this experimental service should take place not later than the end of 1996.

Open ended consultations were held on 5 March in the course of which Articles X.4 and XI were discussed.

Expert Group on Chemical Industry Issues This met during 29–31 January and on 23 February. The group continued its work on the draft *Model Agreement for Schedule 2 Plant Sites* assisted by several revisions of the chairman’s discussion paper *Proposed Solutions to Outstanding Issues in the Draft Model Agreement for Schedule 2 Plant Sites*. The group requested that an updated draft based on these revisions be issued and agreed to continue its work on this draft model agreement in the next intersessional period. The group initiated discussion on a model agreement for Schedule 1 facilities, and requested the Secretariat to pre-

pare a draft for discussion by the group during the next intersessional period.

At both meetings, the Group discussed the chairman’s non-paper *The elaboration of guidelines for mixtures containing a low concentration of a Schedule 2/3 chemical* which was revised for the second meeting. Having reviewed the basic approach to this issue contained in the paper, the group discussed, but could not agree on the numerical value of concentration limits below which declarations would not be required. The group decided to finalize the guidelines during the next intersessional period.

The group also received the Secretariat’s proposed improvements on sections B and C of the *Declaration Handbook* based on the evaluation of the results of the recent trial declaration exercise on communications and the second communications workshop. The group discussed a future course of action to complete these sections as a matter of urgency. In particular, the group requested its chairman to call informal consultations on 12 March to consider sections A, B and C of the *Declaration Handbook*.

This review was written by Treasa Dunworth, the HSP researcher in The Hague.

News Chronology

November 1995—February 1996

What follows is taken from the CBW Events data-base of the Sussex Harvard Information Bank, which provides a fuller chronology and more detailed identification of sources. See Progress in The Hague (above) for coverage of OPCW-related developments. The intervals covered in successive Bulletins have a one-month overlap in order to accommodate late-received information. For access to the data-base, apply to its compiler, Julian Perry Robinson.

1 November In the US Senate, the hearings on ‘Global proliferation of weapons of mass destruction’ before the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs enter their second and final day. On the day previously, a staff study of the Japanese cult Aum Shinrikyo [see 30 Oct] had been released, and evidence on Aum had been taken from 13 governmental and nongovernmental witnesses, including the leader of the New York City chapter of Aum Shinrikyo and officials of the Defense Department, CIA, FBI and Customs Service. Senator Sam Nunn, the ranking minority member of the Committee, had initiated the staff investigation of the cult earlier in the year, the investigators travelling to Tokyo, Moscow, Bonn and New York to examine different aspects. In Japan they had been briefed by a number of key agencies and ministries.

Today’s witnesses address other aspects of the proliferation issue. Among them is Dr Vil Mirzayanov [see 15 Feb], who states that methylphosphonyl dichloride is a precursor for the synthesis of the still-secret Russian ‘Novichok’ CW agent [see 25 May 94] known as A-230. [Note: If this is indeed so, it would seem to follow that A-230 has not, after all, evaded the control schedules of the Chemical Weapons Convention: it would be captured by item 4 of Schedule 2.] Dr Mirzayanov does not mention A-232 [see 8 Dec 93 and 25 May 94].

Dr Milton Leitenberg, a senior fellow of the University of Maryland Center for International and Security Studies, testifies that the BW programme of the former Soviet Union “was apparently an order of magnitude larger than that of the United States at its pre-1969 peak”, most of it established after the 1972 Biological Weapons Convention had been concluded, and much of it seemingly still intact despite President Yeltsin’s assurances of elimination.

The Director of the CIA Nonproliferation Center, Dr Gordon Oehler, states that, besides Aum Shinrikyo, other groups have also begun using chemicals for terrorism. He cites press reporting of an incident in Turkey in which the Kurdistan Workers Party (PKK) is said to have used cyanide to poison a water supply. {FDCH Political Transcripts 1 Nov; *Chemical & Engineering News* 13 Nov}

1 November In Washington, a publication from the Henry L Stimson Center, *The US Senate and the Chemical Weapons Convention: The Price of Inaction*, warns that continued Senate delay [see 20 Oct] on ratification of the CWC may jeopardize America’s own safety and security as well as international efforts to eliminate a category of weapons that is universally abhorred. One of its chapters, by Amy Smithson, includes consideration of a scenario in which the treaty has entered into force without the United States having yet joined.

Also released by the Center is a compilation of *Views About the Chemical Weapons Convention*. Former Secretary of State Lawrence Eagleburger here states: "The [CWC] is an important part of an international structure that would increase US and global security in the next century. If we do not lead this effort to curb the proliferation of chemical weapons and initiate their global elimination, we increase the chances that we will encounter disasters in the 21st century reminiscent of those that occurred in the first fifty years of the 20th century."

2 November In the United Kingdom, the Department of Trade and Industry publishes a revised version of its draft Bill to implement the CWC [see 19 Jul]. The new draft, which has grown from 27 to 38 clauses, reflects comments received from inside and outside government. The DTI minister responsible, Mr Philip Oppenheim, later describes these comments to Parliament as follows: "In general, industry representatives indicated that they were in agreement with the provisions of the Bill. Other views emphasized the need for the operations of the DTI as national authority to be transparent, that it should be accountable, and that the Crown should be bound by the provisions of the Bill." {*Hansard (Commons)* written answers 23 Nov} The new draft has largely abandoned the concept of Crown immunity, which was one aspect of the initial draft that had been heavily criticized at the HSP London CBW Seminar [see 27 Sep]; and, by including a new "catch all" provision, responds to another Seminar criticism of the draft, that the powers it would make available would not be sufficient to support the "necessary measures" which, under Article VI.2 and VII.1 of the Convention, the UK would be required to adopt in order to implement its obligations. The new draft does not, however, incorporate transparency mechanisms to enhance accountability with regard to the strengthened powers. {*ISIS Briefing* 28 Nov}

The Department also produces a compliance cost assessment for the Bill. As regards the information which the chemical industry will be required to provide in order to enable the UK to fulfil declaration requirements under the Convention, this assessment reckons that the industry will have to bear costs in the region of £9.6 million per annum. This is based on the estimate by the Chemical Industries Association that some 2000 UK plants will have to be declared. OPCW inspections might cost the industry upto another £0.1 million per year, exclusive of the costs that are refundable by the OPCW.

3 November Netherlands financial support for the Russian chemdemil programme [see 24 Apr] is the subject of an agreement signed in The Hague by Defence Minister Jorrijs Voorhoeve and the Chief of Russian RKhB Protection Troops, Col Gen Stanislav Petrov. Dutch experts are to visit Moscow and one of the Russian chemical-weapons storage facilities during the first half of December. Under consideration is the possibility of Dutch help in the construction of a chemdemil facility at Kambarka [see 25 Feb 93 and 21 Jan 95] in Udmurtia. {TASS 3 Nov 95 in FBIS-SOV 6 Nov, *De Telegraaf* 6 Nov, *Jane's Defence Weekly* 2 Dec}

4 November In Pyongyang, reports from South Korea that CBW weapons are being stockpiled in the North [see 29 Sep] are characterized as "shameless counter propaganda by warmongers" in a *Nodong Sinmum* commentary. Also: "During the past Fatherland Liberation War, the United States and its followers ignored the demands of international law and committed a heinous atrocity of indiscriminately using biochemical weap-

ons in opposing our Republic and our people. As a result, innumerable innocent people were mercilessly killed and wounded and were infected by various contagious diseases such as plague and typhoid.... Our people, who were direct victims of biochemical weapons and who are continuously facing the threat of chemical weapons today, put forth a proposal to make the Korean Peninsula a nuclear-free peace zone where there are no nuclear and chemical weapons [see 26 Jan 89 and 28 Dec 91]. Our people did this in order to prevent the re-emergence of such a calamity, and are making all possible efforts to bring the proposal to fruition.... We make it clear again that we have no chemical weapons." {Central Broadcasting Station Pyongyang 4 Nov in BBC-SWB 6 Nov}

4 November The *New York Times* publishes a statement urging swift action by the US Senate on the Chemical Weapons Convention. Action continues to be blocked by Senator Helms [see 20 Oct]. The statement, contained in a paid-for advertisement organised by Professor Leonard A Cole of Rutgers University, is signed by a group of 64 prominent scientists, business leaders, and retired military and government figures. It is widely reported.

5 November Iraq transmits to UNSCOM declarations in draft form setting out, once again, "full, final and complete disclosure" of its past chemical and biological weapons programmes. The submission of these drafts is announced two days later by UNSCOM Executive Chairman Rolf Ekéus, who says that UNSCOM work on the drafts will involve cross-checking against all available information, including the "chicken-farm papers" [see 20 Aug]. {*Reuter* 7 Nov, S/1995/1038}

5 November UNSCOM Executive Chairman Rolf Ekéus, in an interview published today, speaks about the constraints on CBW rearmament that will operate in Iraq when the present phase of UNSCOM work is complete: "There is a monitoring system which we are very proud of. We have identified all or most of the dual capabilities — the facilities, factories, universities, breweries, hospitals, etc. We study all of them continuously, using cameras and tagging equipment. We will have an import-export control mechanism in place. We hope the Security Council will adopt a resolution soon. It would make it obligatory for all states in the world that trade with Iraq to notify us about sales of items that we have defined as having dual capabilities... We also have a team left in Baghdad. They will see where the new equipment ends up and make sure it's used for peaceful purposes. We think we will have a strong system." {*Orlando Sentinel* 5 Nov}

5 November In the United States, Defense Department and other officials are debating a new strategic policy that would allow low-yield nuclear weapons to be employed against countries threatening to use biological weapons. The London *Sunday Times* quotes an unidentified source thus: "What is required is to make the acquisition and use of such weapons to be a very high cost business. We have to develop exactly the kind of deterrent strategy for biological weapons as has worked so well for nuclear weapons in the past." The debate, which is also being conducted within the professional strategic literature, has echoes in the United Kingdom concerning the single-warhead "sub-strategic" ballistic missiles with which the country's Trident submarines are to be armed. {*Guardian* 9 Jan}

6–8 November In The Hague, the OPCW Provisional Technical Secretariat holds its second communications workshop on the communications interface between the future Technical Secretariat and National Authorities. {PC-XII/B/2}

6–17 November The United Kingdom runs an international training course for CWC National Authority personnel. Those taking the course are from Argentina, Armenia, Australia, Belarus, Bulgaria, China, Cuba, Czech Republic, Hungary, India, Russia, St Lucia, Singapore, Slovak Republic, South Africa, Thailand and the UK. The course, which is based at the Royal Military College of Science at Shrivenham, is taught mainly by UK officials. The London School of Economics and the Harvard Sussex Program also contribute lecturers.

7 November In the UK House of Commons, the Defence Committee releases the report of its inquiry over the past two years into Ministry of Defence responses to health problems reported by Gulf War veterans. The committee report, *Gulf War Syndrome*, praises the Ministry for its swift establishment of a Medical Assessment Programme [see 27 Jul] but criticizes its “hopelessly inadequate” level of support. Comparing and contrasting the attitudes of the Ministry and of the US Government, the report says: “Both are agreed that there is at present no medical evidence to support the existence of a single disease or syndrome related to service in the Gulf; but whereas the US Administration, at all levels, has displayed compassion for those affected, a commitment to finding the best treatments for them and a determination to investigate the possibility of a common cause, MoD’s response has been reactive rather than proactive and characterised throughout by scepticism, defensiveness and general torpor.”

The report states that French forces operating in the Gulf were given “no protective immunisations against chemical or biological agents, either before or during the Gulf conflict”. The report observes that no French veteran has yet complained of the putative Gulf War Syndrome, and goes on to recommend that the Ministry of Defence “seeks to pursue with all Coalition partners the possibility of a link between medical counter measures against [CBW] and the symptoms associated with Gulf War Syndrome”.

The report calls for resources to be allocated to current preliminary work sufficient to allow the rapid completion of a full, independently monitored, epidemiological study. The report also recommends that “a comprehensive programme of research is established at [CBDE] Porton Down designed to investigate the short term and long term effects of the full range of [CBW] countermeasures available to our Armed Forces, in a variety of operational environments, and that the results of such research — suitably declassified — be published.” {HC Papers (Session 1994–95) 197}

The report is characterized as “unhelpful and disappointing” by Armed Forces Minister Nicholas Soames, but it is welcomed by the Royal British Legion. A lawyer handling 680 claims for compensation, Hilary Meredith [see 27 Jul], comments: “The government must now take action to fund adequate investigation of Gulf-War-related illnesses. After all, it must be lack of funding only that is holding this back — if not, the implication must be that the government does not care about its veterans.” {PA 7 Nov}

7 November In San Francisco there is another meeting of the Presidential Advisory Committee on Gulf War Veterans’

Illnesses [see 18 Oct]. Dr Howard Urvovitz [see 11–12 Mar] reportedly suggests to the committee that the multiple immunizations given to US troops serving in the Gulf may actually have made them more susceptible to ambient CBW agents by inducing a condition known as Immune Paralysis in which the immune system becomes suppressed. He cites his finding that 75 of the 100-odd sick veterans he has now examined have tested positive for antibodies that appear when toxins interact with human endogenous retroviruses. {Gannett News Service 3 Nov}

8 November In Italy, the lower house of parliament votes unanimously to adopt legislation enabling Italian ratification of the Chemical Weapons Convention. {AFP 9 Nov} The Senate had already done so, on 27 July. The ratification law itself is promulgated by the president ten days later. {*Gazzetta Ufficiale* 25 Nov}

8 November The UN Security Council conducts its 28th 60-day review of the sanctions imposed on Iraq [see 23 Oct], leaving them in place.

At a pre-review press briefing the day previously, UNSCOM Executive Chairman Rolf Ekéus said that, in addition to all its other programmes of work on weapons of mass destruction [see 13 Oct], Iraq had apparently also been studying radiological weapons, which are not specifically mentioned in the mandate he has from the Council. {*Los Angeles Times* 8 Nov}

8 November President Clinton extends Executive Order 12938 for a further year, declaring that the state of emergency which necessitated both it and its predecessors [see 14 Nov 94] still existed, namely the continuing threat posed by proliferation of weapons of mass destruction.

He also transmits to the Congress a report on activities under the order. Effective 18 May, sanctions had been imposed against two foreign companies — Mainway Limited [see 26 Apr] and GE Plan — found to have engaged in chemical weapons proliferation activities, the nature of which is described in a classified report to Congress.

President Clinton addresses the Chemical Weapons Convention: “I must report my disappointment that the United States is not yet among those who have ratified. The CWC is a critical element of US nonproliferation policy and an urgent next step in our effort to end the development, production, stockpiling, transfer, and use of chemical weapons. As we have seen this year in Japan, chemical weapons can threaten our security and that of our allies, whether as an instrument of war or of terrorism. The CWC will make every American safer, and we need it now.” {US Newswire 9 Nov}

8 November The US Department of Veterans Affairs initiates a new study in its investigation of the putative Gulf War Syndrome [see 14 Dec 94]. The health status of a random sample of 15,000 Gulf-War veterans will be compared with that of a control group of 15,000 randomly selected veterans who did not serve in the Gulf War. This comparative study will extend to the children and reproductive health of the veterans and their families. It will take two years. {*Montgomery Advertiser* 16 Nov}

8–9 November In Munich, at the Federal Armed Forces Medical Academy, the German Defence Ministry convenes its Second Conference on Medical Biological Protection. The main topic is “New and re-emerging infectious diseases and their im-

plications for medical biological protection". Papers are presented not only by German BW defence and other scientists but also by governmental and nongovernmental scientists from other countries, including Austria, Canada, Russia, Turkey, the UK and the USA. The third conference in the series is scheduled for 6-7 November 1996.

9 November President Yeltsin issues a decree confirming the status of the Interdepartmental Commission on Chemical Disarmament which he had instituted earlier in the year [see 24 Mar] under the chairmanship of his National Security Adviser, Yuri Baturin. According to a wire-service report, the basic functions of the commission include: "drafting recommendations and proposals to the President and the Government of the Russian Federation on the main directions and organization of work linked to training the country for chemical disarmament, destroying chemical weapons stores, closing down or converting undestroyed production plants, providing for international inspections and implementing other international commitments in the field of chemical weapons". {TASS 9 Nov in FBIS-SOV 9 Nov}

9 November In the United Kingdom, at the army's Bramley Training Area near Basingstoke, Operation Cornelius is concluded: the removal of nearly 7000 rounds of buried ammunition including 250 rounds of suspected World War I chemical munitions. The latter have been sent to CBDE Porton Down for analysis and destruction. {PA 9 Nov}

9 November Chinese companies have been assisting a chemical-weapons programme in Iran, according to US Deputy Assistant Defense Secretary Bruce Reidel when testifying before the House International Relations Committee. He says: "Chinese firms have provided some assistance, both in terms of the infrastructure for building chemical plants and some of the precursors for developing agents.... We continue, when we become aware of such incidents, to raise them with the Chinese Government to the fullest extent we can while protecting intelligence sources and methods." He also says: "China's chemical industry is very rapidly growing at this time, and not all facets of it may be under the fullest scrutiny of the Chinese Government." {*New York Times* 10 Nov}

The Iranian Foreign Ministry issues a statement describing the testimony as "another baseless allegation that the US administration makes in order to garner votes". {*Tehran Times* 12 Nov quoted by Xinhua 12 Nov 95 as in BBC-SWB 13 Nov}

10 November Commonwealth heads of government, meeting in Auckland, New Zealand, issue a *Statement on Disarmament* in which, among other things, they urge ratification of the CWC at the earliest possible date and call again for the strengthening of the Biological Weapons Convention. {Xinhua 10 Nov}

11 November In the US Defense Department, a newly formed Counter-Proliferation Council [see 4 Sep] is shortly to begin work overseeing and coordinating policy, budgeting and acquisition programmes for combatting nuclear and CBW weapons, so *Jane's Defence Weekly* reports. The Council will be chaired by Deputy Defense Secretary John White.

13 November The Kazakhstan biopharmaceutical industry is described in detail at a seminar supported by the UK Depart-

ment of Trade and Industry at the University of Birmingham, England, organized by the university's Centre for Russian & East European Studies. There are presentations by the members of a DTI mission to Kazakhstan which in July had visited a large number of biopharmaceutical research, development and production facilities in Almaty and Stepnogorsk in order to explore technological, commercial and investment opportunities for UK companies.

KNPK Biomedpreparat at Stepnogorsk had been among the places visited, a large and technologically advanced industrial complex. It is among the military microbiological facilities scheduled for conversion by the Kazakh government, to which end it is receiving US assistance to the extent of \$2.6 million in Nunn-Lugar funds and \$3 million in private investment [see 5 Apr]. Dr Anthony Rimmington of CREES, who had been a member of the mission, says: "The details of what they used to make here were not made public to us, but we were impressed by their openness". {*New Scientist* 2 Dec}

13 November The US Army's operational requirement for a 100-km-range helicopter-carried BW detection capability which initiated the Counterproliferation LIDAR Program in April has brought two US national laboratories, Los Alamos and Livermore, into coöperation in a \$15 million 21-month technology-development effort. Field tests under ideal conditions at Dugway Proving Ground in 1993 showed that a Los Alamos system using commercial 1.06-micron lasers and a Sun workstation set up for back-scatter analysis, carried on a Black Hawk helicopter, could detect airborne aerosol 53 km away [see also 6 May 94]. Los Alamos is now building two "fully ruggedized" prototypes, while Livermore is developing a new eye-safe (1.5-micron) laser for the system. The task of characterizing the particles comprising the detected aerosol would fall to ground-vehicle-mounted Biological Identification and Detection Systems. {*Aviation Week & Space Technology* 13 Nov}

13 November The US Army announces that it has shortlisted three companies in its Congressionally-mandated search for alternative chemdemil technologies [see 11 Apr 94]. Out of 20 information packages submitted, the army has selected one on a catalytic extraction processing technology owned by Molten Metal Technology Inc, one on a high-temperature hydrogenation technology patented by Eli Eco Logic Inc, and one on an electrochemical oxidation technology, the "Silver II" process [see 12 May 94] of the British firm AEA Technology. The newly formed Alternative Technology Panel of the US National Research Council will now review the three packages for the army. A Defense Acquisition Board Review to determine whether there is any alternative chemdemil technology that warrants pilot testing is scheduled for October 1996. {*Business Wire* 14 Nov, *Chemical Engineer* 14 Dec}

14 November In Washington, where Senators Helms and Kerry are reportedly on the verge of a compromise that will enable Senate Foreign Relations Committee action on the Chemical Weapons Convention [see 20 Oct], the Center for Security Policy publishes a briefing paper arguing that Senator Helms is right to block US ratification of the Convention [see 4 Nov], a treaty which the *Washington Post*, the day previously, had said was "in jeopardy". The briefing paper opens with the following precis: "The usual suspects — the Clinton Administration and other, discredited advocates of ineffectual arms control agreements — are currently mau-mauing Senator Jesse Helms

over the Chemical Weapons Convention. It appears, however, that Sen. Helms has recognized this Convention for what it is: a diplomatic placebo that will do nothing to prevent the proliferation of deadly arms but may, nonetheless, induce the unwary to believe that the problem they pose is being effectively addressed. Sen. Helms is to be applauded for his courageous stance and strongly supported by the security policy community." {CQ Weekly Report 18 Nov, Washington Post 13 and 20 Nov}

14–17 November US Army Edgewood Research, Development and Engineering Center hosts its annual Scientific Conference on Chemical and Biological Defense Research.

A paper from Germany describes how the fill of a 50-year-old 150mm chemical artillery shell recovered from Munsterlager CW proving-ground was found to comprise, not tabun or mustard gas as was relatively common, but sarin nerve-gas; and the sarin was of better than 80 percent purity.

A session of the Conference is devoted entirely to "Less-Than-Lethal". Besides papers on two liquid irritant agents — EA 4923 (a methoxycycloheptatriene) and Oleoresin Capsicum, sometimes known as agent OC — and the apparently potentiating effect of the muscle-relaxant vecuronium on the induction of sleep in mice by a mixture of the hypnotic etomidate and the neuroleptic azaperone, there is a review of past work at Edgewood, the abstract of which opens: "Among the most mature of Less-Than-Lethal technologies are antipersonnel chemicals that render an adversary incapable of carrying out a military mission or criminal activity without permanent harm to people or property. Potential military missions include peacekeeping operations; crowd control; embassy protection; and counterterrorism. Law enforcement applications include use by local, state and national law enforcement agencies in hostage and barricade situations; crowd control; close proximity encounters; prison riots; and to halt fleeing suspects. Depending on the specific scenario, several classes of chemical have potential use, to include: potent analgesics/anesthetics as rapid acting immobilizers; sedatives as immobilizers; and calmatives that leave the subject awake and mobile but without the will or ability to meet objectives. Scientists at Edgewood have studied Less-Than-Lethal chemicals for over forty years." Elsewhere in the conference, Edgewood scientists present papers on medetomidine and carfentanyl congeners.

15 November The European Parliament adopts a resolution expressing deep concern that 6 of the 15 states members of the European Union have not yet ratified the Chemical Weapons Convention: Belgium, Ireland, Italy [but see 8 Nov], Luxembourg, Portugal and the United Kingdom [but see 2 Nov]. Further, the resolution calls upon "the Member States to ensure that sufficient powers and resources are available for the operation of an active, effective and transparent compliance-monitoring system in their territories". The resolution also calls upon the European Commission "to prepare a report on the legal aspects of the implementation of the [CWC] in the Member States to allow coordination of their chemical export controls and other regulations in this area in line with their individual commitments under the terms of the ... Convention".

15 November In the United Kingdom, the 1995–96 session of Parliament is opened by the Queen. She announces that her government will introduce legislation to ratify the Chemical Weapons Convention. Next day, the Chemical Weapons Bill

receives its First Reading in the House of Commons. The Bill is identical to the second draft which the Department of Trade and Industry had published two weeks previously [see 2 Nov].

16 November In China, coinciding with a visit by US Assistant Defense Secretary Joseph Nye, the State Council issues a *White Paper on Arms Control and Disarmament*. {Kyodo 16 Nov} In regard to chemical weapons, this reaffirms that China "does not produce or possess chemical weapons". It continues: "China demands that, in keeping with the stipulations of the [Chemical Weapons] Convention, the country leaving chemical weapons in other countries destroy all such weapons as soon as possible. China hopes that the Convention will go into effect at an early date and be thoroughly and effectively implemented." Details are given of the measures which China has adopted for controlling exports of dual-use chemicals and chemical technologies; the chemicals it has placed under such control are those listed in the CWC schedules.

Later the White Paper says: "In 1984, China acceded to the [Biological Weapons] Convention ... and since that date it has fully and conscientiously fulfilled its obligations under the Convention... China supports measures that help strengthen the effectiveness of the Convention. It will actively join in discussions of the Ad Hoc Group on promoting international cooperation, enhancing trust, strengthening verification and other issues." {Xinhua 16 Nov in BBC-SWB 17 Nov}

16 November The European Parliament in plenary session urges the European Commission "to conduct a comprehensive survey of the entire undersea area of the North Channel between Scotland and Ireland as well as other known munitions and radioactive waste dumping grounds such as Hurd Deep near the Channel Islands". It also urges postponement of plans by British Gas to lay pipelines in the Beaufort's Dyke area of the Irish Sea [see 6 Oct] "where a large quantity of explosives, chemical weapons and nuclear waste are dumped" until "a comprehensive survey of the area is completed". {AFP 16 Nov}

17 November In Osaka, Japan, in bilateral talks during the annual Asia-Pacific Economic Cooperation meeting, Japanese Foreign Minister Yohei Kono tells his Chinese counterpart, Qian Qichen, that Japan will make sincere efforts to dispose of chemical weapons left behind in China by Japanese troops during World War II [see 16 Sep–1 Oct]. {Xinhua 17 Nov in BBC-SWB 21 Nov}

19 November UNSCOM Executive Chairman Rolf Ekéus arrives in Kuwait to begin briefing-visits to the six member states of the Gulf Cooperation Council. His aim is to consolidate political and financial support for the work of UNSCOM. {Reuter 20 Nov, S/1995/1038}

20 November In Kiev, the senior Ukrainian CBW defence officer, Maj-Gen Viktor Litvak, tells a press conference that Ukraine will be able to ratify the CWC next year. {TASS 20 Nov}

20 November In Sudan, government forces attack areas in the south of the country around the Namang mountains and outside Kadugali town with chemical bombs dropped from aircraft piloted by Iraqis, according to a statement issued five days later in Cairo by the opposition al-Ummah Party, quoting eyewitness accounts {AFP 25 Nov, Cairo *Al-Wafd* 3 Dec in FBIS-NES 11 Dec}. There is a subsequent report of Iraqi aircraft

dropping napalm in south Sudan {Paris *Al-Watan Al-'Arabi* in FBIS-NES 12 Dec}

20 November The OPCW Provisional Technical Secretariat currently has a staff of 115 people from 44 countries on fixed-term contracts. {*OPCW Synthesis* 20 Nov}

21 November In the United Nations General Assembly, now part way through its 50th session, the First Committee completes its work. The day previously it had passed a resolution sponsored by Colombia on behalf of the Non-Aligned Movement which urged all states parties to the CWC to consider all relevant norms relating to protection of the environment in implementing the Convention. The resolution, which called for the maintenance of environmental standards in other areas of arms control as well, was adopted by a recorded vote of 149-4-4. The four opposing votes are those of France, Israel, the UK and the USA; the four abstentions are Canada, Estonia, Japan and South Korea. {UN press release 20 Nov}

The committee had also adopted, in this case by consensus, a resolution on the Biological Weapons Convention. The resolution empowered the Secretary-General to provide services and assistance for the Fourth Review Conference, which is to be held in Geneva from 25 November to 13 December 1996. A resolution urging ratification of the Chemical Weapons Convention had, as in previous years, been withdrawn for lack of consensus. Introduced by Canada, a NAM amendment to it would have urged CWC signatories to "intensify their efforts to resolve outstanding issues, in particular that of removal of existing restrictions in the economical and technological areas".

On 12 December the General Assembly itself adopts the resolutions of the First Committee, the one on environmental norms (resolution 50/70M) by a vote of 157-4 with 2 abstentions, and the one on the BWC (resolution 50/80) without vote. {*Disarmament Times* 19 Dec}

22 November In Russia, the Virological Centre of the Ministry of Defence Institute of Microbiology is again featured on television [see 17 Feb 93]. Funding problems are reported to have obliged the centre to let out part of its facilities to a joint stock company. There is footage of an interview with the head of the RKhB Troops, Col-Gen Stanislav Petrov, in which he suggests that outbreaks of dengue and swine fever in Cuba had been acts of biological terrorism. {NTV 22 Nov in BBC-SWB 26 Nov}

22 November The UK government informs Parliament that details of declarations required from the UK under the Chemical Weapons Convention will be made available to the public when they are passed to the OPCW. {*Hansard (Commons)* written answers 22 Nov}

A clarification is later issued by the minister concerned: "We will make available to the public an overview of the UK declaration and some of the detailed information which it will contain. However ... certain information will not be released. This falls into two categories: firstly, the declaration will contain details of many individual commercial sites, which will include commercially sensitive information of value to competitors... Also, details of certain CBDE activities permitted under the Convention and the precise location of materials held for destruction must be safeguarded in view of the risk from terrorists and potential proliferators. However, we will make available to the public all the information in the declaration provided by MoD which does not have security implications. This will include a history of the

UK's activities in the CW field. As far as the OPCW is concerned, we are confident that the organisation's own confidentiality regulations are sufficiently stringent to protect sensitive information following our declaration."

23 November In the UK House of Commons, the Chemical Weapons Bill [see 17 Nov] receives its Second Reading.

24 November Uzbekistan signs the Chemical Weapons Convention [see also 31 Aug], the 160th state to do so.

24 November In Sri Lanka, chemical weapons are reportedly used in fighting between Tamil Tiger guerrillas and government forces attacking the Tamil stronghold of Jaffna. {Reuter in *Boston Globe* 26 Nov, AFP in London *Sunday Telegraph* 26 Nov} Rumours of imminent chemical use some weeks previously had caused the Army to issue gas masks, for in 1990 the rebels had reportedly attacked an army camp with chlorine. The Defence Ministry says that the gas, whose nature had not yet been ascertained, had caused no casualties because troops were prepared for it. Later, the chemical weapons are said to have been volley-fired tear-gas canisters. {AFP 25 Nov in FBIS-NES 27 Nov, AFP 26 Nov}

24 November In Israel, *Haaretz* reports that a proposal that Iraq should attack Israel with biological weapons had been submitted to Saddam Hussein on the eve of the Gulf War. The newspaper cites as its source one of UNSCOM's Iraqi "chicken farm" documents [see 20 Aug]. {AP 24 Nov}

25 November In Italy, the CWC ratification law [see 8 Nov] is published in the *Gazzetta Ufficiale*, thereby entering into force. The law designates the Ministry of Foreign Affairs as the CWC Article VII National Authority, tasked to coordinate and oversee all the administration's substantive implementation work. Criminal legislation in regard to violations of the Convention is extended to Italian citizens abroad. Article VI implementation, which concerns chemical industry and other potentially dual-use activities not prohibited under the Convention, is to be regulated by two special committees, one at the Ministry of Industry, the other at the Ministry of Commerce. For training purposes, industry must now prepare declarations even though the CWC is not yet in force: data related to notification or to licensing are to be submitted to the Ministry of Industry within the next 90 days.

26 November In Canberra, Prime Minister Keating announces particulars of the Australian initiative for a nuclear weapons free world. What is to be called the *Canberra Commission on the Elimination of Nuclear Weapons* is to comprise eminent people from around the world. Its mandate is to include the development of recommendations on durable global and regional security arrangements, including study of the link with other weapons of mass destruction and their control or elimination. {Senator Gareth Evans in *International Herald Tribune* 5 Dec}

27 November Georgia deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 43rd signatory state to do so.

27 November Namibia deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 44th signatory state to do so.

27 November Former Yugoslavia manufactured nerve gas and other chemical weapons [but see 28 Mar 90 and 10 Apr 90], and Serbia still has the capacity to do so, according to a Granada *World in Action* documentary shown on UK television. There is footage of the factories at Lucani and Baric in Serbia where sarin is said to have been produced [see also Dec 93]. There is also footage of samples being gathered at the now-derelict CW facility at Potoci near Mostar in Bosnia-Herzegovina [see 7–8 Dec 93] from which, in early 1992, equipment had been removed by the Yugoslav National Army, including components of what is described as a production line for sarin. Quoting a former worker, the documentary states that the line production capacity had been equivalent to half a million lethal doses per day. [Note: a milligram of sarin is capable of killing an adult human being.] Analysis of samples including a “pipe seal” from this line at the Swedish chemical defence laboratories had shown two of them to contain traces of sarin degradation product. The documentary estimates that there could now be up to 30 tonnes of the nerve gas stored somewhere in Serbia. Information is also presented on a ten-year chemical-weapons collaboration between Iraq and Yugoslavia [see 27 Sep 91] which included joint development of the *Orkan* multiple-launch artillery rocket system and the conversion of an Iraqi German-built plant from pesticide to nerve-gas production. {London *Independent* 27 Nov, Split *Slobodna Dalmacija* 28 Nov in FBIS-EEU 21 Dec} The Frankfurt journal *Nova Bosna*, attributing experts from the Army of Bosnia-Herzegovina, subsequently publishes further details of Yugoslav National Army and Serbian chemical weapons programmes, reporting that the JNA officer in charge had been Colonel Bozidar Dzakula.

Concerning the withdrawal of CW materiel from Bosnia to Serbia by the JNA in early 1992, *ASA Newsletter* {8 Feb} later states, without attribution, that 250 sarin-filled 122-mm rockets were removed from Zunovica Hadzici to Lucani in February 1992, together with some 60 tons of seeming CW-agent precursor chemicals.

27–28 November In Barcelona, the Euro-Mediterranean Conference of the 15 EU member states and 12 non-EU Mediterranean participants adopts a declaration setting out, among other things, a “political and security partnership”. {*European Insight* 1 Dec} This includes a pledge to “promote regional security by acting, *inter alia*, in favour of nuclear, chemical and biological non-proliferation through adherence to and compliance with a combination of international and regional non-proliferation regimes, and arms control and disarmament agreements such as NPT, CWC, BWC, CTBT and/or regional arrangements such as weapons free zones including their verification regimes, as well as by fulfilling in good faith their commitments under arms control, disarmament and non-proliferation conventions.” The declaration continues: “The parties shall pursue a mutually and effectively verifiable Middle East Zone free of weapons of mass destruction, nuclear, chemical and biological, and their delivery systems. Furthermore, the parties will consider practical steps to prevent the proliferation of nuclear, chemical and biological weapons as well as excessive accumulation of conventional arms”.

The non-EU participants in the conference were: Algeria, Cyprus, Egypt, Israel, Jordan, Libya, Malta, Morocco, the Palestinian Authority, Syria, Tunisia and Turkey.

27–29 November UNSCOM Executive Chairman Rolf Ekéus is in Baghdad for high-level technical and political talks. He receives new information on Iraqi CBW and missile programmes. This includes an inventory of chemical agents and precursors, and also a personal diary said to have been kept by a junior military engineer relating to destruction of certain of Iraq’s CW and BW bombs. Iraq, through Deputy Prime Minister Tariq Aziz, undertakes to continue its coöperation without time limits. {S/1995/1038}

27–29 November In Ethiopia, the fourth African Regional Seminar on National Implementation of the Chemical Weapons Convention is held in Addis Ababa. It is hosted by the Ethiopian government and organized by the Ethiopian Science and Technology Commission in coöperation with the OPCW Provisional Technical Secretariat. Twenty African states, including two that have not yet signed the Convention, participate — Benin, Cameroon, Central African Republic, Chad, Egypt, Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Mali, Niger, Nigeria, Senegal, South Africa, Swaziland, Tanzania, Tunisia, Uganda and Zimbabwe. {PC-XII/B/WP.10}

Opening the meeting, the Vice Minister of Foreign Affairs, Dr Tekeda Alemu, states that Ethiopia has accomplished most of the work necessary for ratifying the Convention. {*Ethiopian Herald* 28 Nov}

27 November–8 December In Geneva, the Ad Hoc Group of BWC States Parties [see 10–21 Jul] reconvenes for its third session [see guest article, pp. 2–4].

28 November In Japan, the Cabinet approves an ordinance bringing into force the domestic legislation which had been adopted in 1982 to implement the Biological Weapons Convention. {Kyodo 28 Nov in BBC-SWB 30 Nov}

28 November In the United States, the chemdemil incineration facility at Tooele Army Depot, Utah, has not yet commenced operations [see 30 Dec 94]. It is a year behind schedule. A Utah state official tells *Inside the Pentagon* that the army had greatly underestimated the time required to complete the procedures associated with the surrogate trial burn process on which state licensing is in part dependent. The army is now aiming for 15 April 1996 as the start-up date. {London *Independent on Sunday* and London *Observer* 28 Jan}

28 November President Clinton writes to Senate Foreign Relations Committee Chairman Jesse Helms [see 14 Nov] in response to the latter’s concerns about Lt-Gen Anatoliy Kuntsevich, erstwhile chairman of the Russian Presidential Committee on CBW Convention Problems [see 20 Oct]. The president’s letter, released in January, includes the following: “Any activities aimed at smuggling materials for weapons of mass destruction — whether nuclear, chemical or biological — are of vital concern to the United States. That is why we recently imposed chemical weapons-related sanctions against General Kuntsevich. That is also why we are so determined to bring the Chemical Weapons Convention into force and to do so as soon as possible.”

President Clinton continues: "The CWC will strengthen our ability to deal with proliferation problems such as this by outlawing chemical weapons-related assistance to other countries, imposing reporting requirements on and restricting trade in chemicals that can be used to make chemical weapons, and requiring domestic legislation establishing civil or criminal penalties for violations of the CWC's provisions. Moreover, the CWC's routine and challenge inspection provisions will give us access to information that could reveal or even confirm a potential chemical weapons-related transfer."

The letter ends: "I share your concern about General Kuntsevich's smuggling activities. I am convinced, however, that once the CWC is in force in Russia and other countries, proliferators like General Kuntsevich will find it both more difficult and more costly to carry out their deadly activities. The CWC is in our national security interests. I urge your Committee to complete its consideration of this vital treaty this fall."

The president's National Security Advisor, Anthony Lake, writes to Senator Helms with information on the role of General Kuntsevich in Russian CW policy. This makes it clear that, contrary to the senator's characterization of Kuntsevich as a "key Russian negotiator", Kuntsevich was never "a member of the Soviet or Russian delegations to the CWC or BDA [Bilateral Destruction Agreement] negotiations".

29 November In Brussels the NATO Defence Planning Group and the NATO Nuclear Planning Group meet in ministerial session. They issue a final communiqué which includes this: "We noted with satisfaction the Alliance work on the defence implications of the proliferation of nuclear, biological and chemical (NBC) weapons and their delivery means, and endorsed the recommendations of the Senior Defence Group on Proliferation (DGP), including on needed military capabilities. These military capabilities should support NATO's central objectives for dealing with proliferation: prevent proliferation from occurring or reverse it through diplomatic means, deter use, and protect NATO territory, populations and forces from NBC attacks. Prevention of proliferation remains our primary aim, but we noted that NBC proliferation poses a direct military risk to the Alliance and must be taken into account to maintain NATO's ability to safeguard the security of its member states. Alliance military preparedness to deal with this risk is an important aspect of NATO's adaptation to the new security environment. We agreed that an appropriate mix of conventional response capabilities and passive and active defences, coupled with effective intelligence and surveillance means, would complement Alliance nuclear forces and would reinforce the Alliance's overall deterrence posture against threats posed by proliferation." {*Atlantic News* 1 Dec}

29 November In the United States, at Wright-Patterson Air Force Base near Dayton, Ohio, 92 biological-warfare munitions are unearthed during construction work. They are M114 bomb-lets charged with *Brucella suis* bacteria. [Note: This 4-pound munition had been developed during the late 1940s from initial World War II studies, latterly for the M33 500-pound cluster-bomb that was standardized with an Agent AB1 brucellosis fill in 1951.] Subsequent sampling and analysis of the buried munitions show the bacteria all to be dead. The commander of the Air Force Aeronautical Systems Center, Lt-Gen Richard Scofield, states that the bomb-lets had been brought to the air-base between 1951 and 1954 as part of a project to develop a

mobile laboratory that tested a bomb-let's contents for potency. {*Dayton Daily News* 7 and 15 Dec, *Columbus Dispatch* 9 Dec}

29 November–2 December In Baghdad, UNSCOM chemical experts hold talks with Iraqi officials on the new draft "full, final and complete disclosure" of Iraq's CW programme [see 5 Nov], identifying aspects on which UNSCOM would need clarification and further information. Issues raised include: verification of the declared level of VX production; major inconsistencies in the overall material balance; and accounting for munitions, both imported and indigenously produced, that had been intended for chemical fills. The talks are later described as "productive". {S/1995/1038}

30 November Japanese Foreign Minister Yohei Kono, questioned during a meeting of the House of Councillors Foreign Affairs Committee confirms a statement made to the committee by the head of the Defence Agency Bureau of Defence Policy, Masahiro Akiyama, in which the latter had said that the Japanese military had manufactured "both non-lethal and lethal gases" at the time of World War II, and had added: "It's clear that weapons filled with non-lethal chemicals were used". {*Mainichi Daily News* 2 Dec}

30 November President Clinton signs into US law the 1996 Defense Appropriations Act, which includes some \$7 billion in funding additional to that which the administration had requested and which it had been opposing. The Defense authorization legislation still remains controversial. {*Defense News* 11 Dec}

30 November The US administration proposes an amendment to its antiterrorism bill [see 19 Apr] in an attempt to get the legislation through a blockade in the House of Representatives where it is seen as a threat to civil liberties by both liberal Democrats and conservative Republicans. The amendment would, among other things, remove the provision allowing the military to assist civilian law enforcement officials in cases involving CBW weapons [see 7 Jun]. {*Washington Post* 2 Dec}

1 December In Belgium, the chemdemil facility at Houthulst [see 14 Sep] has just begun the task of destroying, by disassembly and incineration, the 21,000 unearthed chemical munitions that have accumulated since ocean-burial of these Great-War remnants ceased in 1980. The facility cost some \$19 million to build and is expected to cost \$1.7 million per year to run. It is likely to take about 15 years to deal with the current stockpile which is, however, still being added to almost daily. {*Austin American Statesman* 14 Dec}

2–3 December The Pugwash Study Group on Implementation of the CBW Conventions holds its fourth workshop [see 19–21 May], in Geneva, on Strengthening the Biological Weapons Convention. Participating are 52 people from 20 countries. {DPA 4 Dec, *Pugwash Newsletter* Jan}

3 December In Madrid, at the close of the EU/USA summit meeting, two documents are signed, one of them a *Joint EU/US Action Plan* which includes the following: "We will cooperate with a view to revising the 1972 Convention on Biological Weapons in order to promote new measures to increase its effectiveness. We will work to counter the proliferation of chemical and biological weapons." {*Atlantic News* 16 Jan}

4 December In Tokyo, the leader of the sect Aum Shinrikyo, Shoko Asahara, is served a further arrest warrant, this one on suspicion of involvement in the murder by VX nerve-gas of an Osaka businessman a year previously. {Kyodo 4 Dec in FBIS-EAS 5 Dec} Asahara is already under indictment on a variety of murder and other charges. His trial, which was to have begun on 26 October [q.v.] has been postponed until 24 April 1996. {Reuter 31 Jan}

The first trial of other indicted cult members begins on 11 December, when two of them plead guilty to charges of having released poison gas in the Tokyo subway on 20 March. {Reuter 11 Dec}

4 December In Tehran, Iranian Foreign Minister Velayati and Industries Minister Ne'matzadeh speak at a national seminar on the national implementation of the Chemical Weapons Convention attended by high-ranking government officials and military officers. Dr Velayati describes the negotiating history of the Convention and says: "We reject all false allegations that Iran is building chemical weapons". He also says that, during the years of the Sacred Defence (i.e., the war with Iraq), 252 chemical attacks were carried out against Iran and about 9,000 people were killed in these attacks.

Dr Velayati speaks, too, of the proliferation of chemical weapons, a Tehran radio commentary summarizing his remarks as follows: "It should be noted that the technology for the manufacture of chemical weapons, as well as the necessary raw materials for such weapons, first existed in the industrial countries and then infiltrated to the developing countries. In other words, control on the production and distribution of chemical weapons is one of the political responsibilities of the industrial countries more than anyone else, and the negligence and efforts to reap benefits by some political and economic factions in these countries have inflicted irreparable damages on the health of many innocent people. Meanwhile, more sensitivity should be displayed on the use of chemical weapons in order to grant the Convention higher credibility. Also, the use of such weapons should be very carefully followed up and violators should be dealt with on the basis of the Convention." {Xinhua 5 Dec}

4 December In Germany, the Federal Government has decided against refunding Rhine-Palatinate in respect of the DM 5.3 million which the Land had spent safeguarding the transport of US chemical munitions out of Clausen in 1990 [see 1 Sep 90 and 22 Mar 91]. {Frankfurter Rundschau 5 Dec}

4-6 December In Muscat, Oman, the Gulf Cooperation Council [see 19 Nov] conducts its 16th summit meeting. The GCC Supreme Council adopts a final statement which includes the following: "The Council underlines the importance of intensifying the efforts of the UN Commission assigned the task of eliminating Iraqi weapons of mass destruction by promoting the work of its monitoring organs so that all these weapons and their components may be brought under control and eliminated rapidly. In this regard, the Council expressed the GCC members' readiness to continue to contribute towards the work of this commission by way of extending financial and political support to it." {Oman TV 6 Dec in BBC-SWB 8 Dec}

5 December In the Russian State Duma, the draft law on the elimination of chemical weapons [see 6 Jul and 26 Oct] receives its first reading, and is referred to committee. Some

deputies voice dissatisfaction with the draft, notably on the grounds that the draft is not consistent with environmental requirements. {Moskovskiye Novosti 24 Dec in FBIS-SOV 12 Jan, Igor Khripunov in Defense News 15 Jan} The Deputy Chairman of the Duma Defence Committee, Aleksandr Piskunov, sees current election-campaigning as responsible for this. He says on Moscow Echo radio {6 Dec in FBIS-SOV 6 Dec} that some deputies are using the issue to increase their popularity in certain quarters.

5 December In Brussels, the North Atlantic Council meeting in ministerial session adopts a final communiqué which includes the following: "The Alliance's continuing success in addressing the political and defence aspects of proliferation, furthered by the work of the Senior Politico-Military Group on Proliferation and Senior Defence Group on Proliferation, demonstrates NATO's resolve to work together on common security concerns and is an important aspect of the Alliance's ongoing adaptation. We welcome and endorse this work as a contribution to enhancing NATO's ability to safeguard the security of its member states in the face of direct risks posed by NBC proliferation. We also welcome the consultations with Cooperation Partners on proliferation issues." The communiqué goes on to "note the importance of an early entry into force" of the CWC, and to express support for "the ongoing work to strengthen confidence in compliance" with the BWC. {Atlantic News 7 Dec}

6 December In the UK House of Commons, amendments to the Chemical Weapons Bill [see 23 Nov] are considered by a committee of the whole House, two of them being adopted, including a requirement for a statutory annual report on the operation of the Bill. The Bill then receives its Third Reading and passes to the House of Lords, where it receives its First Reading next day. {Chemistry in Britain Jan}

6 December The UN Security Council committee that is monitoring the UN sanctions against Iraq agrees a mechanism for monitoring future exports to Iraq of dual-use technologies that could be used in proscribed weapons programmes [see 5 Nov UNSCOM]. This 'EXIM regime', which would complement the ongoing monitoring and verification system [see 13 Oct] as required under Security Council resolution 715 (1991) [see 11 Oct 91], is set out in a proposal for approval by the Security Council which the Sanctions Committee now transmits to the Council on its own behalf and on behalf of UNSCOM and the IAEA. The regime would rely on notifications both by Iraq and by the supplier states of planned supplies of dual-use items to Iraq, with inspection of those items at end-user sites. UNSCOM has been working to complete the necessary practical arrangements, including inspections of Iraqi border and customs posts, so that the EXIM regime can function within 45 days of Security Council approval. {UN press release 6 Dec}

7 December In Russia, the Ministry of Environmental Protection and Natural Resources announces that at least 160,000 tonnes of chemical weapons may lie buried in Russian seas, posing "a grave threat to ecology and the health of man". The Ministry states that, as part of the Russian programme over the next 15 years which includes elimination of the 40,000 agent-tonne chemical-weapons stockpile, it is joining with other departments to plan a series of measures to prevent the dumped weapons from causing disaster. There are dump sites in the

Baltic, White and Barents Seas and in the Sea of Japan. {Interfax 7 and 12 Dec in BBC-SWB 8 and 22 Dec}

7 December In the US Senate, where Foreign Relations Committee chairman Jesse Helms has continued to block his committee's business, including the CWC, in furtherance of his Bill to reorganise the Department of State [see 1 Aug], the negotiation between him and, through Senator John Kerry, the Administration finally achieves and registers the compromise it has sought [see 14 Nov]. {*Washington Post* 8 Dec, *CQ Weekly Report* 9 Dec}

In statements on the floor of the chamber shortly before midnight, Senator Helms asks for "consent that if the Chemical Weapons Convention has not been reported by the close of business on April 30, 1996, that convention be discharged from the Foreign Relations Committee and placed on the Executive Calendar". The Majority Leader, Senator Robert Dole, says: "It would be my intention that the Senate would consider the Convention in a reasonable time period once the Convention is on the Executive Calendar". Senator Kerry announces the amendment to HR 1561, the House bill to reorganise the State Department, which he and Senator Helms have negotiated. Senator Helms then states his intentions regarding the CWC: "[T]he Foreign Relations Committee will immediately establish a hearing schedule on the convention which will begin hearings in February 1996. The committee will complete its hearings on the convention by April 30, 1996. By April 30, the committee will meet in a business session to consider the Chemical Weapons Convention. Prior to the final committee vote on whether to report the treaty to the Senate, the committee could adopt any or all of the following: recommendations to amend the treaty; reservations and understandings; modifications of the resolution of ratification; or direction for the renegotiation of the treaty. The final committee vote could allow that the treaty be reported favorably, unfavorably, or without recommendation." {*Congressional Record* 7 Dec pp S18229-30}

Senator Dole's statement is taken mean that there could be a full Senate vote on ratification of the CWC as early as late May 1996. {*Chemical & Engineering News* 29 Jan}

Senator Helms later says to the Senate (during a debate which precedes a vote in favour of HR 1561 as amended): "I feel obliged to assert that I remain opposed to the Chemical Weapons Convention. Until this administration comes forward with a public explanation of precisely how this treaty can be verified, which it cannot do and has not done yet, I cannot imagine that the Senate will be prepared to take action on the treaty. But that remains to be seen." {*Congressional Record* 14 Dec p S18619}

7–15 December In Iraq, UNSCOM conducts its 29th biological-weapons inspection, UNSCOM 127.

8 December Italy deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention [see 25 Nov], becoming the 45th signatory state to do so.

9–15 December In Iraq, UNSCOM conducts its 26th chemical-weapons inspection, UNSCOM 129A.

11–14 December In The Hague, the OPCW Preparatory Commission convenes for its twelfth plenary session [see 24–28 Jul]. Representatives of 87 of the 160 member states participate. The executive secretary notes in his report that the

progress of some expert groups in resolving outstanding issues has been less than satisfactory. Many delegations stress the need to renew efforts to find political compromises in order to complete the work of the expert groups and, in particular, call on the United States and the Russian Federation to ratify the Convention at the earliest possible date. The Commission asks the executive secretary to prepare a list of issues for the first Conference of States Parties for discussion at its thirteenth plenary session, scheduled for 18–22 March 1996.

The Commission elects a new chairman and other officers: Ambassador Dato Sallehuddin Bin Abdullah of Malaysia, the nominee of the Asian Group, is elected chairman of the Commission for the six-month period commencing on 8 February 1996. The representatives of Côte d'Ivoire, China, Croatia, Uruguay and the USA, representing the African, the Asian, the Eastern European, the Latin American and Caribbean, and the West European and Others Group respectively are elected as vice-chairmen for the same period. Dr Radoslav Deyanov of Bulgaria is appointed Chairman of Working Group B. The Commission renews the appointment of Ian Kenyon as executive secretary for a further one-year period commencing 11 February 1996. The executive secretary is authorised to appoint Shaukat Umer of Pakistan, the nominee of the Asian Group, as deputy executive secretary, a position that has been vacant since March. {PC-XII/17}

12 December In New Zealand, the government introduces its Chemical Weapons (Prohibition) Bill into Parliament. This is intended to implement the CWC in domestic law and thus enable New Zealand to ratify the convention. The bill is somewhat similar to the corresponding UK bill [see 17 Nov] and would seem to provide the NZ National Authority, which is to be established in the Department of Foreign Affairs and Trade, with ample powers for instituting the "necessary measures" required under CWC Articles VI.2 and VII.1. The similarity also extends to an absence of provision for transparency mechanisms whereby Parliament can assure itself, through ministerial accountability, of NZ compliance with the convention. Thus there is no provision in the bill, as there is in the counterpart Australian legislation, for a statutory annual report to Parliament on its operation [see also 6 Dec UK]. Parliament refers the bill to its Select Committee on Foreign Affairs and Defence.

12 December The Chinese Government will submit the CWC to the National Peoples Congress for approval during the first half of 1996, so the head of the Chinese delegation informs the OPCW Preparatory Commission. {Xinhua 12 Dec in BBC-SWB 13 Dec}

12 December In Ottawa, the G7 plus Russia meet in ministerial session to discuss international coöperation in combatting terrorism. The ministers adopt a declaration setting out guidelines. Among other things this urges "all governments to take the strongest measures to prevent toxic chemicals and biological agents from getting into the hands of terrorists". On the proposal of Japan, the ministers agree to direct their CBW experts to meet and develop these measures. {Kyodo 12 Dec}

13 December In Sri Lanka, unidentified military sources are telling reporters that the Liberation Tigers of Tamil Eelam are buying chemical weapons from abroad [see also 24 Nov], and that a consignment of white-phosphorus artillery and mortar projectiles is already en route to them from a seaport in Turkey.

{Reuter in *Boston Globe* 14 Dec, Xinhua 13 Dec} The Permanent Representative of Sri Lanka to the United Nations later seeks advice from the UN Centre for Disarmament Affairs about remedies available under the Chemical Weapons Convention. {Colombo *Daily News* 4 Jan}

13 December In the Czech Republic, the government approves draft implementing legislation for the Chemical Weapons Convention. The Czech CWC National Authority will be established at the Ministry of Industry and Trade, and will cooperate with the Ministries of Health, the Interior and Justice; it will have five or six employees. The Minister of Industry and Trade, Vladimir Dlouhy, tells a news conference that the country "has neither produced nor stored these weapons on its territory, not even within the framework of the former Czechoslovakia". {Czech Radio 13 Dec in BBC-SWB 14 Dec}

13 December In the US Senate, Martin Lancaster, Special Adviser to the President on the Chemical Weapons Convention, appears before the Armed Services Committee, which is considering his nomination for the post of Assistant Secretary of the Army for Civil Works. {Federal News Service 13 Dec}

13 December In the US Congress, conferees report on their reconciliation of the House and Senate FY 96 Defense Authorization bills [see 6 Sep]. On the controversial anti-ballistic-missile programme, the conference report requires the deployment of an ABM system by 2003. {*Congressional Record* 13 Dec}

For the chemdemil programme, the conference report would authorize a total of \$672.3 million for operations and maintenance, research and development, and procurement; the administration's original request had been for \$746.7 million [see 18 May]. The conference report would repeal the 1990 legislative requirement that a cryofracture chemdemil facility be developed [see 13 Nov 89]. It would also require an interim report from the defense secretary, by 1 March 1996, on the status of the chemdemil programme, on the integrity of the chemical-weapons stockpile, and on alternative chemdemil technologies.

On the Cooperative Threat Reduction (Nunn-Lugar) Program, the conference report would fence \$60 million until the President certifies to the Congress either that Russia is (a) in compliance with its obligations under the 1972 Biological Weapons Convention, (b) that the BWC Trilateral Process [see 15-16 Oct] has reached agreement on modalities for visits to Russian military biological facilities, and (c) that British and US officials have visited the four declared Russian military biological facilities, or that he is unable so to certify (in which event the fenced funding may not be spent on any Russian projects) [see also 13 Jun]. In addition, the conference report would fence half of the Nunn-Lugar funding that is available for the planning and design of a Russian chemdemil facility until the President certifies (a) that the joint Russian-American appropriate-technology study [see 26 Oct] is complete, (b) that Russia is making "reasonable progress" towards completing a "comprehensive implementation plan" for its chemdemil programme, and (c) that the United States and Russia "have made substantial progress toward resolution, to the satisfaction of the United States, of outstanding compliance issues" in regard to the 1989 Wyoming Memorandum of Understanding [see 13 Jul] and the 1990 Bilateral Destruction Agreement.

14 December In Tokyo, premises of Aum Shinrikyo [see 4 Dec] are raided and cult assets frozen on the orders of the

District Court, before which a group of gassing victims and their families are seeking compensation from the cult. {Reuter in *International Herald Tribune* 15 Dec}

Prime Minister Tomiichi Murayama this same day endorses a Justice Ministry request to initiate proceedings to outlaw the cult under the rarely used 1952 Subversive Activities Protection Act. {*Los Angeles Times* 15 Dec} Hearings are opened by the Justice Ministry on 18 January, and are expected to last until mid-March. {Reuter 18 Jan}

On 19 December, Tokyo High Court rejects the cult's appeal against the District Court ruling [see 30 Oct] that the cult's involvement with poison gas was an antisocial act that disqualified it from the protection of the Religious Organizations Law. {Reuter 19 Dec}

14 December In the UK, the number of laboratory animals used in the evaluation of medical countermeasures against CW agents has been declining over the past five years according to the Ministry of Defence, which releases the following figures: 8106 animals in 1990, 4964 in 1991, 2822 in 1992, 2498 in 1993 and 1597 in 1994 [see also 16 Jan]. {*Hansard (Commons)* written answers 14 Dec}

14 December The UK Defence Ministry, asked for its evaluation of the study of the putative Gulf War Syndrome in 650 US soldiers and immediate family members recently conducted by Professor Garth Nicholson of the University of Texas Medical School {London *Sunday Telegraph* 3 Dec}, tells Parliament of its conclusion that Nicholson's paper *Summary of Persian Gulf War illness pilot study on mycoplasmic infections* "does not provide any substantial or conclusive evidence of a connection between illnesses among veterans, mycoplasma infections and service in the Gulf" {*Hansard (Commons)* written answers 14 Dec}.

Professor Nicholson has been recommending to physicians attending sick veterans that they try treatments with antibiotics such as doxycycline to which pathogenic mycoplasmic infections are known to respond, and he has observed that a substantial proportion of a particular sample of Gulf-War-illness patients have had good responses to doxycycline. {*Journal of the American Medical Association* 273: 618-9} His recommendation has been taken up with good results, for example by Dr Howard Urnovitz [see 7 Nov] in California. {London *Guardian* 3 and 13 Jan, *Washington Post* 23 Jan}

15 December In Japan the Cabinet approves export-control regulations applicable to more than 80 dual-use items that could be used in the production of nuclear or CBW weapons or ballistic missiles. When the regulations come into force in October 1996, they will require an exporter to apply for an export licence if the exporter knows that the goods could be intended for such weapons; "know" may here mean simply that the exporter has been told as much by the Ministry of International Trade and Industry. Catch-all systems of this type are already operating in Europe and the United States. {Jiji 14 Dec}

15 December In Bangkok, the ten nations of Southeast Asia (Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam) sign a treaty establishing their region as a nuclear-weapons free zone, after twelve years of negotiation and despite Chinese (and US) reservations. The treaty commits its parties not to manufacture, possess, test or use nuclear weapons. The declared nuclear-

weapons possessor states are to be invited by ASEAN to sign a protocol to the treaty pledging to support its provisions. {AP in London *Daily Telegraph* 16 Dec}

15 December The US General Accounting Office, in testimony on the Cooperative Threat Reduction (Nunn–Lugar) Program before the House International Relations Committee, takes the Russian chemdemil programme and US assistance therefor as an example of “difficulties in working with the Russians”. GAO Associate Director Harold Johnson says in his prepared statement: “The United States and Russia have yet to agree on the applicability of a Russian technology to be used in a chemical weapons destruction facility [see 26 Oct]. Even if the United States and Russia do agree on the applicability of a technology by March 1996, as currently scheduled, and the facility is completed on schedule, uncertainties concerning resources, schedules, and costs may compromise Russia’s ability to destroy its chemical weapons stockpile in compliance with the Chemical Weapons Convention’s anticipated timetables (assuming the Convention enters into force in 1996).” {FDCH Congressional Testimony 15 Dec}

15 December The UN Security Council receives advance copies of the latest half-yearly report from UNSCOM, its tenth, on the implementation in Iraq of the disarmament stipulations of Gulf-War ceasefire resolution 687 (1991) {Reuter 15 Dec}. The report {S/1995/1038} covers the period 17 June to 17 December 1995. Notwithstanding the copious new documentation which Iraq has provided on its proscribed weapons programmes [see 13 Oct], Iraq is still, according to the report, concealing information and making misleading statements; and it is not providing information which it should have volunteered in support of its recently stated policy of complete transparency. As to the latest versions of its “full, final and complete disclosures” of its CW and BW programmes, which had been furnished to UNSCOM in draft form some six weeks previously [see 5 Nov], the report says that Iraq has undertaken to redraft the declarations substantially in order to meet UNSCOM’s requirements.

On CW, the report says that the new information obtained by UNSCOM since August “clearly shows that Iraq’s chemical weapons programme was more developed and wider in scope than had previously been admitted”. Without additional information such as Iraq has now agreed to provide, UNSCOM is still “unable to confirm that stocks of VX, large quantities of its precursors and appropriate weapons do not remain in Iraq”. Likewise, the accounting for procured and indigenously produced chemical munitions, including ballistic-missile warheads, remained incomplete: “Based on information available to it, the Commission believes that there were further activities relating to the development of chemical munitions that have still not been disclosed, including foreign assistance” [see also 27 Nov, Former Yugoslavia]. The report notes that in 1988 Iraq had plans to relocate the production of chemical precursors to civilian chemical facilities.

On BW, the report says that the latest draft “full, final and complete disclosure” admits to a “comprehensive and well-advanced offensive biological-weapons programme”, describing the involvement in it of “a number of facilities, in particular at Al Hakam and Dawrah”. But “serious gaps and omissions exist in the declaration and in the documentary support, especially related to biological warfare agent and munitions production, munition filling and the destruction of weaponized and bulk

agents”. UNSCOM therefore remains unable to state that Iraq does not retain BW agents and munitions.

The report contains a section describing, for the first time, Iraqi work on radiological weapons [see 8 Nov]. The programme had run from late 1987 to mid 1988. Two varieties of aircraft bomb with payloads of irradiated hafnium-containing zirconium oxide had been investigated.

Also presented in the report is a rather detailed account of the support in kind which UN member states have provided for UNSCOM and which is said to cover about two-thirds of the total costs of UNSCOM operations. Here UNSCOM expresses the hope that Germany will not, as its government has recently announced, reduce the air support (provided by two Transall transport aircraft based in Bahrain and three CH-53 helicopters stationed in Iraq) on which UNSCOM has now become dependent. Chairman Ekéus later tells reporters that the Security Council has asked Germany to reconsider its decision, saying also that few other countries would be able to provide and maintain helicopters that could function as effectively for surprise investigations. {Inter Press Service 21 Dec}

15 December In San Pedro Sula, the presidents of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama sign their Treaty on Democratic Security in Central America, which complements the Tegucigalpa Protocol of 13 December 1991. Under Article 49 of the new agreement, states parties “commit themselves to abstain from acquiring, keeping or allowing the stationing or transit of weapons for mass and indiscriminate destruction, including chemical, radiological and biological weapons”. Under Article 50, those of them that have not already done so agree to “start taking the necessary steps ... to approve, ratify or adhere to” the 1925 Geneva Protocol and the 1972 Biological Weapons Convention. In fact all six countries (and Belize as well) are parties to the BWC, but Costa Rica and El Salvador are not parties to the Geneva Protocol (nor is Belize). The treaty is subject to ratification. {Tegucigalpa *La Tribune* 16 Dec in BBC-SWB 29 Dec}

18 December Côte d’Ivoire deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 46th signatory state to do so.

18 December US Defense Under Secretary Edwin Dorn tells reporters that US service personnel sent to former Yugoslavia as part of the NATO Implementation Force (IFOR) under the Dayton accords are to be accompanied by teams “scanning for patterns of disease, for environmental hazards or whatever else”; and, when the troops return home, they are to be given health assessments and registered in such a way that overall trends in any odd ailments they may develop can rapidly be discerned. These arrangements are a lesson learned from the “Gulf War Syndrome” experience. {Gannett News Service 18 Dec}

18–19 December In the Netherlands, senior officials from 28 countries finalize the international export-control system or “new forum” [see 11–12 Sep] that is to take the place of CoCom, the defunct Western Cold-War weapon which, notwithstanding some rather profound EU–US differences, has been revived and redeployed for antiproliferation. The 28 countries represented (the 23 old CoCom members plus the Czech Republic, Hungary, Poland, Russia and Slovakia) agree to what is now called the Wassenaar Arrangement on Export

Controls for Conventional Arms and Dual-Use Goods and Technologies. The new system will become operative after an inaugural meeting of signatory states during 2–3 April 1996 in Vienna, where it is to have a secretariat. Several more states, such as South Korea, are expected to join then. China, however, has not indicated any wish to participate. {Reuter in *International Herald Tribune* 20 Dec}

18–20 December In Cairo, there is the second meeting of the Arab League technical committee that is working on the projected agreement for establishing the Middle East as a region free of weapons of mass destruction [see 22 Mar and 11 May]. A draft comprising 16 articles has been prepared by the Egyptian Foreign Ministry in cooperation with the Arab League. Also contemplated are three protocols — on verification in the nuclear, biological and chemical areas — and two annexes. One annex would contain the undertakings of states neighbouring the core members of the treaty, the core members being the Arab League countries plus Iran and Israel. The other annex would deal with the security guarantees to be provided by the five permanent members of the UN Security Council. {SPA 14 Dec in BBC-SWB 14 Dec} Experts from Egypt, Iraq, Jordan, Palestine, Saudi Arabia, Syria, Tunisia and Yemen participate in the committee, which is convened by the Assistant Secretary General for Political and International Affairs of the Arab League, Ambassador Adnan Imran. {MENA 18 Dec in FBIS-NES 21 Dec}

19 December In Beijing there is a further round of Sino–Japanese ministerial talks [see 17 Nov] during which Japanese Foreign Minister Yohei Kono speaks of his country's plans for removing the chemical weapons it had abandoned in China fifty years previously. He says that, budget approval permitting, Japan will start in-depth research in May 1996 on ways to dispose of the weapons. The research will include an environmental assessment of water and soil, as well as preparatory studies for the construction of a weapons-disposal plant. {Jiji 19 Dec, Kyodo 19 Dec in BBC-SWB 20 Dec}

19 December The UK Defence Ministry tells Parliament that a total of 339 British Gulf War veterans have now received an initial examination under its Medical Assessment Programme [see 7 Nov]. {*Hansard (Commons)* written answers 19 Dec}

20 December In Belgium, legislation to ratify the CWC is introduced by the government into the Senate. Implementing legislation is to be submitted later. {Belgische Senaat (Zitting 1995–1996) 1-208/1}

20 December In Arkansas, some 40 FBI agents accompanied by US Army CW experts arrest a man living alone in a remote mountain cabin, Thomas Lavy, against whom a grand jury in Alaska had recently returned an indictment charging him with violation of the Biological Weapons Anti-Terrorism Act of 1989 [see also 25 Oct]. This is the law that implements the 1972 Biological Weapons Convention in the United States. Canadian Customs officers had found a bag containing 0.13 kilograms of ricin in Lavy's car when he was driving from Alaska to Arkansas in April 1993 [*sic*]. Bail is refused at a hearing next day. Three days later Lavy is found hanged in his prison cell. {*Washington Post* 23 Dec, *New York Times* 24 Dec, *St Louis Post-Dispatch* 31 Dec, *Anchorage Daily News* 4 Jan, *Long Island Newsday* 7 Jan}

22 December In Israel, Prime Minister Shimon Peres, speaking before the Tel Aviv Journalists Association, says: "Give me peace, and I'll give up the nuclear option.... If there is regional peace, I believe it will be possible to have a Middle East free of all nuclear threats, missiles and other weapons." These remarks come some two weeks after the Prime Minister had reportedly extracted a promise from the President Mubarak to reduce Egyptian pressure on the issue of weapons of mass destruction [see 18–20 Dec] for one year or until a peace agreement has been signed with Syria. And the remarks come five days before the bilateral talks with Syria resume in Washington. {London *Daily Telegraph* 23 Dec}

22 December In Croatia, a contingent of German soldiers that includes chemical-weapons specialists arrives as part of the NATO Implementation Force agreed in the Dayton accords ending the war in former Yugoslavia. {AFP 22 Dec}

26 December In Jordan, customs authorities announce seizure of a shipment of "three highly noxious chemical components which had been imported from a European country by an Iraqi businessman passing them off as pesticides". {AFP 27 Dec} Earlier in the month seizure of a shipment of Russian-made gyroscopes applicable in the guidance systems of long-range missiles had been announced, a shipment which had arrived at Amman airport on 10 November. {*Jordan Times* 9 Dec} The chemicals, also described as "acids and very toxic chemical material", had arrived some months before, and are said to have comprised several kilograms of material "concealed in a shipment of drugs exported by a Jordanian pharmaceutical company to Iraq". {*Amman Al-Dustur* 28 Dec} Customs authorities had acted on a tip-off from UNSCOM which had found information on the shipment in documents given to it by Iraq. {AP in *New York Times* 28 Dec} The identity of the chemicals and the category of proscribed weaponry to which they might be applicable remain undisclosed.

27 December In China new *Regulations for Supervision and Control of the Management of Chemicals* are promulgated, responsibility resting with the State Council for Chemical Industry.

Reporting this later, the journal of the Henry L Stimson Center CWC Implementation Project (now called *The CBW Chronicle*) suggests that the regulations "could act in tandem with the domestic implementing legislation required by the CWC". The licensing system set out in the regulations, applicable to four defined categories of chemical, could indeed constitute appropriate "necessary measures" as required of states parties under Articles VI.2 and VII.1 of the Chemical Weapons Convention.

28 December In Damascus, the foreign ministers of Egypt, Syria and the member-states of the Gulf Cooperation Council — Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE — end two days of talks, adopting a final statement that firmly backs Syria in the revived negotiations with Israel [see 22 Dec]. The statement also calls on the countries of the Middle East and the Gulf "to get rid of weapons of mass destruction", and on Israel "to join the Nuclear Non-Proliferation Treaty". {AFP 28 Dec}

28 December Morocco deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 47th signatory state to do so.

28 December President Clinton vetoes the FY 96 Defense Authorization legislation [see 13 Dec]. Among the reasons for doing so set out in the message with which he returns the bill to Congress are its “counterproductive certification requirements” for the use of Nunn–Lugar funds. {*CQ Weekly Report* 6 Jan} An attempt in the House of Representatives to overturn the veto fails. {*Jane’s Defence Weekly* 17 Jan}

2 January In the UK Public Record Office, files on the British biological-weapons programme of World War II, are now, 50 years on, open to public inspection. {London *Daily Telegraph* 8 Jan}

2 January In California, the Center for Nonproliferation Studies of the Monterey Institute of International Studies is planning to “develop a policy research program in CBW proliferation to complement existing CNS research programs in the nuclear, missile, and conventional weapons fields”. It is creating the post of Director for CBW Proliferation Issues, for which applications received by today will “receive priority screening”. {MIIS advertisement in *Arms Control Today* Nov}

3 January In Tokyo, government plans for dealing with the abandoned Japanese chemical weapons in China [see 19 Dec] are reported by *Nihon Keizai Shimbun*. Several disposal plants are to be built in China following consultations that will commence in or soon after April 1996. A special public corporation, to be called the Centre for Promotion of Disarmament and Non-proliferation, will be established under the Foreign Ministry to undertake the work, initially as an element of the Japan Institute of Research in International Issues, but subsequently independent of it. Following conclusion of a bilateral disposal agreement, plant construction will start sometime after April 1997, and actual operations maybe a year later. The Centre will use Self-Defence Forces disposal technology, and it will also introduce private-sector technology, both domestic and foreign, European and US. Total cost is expected to reach “several hundred billion yen”. The duration of the project, expected to be at least ten years, is partly dictated by the ‘old and abandoned chemical weapons’ provisions of the Chemical Weapons Convention, which it is thought will certainly enter into force within the next year or two.

Chinese experts are subsequently quoted by Xinhua as estimating that disposal of the weapons — more than 2 million munitions and 100 tons of CW agents in 70 different localities — will take at least 8-9 years and cost several billion yuan [see also Aug 94 and 17 Aug 95]. {Xinhua 13 Jan in BBC-SWB}

4 January The US National Academy of Sciences Institute of Medicine publishes its panel report on the Defense Department’s August 1995 findings from its continuing Comprehensive Clinical Evaluation Program on the putative Gulf War Syndrome [see 1 Aug 95]. The report [see also 14 Aug 95], which had been commissioned by the Defense Department, agrees with the finding that there is no clinical evidence that the Gulf War caused a previously unknown serious illness among its veterans. It says that if there had been such an illness, one that was capable of causing serious impairment in a high proportion of people at risk, it would probably have been detectable in the population of 10,200 patients described in the CCEP report. But if the illness were a mild one, or if it were incapable of affecting more than a small number of veterans, it

might not have been detectable in that sample. {Reuter and Gannett News Service 4 Jan}

5 January The UN Security Council conducts its 29th 60-day review of the sanctions imposed on Iraq [see 8 Nov 95], leaving them in place. {AP 5 Jan}

7 January South Korea may make continuation of its food-aid to North Korea conditional on the North abandoning its CBW weapons [see 4 Nov], so an unidentified government official tells reporters. North Korea is reported to be on the brink of famine. {Yonhap 7 Jan in BBC-SWB 7 Jan, Reuter 7 Jan}

8 January The UK government releases an interim report from its survey of a part of the North Channel seabed, including some of Beaufort’s Dyke, that had been used as a dumping ground for large quantities of many types of surplus weapon, among them 14,600 tons of phosgene-filled 5-inch artillery rockets sunk in July 1945 [see 6 Oct]. The survey, conducted by the Scottish Office Fisheries Department Marine Laboratory, tends to confirm fears that cargoes of munitions were sometimes dumped in relatively shallow waters short of the Dyke, and that the recent laying of gas pipeline had disturbed dump sites, causing the beaching of large numbers of phosphorus munitions. {London *Independent* and Glasgow *Herald* 9 Jan} The Marine Laboratory will be conducting a follow-up survey, to which the Ministry of Defence will contribute. {*Hansard (Commons)* written answers 6 Feb}

9 January The UK Chemical and Biological Defence Establishment at Porton Down currently has 53 extramural research contracts, 42 of which — together worth about £5 million, and none of them classified — are with 21 universities. Of those 21 universities, only Birmingham, Bristol, Durham, Hull, Leeds, Newcastle, Southampton, Warwick, UMIST and one other, which together have 19 of the 42 contracts, have confirmed their willingness to have their contractual relationship disclosed to the public. {*Hansard (Commons)* written answers 16 Jan and 8 Feb, *Times Higher Educational Supplement* 23 Feb}

10 January In the US Defense Department, the Joint Requirements Oversight Council, which has been tasked by the Joint Chiefs to find ways of reprogramming for basic procurement purposes some \$10 billion of the defence spending projected for FY 97-01 {*Defense News* 18 Dec}, has just issued a paper recommending that \$805 million be cut from the Counterproliferation Support Program [see 1 Nov 94 and 30 Sep 95] and the NBC Defense Program over that time period. This would, the JROC paper is reported by *Jane’s Defence Weekly* as saying, “eliminate interim capabilities where near term risk is acceptable”. Among the projects threatened by this plan are the FY 99 Advanced Concept Technology Demonstration for an air-delivered earth-penetrating weapon capable of destroying stored BW weapons through six metres of concrete {*Jane’s Defence Weekly* 25 Nov}, and perhaps also the ‘Agent Defeat’ effort of the US Air Force, which seeks a family of munitions to render CW and BW weapons facilities useless but without allowing escape of CBW agent {*Defense News* 25 Sep}. In the NBC Defense Program, funding would be reduced for biological standoff detection systems, and eliminated for an improved biological detection system {*Jane’s Defence Weekly* 10 Jan}.

12 January In Moscow the new Russian Foreign Minister, Evgueni Primakov, speaks at a press conference about his four priority areas for Russian foreign policy. He says that one of them is the need to develop relations between states to prevent the proliferation of weapons of mass destruction. {*Atlantic News* 16 Jan}

12 January President Clinton's Advisory Committee on Gulf War Veterans' Illnesses [see 7 Nov 95] convenes in Kansas City for a further hearing to receive testimony from veterans, Defense officials and others. The focus of the hearing is on the military's use of medical protection against two of the three principal assessed CBW threats during the Gulf War, namely botulin toxin and nerve gas (the third being anthrax). {*Kansas City Star* 13 Jan}

15 January In Sri Lanka a military spokesman describes as a "wild canard" a statement issued by the Tamil Tigers that the Sri Lankan airforce has been using napalm. He states that Sri Lanka has strongly supported the Chemical Weapons Convention [see also 13 Dec 95]. {*Lankapuvath* 15 Jan in BBC-SWB 15 Jan}

15 January The UK Defence Ministry responds as follows to a Parliamentary question about how often during the Gulf War orders had been issued for service personnel to take their pyridostigmine tablets: "During the conduct of Operation Granby, which ran from 9 August 1990 to 11 April 1991, the assessed threat of chemical weapon attack in the theatre of operations was regarded as sufficiently high to necessitate the issuing of orders for nerve agent pretreatment [set] — NAPS — tablets to be taken during the period from 18 January 1991, following the start of the air war, to 1 March 1991, when hostilities ceased. The orders applied to all units and personnel in, or deploying into, theatre." A NAPS tablet contains 31.5 mg of pyridostigmine, the prescribed dose being one tablet every eight hours. {*Hansard (Commons)* written answers 9, 15 and 16 Jan}

15 January For the Russian chemdemil programme [see 5 Dec 95], an international Chemical Weapon Destruction Support Club should be established, argues Igor Khripunov [see 18 Feb 91] of the University of Georgia Center for International Trade and Security. This would reduce the political vulnerability in both America and Russia of US support for the programme, facilitate coördination among the countries that are currently providing assistance (Germany, the Netherlands, Sweden and the United States) and encourage other countries to assist, including those that have expressed interest in the past (France, Japan, Italy and Spain). {Igor Khripunov in *Defense News* 15 Jan}

16 January From Russia, Lt-Gen Anatoliy Kuntsevich [see 28 Nov 95] says in an interview pre-recorded in Moscow and now shown on UK television that the charges of smuggling CW-agent precursors to Syria which had been laid against him [see 20 Oct 95 and 28 Nov 95] are false. "What are 800 kilograms of chemical substance? You cannot make a chemical weapon with 800 kilograms, you cannot do anything with 800 kilograms, obviously it is a political game." {Mark Urban on BBC-2 *Newsnight* 16 Jan in FBIS-SOV 18 Jan}

Unidentified "intelligence sources" are later quoted by the New York *Daily News* [22 Feb] as holding Kuntsevich largely

responsible for the purchase by Iran and Syria of Russian plans for production of the nerve gases VX and 'Novichok-5'.

17 January The Executive Secretary of the OPCW Preparatory Commission announces preliminary results from the process of recruiting potential inspectors for the OPCW, for whom training must commence in August/September on the assumption that the CWC will enter into force by late 1996 or early 1997. From a total of 1692 applications, 341 candidates have been interviewed (in Beijing, Buenos Aires, The Hague, Jakarta, Moscow, New Delhi, Prague, Seoul, Stockholm, Tehran, Tokyo and Washington) of whom 158 have been selected for the "active list" and a further 45 for the "reserve list". About half of the "active" candidates are from countries that have not yet deposited instruments of ratification. For some categories of inspector, especially the Industrial Chemist category, there is a shortage of candidates, so the recruitment process is still continuing. {OPCW/PTS press release 17 Jan}

17 January Iraqi President Saddam Hussein gave his field commanders standing orders during the Gulf War to use chemical weapons against Coalition forces but the orders were disregarded, according to an article by Kenneth Timmerman [see 14 Sep 93 and 16 Mar 95] in the forthcoming issue of *The New Republic* {29 Jan}. The article, which is said to be based on captured Iraqi documents and newly declassified US intelligence reports, also states that "Saddam fully intended to use some of the deadliest weapons known to man if the Allies marched on Baghdad". Further, the article speculates that the oil-well fires in Kuwait were used by Iraqi forces to dispose of the chemical weapons that had been deployed to Kuwait and southern Iraq. {*Reuter* 17 Jan}

18 January In the UK, the Association of Chief Police Officers approves the start-up of a six-month street trial in which selected police forces will issue hand-held CS spray devices, but not OC pepper-spray, to their street patrols [see 15 Jun 94 and 13 Apr 95], some 2500 patrol officers in all. The Home Office has concluded that "CS presents no significant risk to human health, but that not enough is currently known about oleoresin capsicum for us to be reassured as to its effects on human health". {*Hansard (Commons)* written answers 25 Jan, *London Independent* 19 Jan and 1 Mar}

Asked later about long-term health effects, the Defence Ministry, whose Chemical and Biological Defence Establishment has conducted most of the research into these agents, tells Parliament: "In the early 1980s CBDE carried out limited studies to assess the long term health effects of exposure to CS gas. The results of these laboratory-based animal studies reinforced by generally available medical evidence suggests that there are no long term effects on people exposed to CS gas in the concentrations commonly employed." {*Hansard (Commons)* written answers 7 Feb}

It is subsequently reported that three of the police instructors who had earlier been training officers in the use of CS spray are understood to be seeking compensation for blistering caused to their skin after exposure to the spray. And it transpires that an ACPO paper circulated to police forces on 4 January recognised that there were "possible health risks" involved in using the sprays. The trials nevertheless begin, on 1 March. {*London Independent* 1 and 2 Mar}

19 January In Hong Kong, a bill to implement the Biological Weapons Convention is gazetted and is expected to come before the Legislative Council on 31 January. Following agreement within the Sino-British Joint Liaison Group, the legislation is intended to ensure that the provisions of the Convention will continue to apply in Hong Kong after the UK colony reverts to Chinese control in 1997. {*South China Morning Post* 18 Jan}

19 January US Arms Control and Disarmament Agency Director John Holum tells reporters that he expects only very limited opposition to the CWC when its ratification is finally put to the vote in the Senate [see 7 Dec 95].

Director Holum also says that the US Government believes there to be approximately 25 countries "in various stages of developing chemical weapons capabilities". On the challenge of monitoring compliance with the CWC, he says: "We will be in a dramatically better position than we are now to collect information on activities which are now, unfortunately, legal and, under the treaty will not be". {Federal News Service 19 Jan}

21 January The former USSR Pacific Fleet dumped 1796 tonnes of chemical munitions into the Sea of Japan in several operations during 1960-61, so *Tokyo Shimbun* reports, citing archive documents. {AFP 21 Jan} The command of the Russian Pacific Fleet later states that its archives contain no such data, but does not deny that the ocean-burials might indeed have occurred. {TASS 25 Jan in BBC-SWB 26 Jan}

22 January The US Defense Department releases detailed information on the size of the US chemical-weapons stockpile, its composition, and the content of each of its nine storage locations. According to the disclosure, there are now 30,600 agent-tons of unitary chemical munitions and bulk agent in the stockpile, as well as 680 tons of binary-munition components. The Program Manager for Chemical Demilitarization, Maj-Gen Robert Orton, tells reporters that current plans are to destroy the stockpile by the end of 2004 {Federal News Service 22 Jan}. His deputy for Nonstockpile Chemical Materiel, Wayne Jennings, is later quoted as saying that the binaries will not be destroyed until around 2005 {*Chemical & Engineering News* 29 Jan}.

Whether these dates will actually be met has been rendered somewhat uncertain by the stand which the legislatures of two of the stockpile states — Kentucky and Indiana — are taking against incineration, namely requiring positive proof, before permits are issued to the Army, that incineration will have no long-term health or environmental consequences. {*Time* 12 Feb} In Oregon, too, opposition is developing {BNA State Environment Daily 26 Feb} [see also 28 Nov 95, Utah]

The binary chemical stockpile comprises the components for 56,820 complete rounds of the 155-mm GB-2 artillery projectile [see 27 Jul 89 and 28 Sep 90], a further 201,728 shells for such rounds loaded with one of the two requisite binary-reactant canisters, plus a small quantity of the second binary reactant (DF) held, not in uploadable canisters, but in bulk containers. No holdings at all are declared for the Bigeye VX-2 aircraft spraybomb [see 15 Oct 89], but included in the listings are some 300 55-gallon drums of one of the binary-VX reactants, namely QL. [Note: that would be a quantity sufficient for about 400 Bigeye spraybombs].

The unitary chemical stockpile, of which 894 agent-tons in 120,000 munition-items have been destroyed in the Johnston Atoll chemdemil facility since commencement of operations

there more than five years ago [see 30 Jun 90], currently comprises 17,200 agent-tons of mustard gas, 75 percent of it held unweaponized in bulk storage containers, and 13,400 agent-tons of nerve gas, 46 percent of it unweaponized. Irritant agents, such as agent CS [see 16 Oct 95], are not listed in the disclosure. The mustard gas is of two types: distilled mustard (HD) and runcol (HT). The nerve gas is also of two types: sarin (GB) and agent VX. There are also 2 tons of tabun nerve gas in two forms, unthickened (GA) and thickened (TGA), 3 tons of thickened sarin (TGB) and 13 tons of lewisite. The weaponized agents are held in some 3.3 million munitions of 11 principal types: landmines; 4.2-in mortar rounds; 105-mm, 155-mm and 8-in howitzer rounds; 155-mm gun rounds; 115-mm artillery rockets; 500-lb (two types) and 750-lb aircraft bombs; and 160-gal aircraft spraytanks. {US Defense Department news release 22 Jan}

The detailed estimates of US chemical-weapons holdings set out in CWCB 2 (Autumn 1988) are largely corroborated by the newly declassified information.

23 January In Moscow, Maj-Gen Viktor Kholstov, deputy commander of Russian RKhB Protection Troops, comments on yesterday's public disclosure by the US Defense Department of its chemical-weapons holdings [see 22 Jan]. He speaks of the apparent intention of the United States to retain some 10,000 tonnes of toxic agents for "studies, development, trials and evaluation", saying that this describes a pragmatic approach to weapons disposal, a lesson which Russia would do well to learn. {TASS 23 Jan in FBIS-SOV 24 Jan}

Most probably, General Kholstov had seen only a faulty wire-service report of the US disclosure, one in which "tons" was subsequently corrected to "pounds" by the issuing agency. {AP 25 Jan} In the original disclosure, holdings for "chemical defense" of "research, development, test and evaluation (RDT&E) agents" are itemized to a total of 9697.50 agent pounds, as of 15 December 1995.

23 January Bosnian Serb use of agent BZ during the final attack on Srebrenica six months previously [see 10 Jul 95, and see also 24 Jul 95, Zepa] has been corroborated by accounts from five survivors interviewed in Tuzla during November and December by British journalist Brian Johnson Thomas, so the BBC World Service reports. The broadcast states that Bosnian Serb forces did not use the weapon indiscriminately but only against one point of the defence line. {*OMRI Special Report* 23 Jan} Thomas subsequently says in interview that, during the five months he had been in former Yugoslavia during 1995 researching a television documentary [see 27 Nov 95], he had seen BZ munitions with Muslim forces outside Mostar and with Serb forces outside Banja Luka; a Yugoslav Army chemical-warfare manual has pictures, he says, of identical munitions. He had learnt from the five witnesses of the Srebrenica attack that, about 30 minutes after the chemical artillery bombardment, the Bosnian Serbs had broadcast an appeal to the defenders to surrender. Then, he says: "A lot of Muslims left the trenches and ran toward the Serb position to surrender and they were mown down by machine gun fire. The ones who didn't run to the front lines were fighting each other in the trenches and there were also examples of very bizarre things like [fighters] hugging trees." {AP 23 Jan}

23 January The World Health Organization executive board, meeting in New York, recommends that the world's last remain-

ing known holdings of smallpox virus, in Russia and the United States, be destroyed by 30 June 1999 [see also 19 Jun 95]. The recommendation will go before the annual World Health Assembly in May 1996. {*New York Times* 25 Jan, *London Daily Telegraph* 26 Jan}

23 January President Clinton, in his address to the US Congress on the State of the Union, says: "We can outlaw poison gas forever, if the Senate ratifies the Chemical Weapons Convention — this year".

27 January In Iraq, a new director is appointed to the Military Industrialization Commission [see 30 Jun–2 Jul 95], which the Oil Minister, Lt-Gen Amir Mohammed Rasheed, had been running since last August. The Commission had previously been headed by Lt-Gen Hussein Kamel, who defected to Jordan in August, and it is his erstwhile deputy, Daif Abdelmajid Ahmed, who is the new director. His duties include representing Iraq in meetings with UNSCOM. {*Reuter* 28 Jan}

Iraq is now in the process, for the third time, of renewing talks with the UN on a limited lifting of the oil embargo in order to purchase food and medicine; on 19 January it had agreed to resume the negotiation. {*Economist* 27 Jan}

28 January In Israel, the Supreme Court rejects the petition of Marcus Klingberg [see 7 Jul 95] for release from prison, where he has been since 1983 on a 20-year sentence for passing information relating to biological warfare to the Soviet Union. From 1957 to 1983 he had worked at the Ness Ziona Biological Institute, latterly as Deputy Director. He is now 78 years old and in deteriorating health. His lawyer says to reporters: "The court based its ruling on the contention that Mr Klingberg knows things that can harm state security". The court accepted his claim that he had no intention of betraying additional secrets, but took the view that he might nevertheless do so unwittingly. {*Jerusalem Post* 28 Jan and 12 Feb} Israel is not a party to the Biological Weapons Convention.

28 January In Britain, the *Mail on Sunday* describes how its reporters had no great difficulty in purchasing kilogram quantities of the CW-agent precursors thionyl chloride and thiodiglycol, the former by telephone call to Bayer AG in Germany, the latter over the counter from a South London trading company.

30 January In Russia the Presidency announces that the Foreign Ministry is organizing an intergovernmental working group on measures to resist terrorism in accordance with a mandate received the month previously at the Ottawa ministerial session of the Group of Seven plus Russia [see 12 Dec 94]. President Yeltsin's press secretary, Sergey Medvedev, tells reporters that the group is will be exchanging intelligence information from the relevant agencies of the eight countries in order to prevent acts of terrorism involving the use of nuclear or CBW weapons, and also to combat hostage-taking. {*Interfax* 30 Jan in *BBC-SWB* 31 Jan}

30 January In the UK House of Lords, the Chemical Weapons Bill [see 6 Dec] receives its Second Reading. {*Nature* 8 Feb, *Chemistry in Britain* Mar}

30 January The UK Ministry of Defence announces that it "will commission a series of epidemiological studies comparing

the health of Gulf veterans with similarly matched control groups of service personnel who did not go to the Gulf". {*Hansard (Commons)* written answers 30 Jan} This announcement of the full-scale inquiry into the putative Gulf War Syndrome which has long been urged upon the Ministry [see 27 Jul and 7 Nov 95] continues: "The aim of these studies, some of which will be conducted in-house and some by commissioning external research, will be to establish whether there is any increased prevalence of illness among Gulf veterans or of birth defects among their children. We will also commission research into the alleged causes of Gulf-related illness, including the possibility of interaction between the vaccinations received by service personnel and the nerve agent pretreatment sets — NAPS — taken for protection against the very real threat of chemical attack [see 15 Jan]. We shall of course work very closely with the US, but will not duplicate their efforts... The Medical Research Council has been invited to oversee and review the conduct of the programme, and the results will be published." The Ministry will meet the costs of the research, which is expected to take three years to complete, from a part of its budget that has yet to be decided. {*London Daily Telegraph* 31 Jan, *Hansard (Commons)* written answers 14 Feb}

2 February In the UK, the Porton Down Volunteers Association [see 19 Nov 94] has recently lodged a complaint with the European Human Rights Commission. Lawyers acting for the chairman of the Association, Michael Roche, a former soldier who volunteered as a "guinea pig" for tests of mustard and nerve gases at Porton in the early 1960s, are arguing that the UK government is in breach of the European Convention on Human Rights because Roche has been denied access to Porton's experimental records and because there was no medical follow-up that might now allow him to claim the disability pension for which he believes his present health condition entitles him. {*London Guardian* 2 Feb}

6 February In Denmark, following "Gulf War Syndrome" rumours, military personnel who served with UN forces in Kuwait and northern Iraq after the 1991 Gulf War are to receive medical examinations, so Defence Ministry medical chief Maj-Gen Knud Jessen tells reporters. {*Reuter* 6 Feb}

6 February Ireland has not yet prepared an instrument of ratification of the CWC for consideration by the Oireachtas, so Comdt Peter Daly of the Army Ordnance Corps tells a conference in Cork. The conference, on chemical emergencies, is also told by him that, although the threat of chemical weapons to Ireland is quite low, it does nevertheless exist, for example from old ocean-dumped chemical munitions being washed ashore [see 29 Mar 95, 18 May 95 and 6 Oct 95] or from a terrorist organization. {*Irish Times* 7 Feb}

6 February At the United Nations in New York, Iraqi and UN negotiators begin talks on Security Council resolution 986 (1995) which would allow Iraq to resume limited exports of oil in order to buy medicine and food under international control [see 27 Jan]. Iraq has hitherto been objecting to some of the pre-conditions, notably those regarding food-distribution in northern (Kurdish) Iraq and the use of the trans-Turkey pipeline for the greater part of the oil-export. {*Reuter* 5 Feb}

8 February At Harvard University, in the Kennedy School of Government, the Director for External Relations of the OPCW

Provisional Technical Secretariat, Serguei Batsanov, addresses a session of the HSP Cambridge Colloquium.

9 February In Bulgaria, the Foreign Ministry releases a declaration which the government had made on 1 February: "There have not been stockpiles of chemical and [sic] biological weapons on the territory of Bulgaria in the past 50 years". The Ministry explains that the declaration had been requested by the 28 member countries of the Australia Group, to which Bulgaria had applied for membership. {BTA 9 Feb in BBC-SWB 11 Feb}

9 February On Johnston Atoll in mid-Pacific, the US Army chemdemil facility completes, ahead of schedule, the destruction of all the sarin nerve-gas aircraft bombs once stored there. JACADS has now safely incinerated more than 1000 tons of CW agent [see also 22 Jan], an Army spokeswoman says. {Gannett News Service 9 Feb}

9 February The OPCW Provisional Technical Secretariat announces that, during 1996, it will be conducting two more training courses for personnel of the projected CWC National Authorities of signatory states [see 11–29 Sep 95 and 6–17 Nov 95]. The Indian Government will be hosting the first of them in Gwalior from 15 April to 3 May. The dates and venue of the second have yet to be announced. {OPCW/PTS press release 9 Feb}

9 February The US Defense Department, which has a World Wide Web site on the Internet called *Gulfink* through which it makes publicly available a data-base of declassified Gulf War documents [see 3 Aug 95], ends public access to the "Intelligence Collection" part of the data-base. The CIA had reportedly been complaining that too much was being disclosed about US intelligence sources and methods. Four days later, public access is reopened, but the data-base has been much depleted during the interim. {Gannett News Service 13 Feb}

10 February In Moscow, *Nezavisimaya Gazeta* publishes a lengthy commentary by retired Army colonel Boris Sibirsky on problems of Russian compliance with the Chemical Weapons Convention. The article advocates Russian ratification subject to several provisos, some of which would require that the convention actually be amended. A recurrent theme is the presence in the convention of what Colonel Sibirsky calls "prejudices against Russia which, to put it mildly, attest to the miscalculations and myopia of the Soviet and Russian diplomats". His argument seems to be that Russia should therefore not move too hastily in destroying its CW stockpiles, for, compounding the asymmetry, are (a) the lead which the United States has established in such technologies as binary munitions and nonlethal weapons, and (b) something which he suggests was manifest during the Vietnam War, namely US political will to resort to chemical warfare.

12 February In a US federal court in Miami, a plea of guilty is entered by the person formerly in charge of the FBI's less-than-lethal weapons research program at Quantico. He admits to having taken kickbacks from the company which, since 1989, had been selling pepper sprays to the FBI. {*Miami Herald* and Fort Lauderdale *Sun-Sentinel* 13 Feb}

12–21 February In the United States, near Aberdeen Proving Ground, there is a working-group meeting of the Russian–

CWC Non-Signatory States

as of 6 March 1996

Angola
Botswana
Egypt
Eritrea
Libya
Mozambique
Sao Tome & Principe
Somalia
Sudan

Bhutan
Iraq
Jordan
Kiribati
Lebanon
Niue
North Korea
Palau

Solomon Islands
Syria
Taiwan
Tonga
Tuvalu
Vanuatu

Bosnia-Herzegovina
Macedonia, FYR of
Yugoslavia

Antigua & Barbuda
Barbados
Belize
Grenada
Jamaica
Suriname
Trinidad & Tobago

Andorra

160 states have signed the CWC, 48 of which have deposited instruments of ratification

American Joint Evaluation Program (RAJEP) that is assessing the Russian two-stage process for destroying organophosphorus CW agents [see 13 Dec]. The purpose is to discuss progress immediately prior to a two-day high-level RAJEP meeting in Washington [see also 15 Dec 95, GAO]. *ASA Newsletter* {8 Feb} reports: "US and Russian scientists have jointly and conclusively demonstrated that the Russian chemical neutralization destroys the chemical agents and works well".

14 February President Clinton accepts the interim report, released today, of the Presidential Advisory Committee on Gulf War Veterans' Illnesses [see 12 Jan] and announces that he has asked the Secretaries of Defense, Veterans Affairs, and Health and Human Services to develop an action plan for implementing its recommendations. {White House press release 14 Feb} These range from ways to improve record-keeping on the health of veterans and outreach to them to the development of improved CBW agent detectors.

In its future work, the committee says it will investigate alleged incidents of exposure of *Desert Shield/Storm* personnel to CBW agents, now that so much more information has become available about Iraqi CBW programmes. The interim report notes that the Defense Department and the CIA have reopened their investigations into whether CBW agents were in some way used or accidentally spread during the war. The committee's final report is due at the end of the year. {UPI and Reuter 14 Feb}

15 February In the UK, the independent judicial inquiry into the export to Iraq of defence equipment and dual-use goods [see 6 Apr 95] set in motion more than three years previously [see 10 Nov 92] publishes its report {HC Papers (Session 1995-96) 115}. By Sir Richard Scott, who is now the Vice-Chancellor, the report is in five volumes, and is quite unprecedented in its disclosure of the inner workings of government in the UK. No overall conclusions are presented, but a recurrent theme of the report is the failure of government to "discharge the obligations imposed by the constitutional principle of Ministerial accountability". However, in its treatment of the numerous steps taken by officials and ministers to prevent dual-use goods from entering the Iraqi chemical-weapons programme, the report is invariably commendatory.

The Scott Report states that intelligence had confirmed, by January 1984, that Iraq was using chemical weapons against Iran. The report details several episodes in which British companies had been prevented from exporting CW-agent precursors, or production plant for them, to Iraq, sometimes via Jordan or Egypt. And it throws light on the entry of certain chemicals into what later became the CW precursor control list of the Australia Group.

The Scott Report also describes the genesis and application of the so-called 'NBC Guidelines' that were issued in January 1988 to cover any overseas promotion or supply of, among other things, antichemical protective equipment or training. One of these guidelines was as follows: "The supply of any item which might assist Iran or Iraq to wage chemical warfare will not be authorised. Therefore current policy is to prevent the sale or diversion of defensive CW equipment to Iran or Iraq." The report does not address the compatibility of such guidelines with the provisions, then under negotiation, of what has since become Article X of the Chemical Weapons Convention.

With regard to the Import, Export and Customs Powers (Defence) Act of 1939 [see 6 Apr 95], the Scott Report includes the following: "I recommend that Government publish as soon as practicable a Consultation Paper with proposals both for the content for new empowering legislation in place of the 1939 Act and for an export licensing system and export licensing procedures suitable for the peacetime requirements of a trading nation in the post cold war era."

15 February At Harvard University, in the Kennedy School of Government, Professor John van Courtland Moon speaks on

"United States BW policy and planning in World War II" at the HSP Cambridge Colloquium.

16 February In Brussels there are two workshops on National Implementation and Legislation of the Chemical Weapons Convention. Both workshops are organized by the HSP Brussels researcher, Mitslal Kifleyesus, under the auspices of the OPCW Provisional Technical Secretariat. Both workshops are for people from states whose representation to the OPCW Preparatory Commission is from Brussels rather than The Hague. The first, held at NATO Headquarters, is attended by representatives from Slovakia, Slovenia and Ukraine. The second, held at the ACP House, is attended by representatives from Benin, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Fiji, Gabon, Lesotho, Mali, Nepal, Papua New Guinea, Paraguay, Sierra Leone, Swaziland, Togo, Uganda, Zambia and Zimbabwe, as well as representatives of two non-signatory states, namely Angola and Eritrea. Both workshops include presentations by people from the PTS, the HSP and the SSF Group. {OPCW/PTS press release 19 Feb}

18-21 February In the Philippines, counter-terrorism is the subject of an international conference in Baguio attended by 120 experts and officials from 19 countries: Australia, Canada, Egypt, France, Germany, Indonesia, Israel, Italy, Japan, Malaysia, New Zealand, Pakistan, the Philippines, Russia, Spain, Thailand, Turkey, the UK and the USA. The participants issue a communiqué in which they say they will increase co-operation and co-ordination in sharing intelligence and in "preventing the illicit traffic in and use of explosives, weapons and nuclear, chemical and biological materials". {AFP, Kyodo and Xinhua 22 Feb}

20 February In Iraq, the Revolutionary Command Council announces a pardon for Hussein Kamel [see 27 Jan] and his brother Saddam Kamel who today return to the country from Jordan, having defected six months previously. {Reuter 20 Feb} Both UNSCOM and US Defense Department officials publicly reject suggestions that the information which Saddam Kamel had provided about Iraqi weapons programmes must now be treated as disinformation. {AFP 20 and 21 Feb}

Three days later, after an announcement that the two returnees have been divorced by their wives, who are daughters of President Saddam Hussein, they, their father and another brother are shot to death. A television station controlled by the President's son Uday reports that "the traitors have been executed". {London *Observer* 25 Feb}

22 February In Bosnia-Herzegovina, no evidence of chemical-weapons-use in the north-east of the country has been found by an NBC defence unit from the US component of the NATO Implementation Force [see also 22 Dec 95, Croatia] operating out of Tuzla, so US Army expert John Miller tells reporters. {AFP 22 Feb}

22 February In the United States, Director of Central Intelligence John Deutch includes the following in a prepared statement before the Senate Select Committee on Intelligence: "Chemical weapons programs are active in 18 countries [see also 19 Jan], "including most major states of the Middle East. Libya, for example, is now building the world's largest underground chemical weapons plant in a mountain near Tarhunah [see 11 Jul 95]. Chemical weapons countries are also develop-

ing more and longer-range delivery systems, including ballistic and cruise missiles and UAVs. Biological weapons, often called the poor man's atomic bombs, are also on the rise. Small, less developed countries are often eager to acquire such weapons to compensate on the cheap for shortcomings in conventional arms. Small quantities of precursors, available on the open market, can produce a deadly chemical or biological weapon." He also observes that "the prospects for chemical and biological terrorism will increase with the spread of dual use technologies and expertise".

Also testifying is the Assistant Secretary of State for Intelligence and Research, Toby Gati. According to his prepared statement, there is no "imminent WMD proliferator" in Latin America and the Caribbean region; nor, in contrast to Iran, Iraq, Libya and Syria, is Sudan in such a category. {Federal Document Clearing House Congressional Testimony 22 Feb}

24 February In Iraq, two new UNSCOM missions arrive: a 19-member chemical team led by Cees Wolterbeek of the Netherlands, and a 7-member biological team led by Richard Spertzel of the United States. {AFP 25 Feb}

26 February Libya issues a statement denying a recent *New York Times* {25 Feb} report that it has almost finished building a huge underground chemical-weapons factory at Tarhunah. The statement characterizes the report as "part of the malicious campaign led by American circles to defame the Jamahiriya and frame it up on false charges". The *New York Times* report cited the recent Congressional testimony of CIA director John Deutch [see 22 Feb] and also referred to copies of construction plans and building specifications said to have been obtained by German intelligence services from German and Austrian com-

panies contracted to build a tunnel at Tarhunah. "Informed sources" in Germany are subsequently quoted by DPA agreeing that "German intelligence agencies possess construction blueprints for a big chemical weapons factory" being built in Libya, but disagreeing that the plant would be the world's biggest and that it might become operational as early as 1997. {DPA 26 Feb}

27 February Finland may participate in the Dutch project for aiding the Russian chemdemil programme [see 3 Nov 95], so Defence Minister Agnelli Taina told his Netherlands counterpart, Dr Joris Voorhoeve, during the latter's recent visit to Finland.

Reporting this, *NRC-Handelsblad* also writes: "Later this year, Minister Voorhoeve, in conjunction with Foreign Minister Hans van Mierlo and Environment Minister Margreet de Boer, intends to invite a number of interested countries to hammer out a joint plan of action, aimed at eliminating the quantities of combat gases and chemical substances in Russia. The project is expected to require a total investment of several billions of guilders, according to present estimates." [See also 15 Jan]

27 February In the UK House of Lords, amendments to the Chemical Weapons Bill [see 30 Jan] are considered by a committee of the whole House. All are withdrawn in the face of government opposition. The bill now proceeds to its report stage, which is scheduled for 18 March.

29 February In the US Senate Foreign Relations Committee, the further hearings on the Chemical Weapons Convention [see 7 Dec 95] have now been set to commence during March.

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Forthcoming events

- A NATO Advanced Research Workshop on *The Technology of Biological Arms Control and Disarmament* will take place on 28–29 March 1996 in Budapest under the co-direction of Michael Moodie of the Chemical and Biological Arms Control Institute, Alexandria, and Tibor Tóth of the Hungarian Ministry of Defence.
- A NATO Advanced Research Workshop on *CW Agent Neutralization: Chemical and Biological Integration for Agent Destruction* will take place in Suzdal, Russia, during 1–4 April 1996 under the co-direction of Professor J R Wild of Texas A&M University and Professor A M Boronin of the Russian Academy of Sciences.
- The Preparatory Committee for the Fourth BWC Review Conference convenes in Geneva on 9–12 April 1996.
- A Regional Seminar on Implementation of the CWC will be hosted in Tehran by the government of the Islamic Republic of Iran during 22–25 April 1996.
- The CFE Foundation will convene a second international meeting on sea-dumped chemical weapons at the Rockefeller Foundation conference centre in Bellagio, Italy, during 22–26 April 1996.
- The Review Conference of the Certain Conventional Weapons Convention will reconvene in Geneva for the period 22 April–3 May 1996.
- A NATO Advanced Research Workshop on *Assessment of Mobile Technologies for Remediating Sites Contaminated with Chemical Warfare Agents* will take place in Prague during 6–8 May 1996 under the co-direction of Dr F W Holm of SAIC and Dr R Markosova of the Ministry of Education.
- The Pugwash workshop on *The Chemical Weapons Convention in its North-South Context*, is postponed from 10–12 May until October 1996.
- A NATO Advanced Research Workshop on *Analytical Chemistry associated with the Destruction of Chemical Weapons* will take place in Prague during 19–22 May under the co-direction of Dr D J Reutter of the US Army and Dr V Stein of the Military Technical Institute of Protection, Brno.
- The US Defense Nuclear Agency *5th Annual International Conference on Controlling Arms* will take place in Norfolk, Virginia, on 3–6 June 1996.
- The second international *Chemical and Biological Medical Treatment Symposium* will take place in Spiez, Switzerland, during 7–12 July.
- The BWC Ad Hoc Group will reconvene in Geneva on 15–26 July and 16–27 September in Geneva, with the Fourth Review Conference scheduled for 23 November–13 December 1996 in Geneva.
- The fourteenth plenary session of the OPCW Preparatory Commission will be held in The Hague during 22–26 July 1996, and the fifteenth is scheduled for 9–13 December.
- The second Pugwash workshop on *Strengthening the Biological Weapons Convention* will take place in Geneva on 21–22 September 1996.

Deposited CWC Ratifications

as of 6 March 1996

Fiji — 20 January 1993	Monaco — 1 June 1995
Mauritius — 9 February 1993	Netherlands — 30 June 1995
Seychelles — 7 April 1993	Denmark — 13 July 1995
Sweden — 17 June 1993	Peru — 20 July 1995
Norway — 7 April 1994	Algeria — 14 August 1995
Australia — 6 May 1994	Austria — 17 August 1995
Albania — 11 May 1994	Poland — 23 August 1995
Maldives — 31 May 1994	Ecuador — 6 September 1995
Cook Islands — 15 July 1994	South Africa — 13 September 1995
Spain — 3 August 1994	Japan — 15 September 1995
Bulgaria — 10 August 1994	Canada — 26 September 1995
Germany — 12 August 1994	Argentina — 2 October 1995
Sri Lanka — 19 August 1994	Slovak Republic — 27 October 1995
Mexico — 29 August 1994	El Salvador — 30 October 1995
Turkmenistan — 29 September 1994	Georgia — 27 November 1995
Uruguay — 6 October 1994	Namibia — 27 November 1995
Paraguay — 1 December 1994	Italy — 8 December 1995
Lesotho — 7 December 1994	Côte d'Ivoire — 18 December 1995
Greece — 22 December 1994	Morocco — 28 December 1995
Tajikistan — 11 January 1995	Czech Republic — 6 March 1996
Mongolia — 17 January 1995	
Armenia — 27 January 1995	
Finland — 7 February 1995	
Oman — 8 February 1995	
Romania — 15 February 1995	
France — 2 March 1995	
Switzerland — 10 March 1995	
Croatia — 23 May 1995	

Imminent Ratifications

Belarus, Belgium, Benin, Brazil, Cameroon, Costa Rica, Ethiopia, Gabon, Hungary, India, Latvia, Mali, Papua New Guinea, Saudi Arabia, United Arab Emirates, United Kingdom

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

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Subscription enquiries should be addressed to Barbara Ring at the Department of Molecular and Cellular Biology, Harvard University, 7 Divinity Avenue, Cambridge, Massachusetts, 02138, USA. The annual subscription price is \$40 (individuals and non-profit organizations) or \$100 (corporate bodies). Payment may be made by cheque (in US\$) payable to 'Chemical Weapons Convention Bulletin'.