# **CHEMICAL WEAPONS CONVENTION BULLETIN**

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### CHEMICAL WEAPONS CONVENTION EN ROUTE TO ENTRY INTO FORCE

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A little more than two years have elapsed since the international Chemical Weapons Convention (CWC) prohibiting the development, production, stockpiling and use of chemical weapons was opened for signature at an impressive ministerial-level conference in Paris. Thus began an important new phase in the international effort to eliminate the risk of chemical warfare which has haunted the world throughout this century. It seems appropriate today to glance at what has been achieved during these past two years, and to give some thought to the problems that are still at hand.

The last two years have proved an extremely interesting period, rich with problems and activities, covering a much wider range of issues than the Geneva negotiations had to tackle. While they have seen a continuation of negotiations and even of the reopening of some of the problems discussed earlier in Geneva, a parallel period of intense building of the new international organization has begun. Associated tasks include designing plans to ensure that the OPCW will be able to begin monitoring the implementation of the Convention immediately upon the CWC's entry into force; fine tuning, together with the Host Country (the Netherlands) a whole set of legal and financial conditions necessary to its existence in The Hague; and the selection of a location and the design of a building for the future headquarters site. On the national level, in countries which have signed the Convention, this same two-year period saw the emergence of new players in decision-making on chemical weapons issues, as the focus of activities moved away, somewhat, from foreign ministries, and on to other agencies such as industrial ministries, which are more concerned with the internal implementation of the treaty. Of course, national parliaments will typically have the last word on ratification of the Convention, and thus on its entry into force. Despite quite a few moments of frustration, it would be fair in my view to state that, on balance, the efforts have proved successful so far.

#### **Political Arithmetic**

The number of states which have signed the CWC has reached 159 — an overwhelming majority of present-day states. There are only three important areas in the world which are still not covered by this 'signature network': part of the Middle East, part of the former Yugoslavia, and the Democratic People's Republic of Korea. Another 'abstainee' is Uzbekistan — the only former Soviet Republic that is not a CWC signatory. The remaining non-signatories are, by and large, small island countries with no chemical industry, and these present very little or no CW proliferation risk.

In the meantime, the number of completed ratifications of the Convention has reached 27, which is more than one-third of the 65 that are required for the treaty's entry into force. Even more encouraging is the present rate of ratifications: approximately one per week, which is a noticeable improvement over the first year and a half following the Paris conference. In fact, neither overly optimistic nor overly alarmist projections have materialized, and thus one can say that the process of ratification is proceeding normally.

Of particular importance is the first ratification by a permanent member of the UN Security Council — namely France, whose instrument of ratification was deposited in March 1995. The present trend in ratifications, and the progress made by several other countries in preparing for

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<sup>\*</sup> The views expressed are those of the author only, and do not necessarily reflect the views of the Preparatory Commission or any other institution.

ratification, allows the suggestion that by early summer as many as 40 instruments of ratification could be deposited with the Secretary-General of the United Nations, who is the Convention's depositary. However, the final result is far from guaranteed. Two very important ratifications are still those of the United States and of Russia, the two largest possessors of chemical weapons. There is no doubt that if both major possessors ratify this year, the target number required for entry into force of the Convention would be achieved without much further delay, and we would be able to speak quite confidently about the entry into force of the Convention some time in mid-1996. In the opposite case, however, given parliamentary elections in Russia in December 1995, and presidential elections in both countries in 1996, the situation might become much more problematic and serious.

Concerns are sometimes expressed over the possibility that 65 ratifications could occur without the Russian and American ratifications in place, and that the Convention would enter into force 'by default'. In that case, the major contributors to the OPCW budget would become the leading industrial nations, financing nothing more than inspections of their own chemical industry — hardly an attractive option. This scenario, however, does not appear to be politically credible. It is more probable that when the number of ratifications approaches 50 to 55, states parties would become much more cautious in depositing their instruments of ratification, even if they have completed all the necessary domestic procedures to do so. The danger, however, would be in the possibility of a significant delay in the entry into force of the Convention, which, in turn, would affect negatively preparations at the international level by delaying the work on remaining issues in the Preparatory Commission and, in the worst-case scenario, depriving the entire process of political steam. What might make things even worse, under such a scenario, would be the possible decrease of political attention to the CWC, as other issues like NPT extension, the comprehensive test ban treaty, and land mines seem to be on the top of the arms control agenda for many governments, not to mention such non-arms control problems as the crisis in the former Yugoslavia, peacekeeping, debates on the expansion of NATO, and other similar issues. It would be naive to suggest that chemical disarmament is a problem more vital than most of those mentioned above. The concern expressed here, however, is that the CWC must not be forgotten in today's jungle of post-cold war international problems.

In the meantime, the actual work of the Preparatory Commission is also a source of satisfaction mixed with some degree of concern. Quite a lot has been achieved in practically all areas of its work.

#### Building the OPCW

The Preparatory Commission, which is both predecessor and 'parent' of the OPCW, is up and running. It has acquired its own face and shape, and its proper working methods. The Provisional Technical Secretariat (PTS) now employs about 120 people coming from more than 40 countries; its staff is of the highest calibre. The Commission, as a new, independent international organization, is beginning to receive recognition in the international community, although more could have been achieved, especially in the area of providing a more formal basis for its relationship with the United Nations.

Designs for the OPCW itself are also taking shape. It has already been decided that the Technical Secretariat, at entry into force, will be about 400 people strong, with more than half of that number working in the Verification Division, many as inspectors. Within approximately six months of its establishment, this figure would increase by a further 70. While the structure of the OPCW Technical Secretariat, especially that of its top echelon, has not yet been decided, it is rather evident that the main functional elements of the present Provisional Technical Secretariat would be retained. Preliminary estimates for the OPCW's first year budget have also been made: they are somewhat below \$100 million, which is a significantly lower figure than earlier projections.

These figures, however, for a number of reasons, cannot be considered final. The required number of inspectors the main 'building block' in the calculations — was produced on the basis of several assumptions, rather than on concrete knowledge about how many facilities need to be inspected. This 'best estimate' was necessitated by the failure of a number of governments to respond to repeated appeals by the Executive Secretary of the Commission to Member States to communicate to him the approximate number of facilities in their countries that would be subject to inspections under the Convention. Significantly, though, it appears that the main reason for this failure to respond has not been the lack of good will but the practical difficulties many countries are facing in collecting necessary data from their industry.

There are several other factors contributing to uncertainty. For example, there is the lack of agreement on criteria for establishing the usability of old chemical weapons, produced between 1925 and 1946, which, if not overcome, might result in an additional need for inspectors to inspect these weapons and their destruction. And there remains the unclear fate of the 1990 US–Russian agreement on destruction and non-production of chemical weapons which is an essential part of the planning for the future organization. Entry into force of the Convention without this bilateral agreement between Russia and the United States also entering into force would mean increased verification activities by the OPCW and, hence, more inspectors.

An important body of work has been accomplished in relation to the training of inspectors: a three-phase (module) training scheme has been approved by the Commission, and the screening of about 1,500 inspector applicants is well under way. The Secretariat is actively engaged in discussions with states that have offered their facilities for inspector training, for the purpose of establishing which of these sites best conforms with the established criteria and with the actual needs of the Commission. After some initial complications and misunderstandings, encouraging progress has been made in the last several months on financial arrangements for the construction of the future headquarters building for the OPCW. Its location in one of the best parts of The Hague has been determined, as well as its design, as proposed by the Boston architectural firm of Kallmann McKinnell & Wood. The new building is expected to be ready in mid-1997, which might very well mean that the Preparatory Commission will have to look for alternative, temporary, OPCW accommodation in the interim. This will be especially difficult if the treaty enters into force in mid- or late 1996, as it will entail two moves during the organization's first year, a period likely to be crucial to the organization's development.

Additionally, quite recently the location for the OPCW laboratory has been identified, and a lease signed, which allows practical work to begin on the adjusting of the existing laboratory building to the OPCW's needs and requirements. The same facility will house the OPCW's equipment store; this is fortunate, as the process of procuring the inspection equipment is now beginning.

It is worth mentioning as well the Headquarters Agreement with the Host Country that the Preparatory Commission has concluded. This Agreement provides a set of immunities and diplomatic privileges for the Commission and for the Secretariat. Practical questions that continue to arise in the process of implementing the Agreement can help shape the Commission's approach to the OPCW Headquarters Agreement, which has still to be developed.

This leads to a discussion of another interesting 'construction' process in progress: that of the OPCW's diplomatic community. The decision to house the Organisation and its Preparatory Commission in The Hague meant, among other things, the need for many governments to entrust their embassies in The Netherlands with tasks which they had not performed before. In some cases, that led to new personnel appointments, and some other 'bilateral' diplomats had to assume new burdens associated with tasks relating to hectic and intriguing multilateral diplomacy. One way or another, today one can already speak about the emergence of a new family of people in The Hague, which is very helpful indeed. The Hague is not the only major international city affected by the arrival of the PTS/OPCW in the Netherlands. Out of 159 states members of the Commission, about 50, typically developing countries, have entrusted their embassies in Brussels with the responsibility to liaise with the Preparatory Commission — for the simple reason that they have no diplomatic personnel in the Netherlands. The reality of approximately one-third of the member states' diplomatic personnel being situated in Brussels, has created new responsibilities for the Secretariat. It must maintain communications with those embassies, which normally have very little staff, and are already overtaxed with matters specific to Belgium, to contacts with NATO, the Western European Union (WEU), and the European Union. These last mentioned international organizations, located in Brussels, often deal with matters which seem much more important for developing countries than

following some complicated technical debate in an expert group, on, say data systems. But now the situation is improving there as well.

Perhaps the most important problem now facing the Preparatory Commission in the area of organization building is to define ground rules for the staff regulations of the future Technical Secretariat. No clear agreement in this area has so far emerged. Should they be based on principles quite different from the ones on which the UN system is based? And would this solution, by itself, ensure the prevention of the UN-type red tape; of bureaucracy; and of the instinct to avoid taking and assuming responsibility for decisions? Or, rather than reinvent the bicycle, the OPCW could simply take the UN system as a basis, perhaps with some modification and simplification. The lack of answers to these questions has begun to seriously affect other preparatory activities, such as the recruitment of inspector trainees, since the Preparatory Commission is not yet in a position to define their terms of employment with the OPCW, the financial package, benefits, contract duration, etc. Such unanswered questions may be among the important reasons for the insufficient number of applications received from qualified candidates so far for those jobs in which a chemical industry background is essential.

#### Verification Procedures and Other Issues

Here, as well, achievements co-exist with problems. A number of tasks have been accomplished, like those relating to declarations and inspection report formats, the composition of inspection teams, categories and characteristics of inspection equipment, several sections of the Declaration Handbook, and so forth. Significant progress has also been made in developing procedures designed to protect confidential business and national security information - an issue of great concern to the chemical industry and many governments. And, after months of frustrating and unproductive debates, the Commission seems to be close to agreement on the basic security concept for the OPCW information management (computer) system, which would comprise three echelons. The inner circle would be highly protected as it would contain confidential verification-related data. Access to this circle of data would be very limited and strictly controlled. The next circle of security, with a lower degree of protection, would contain administrative, personnel, and other restricted information of lower sensitivity. This circle would be linked to the one just mentioned through a special gateway whose function, essentially, would be to ensure that information flow is possible only one way, i.e. from the second to the first circle and not vice versa. There may also be a third circle of security, with little or no connection to the others, which would be open to authorized users outside the organization.

Remaining problems to be resolved range from purely technical questions to more fundamental political problems. The latter, the political problems, now begin more and more to slow down the work of the Preparatory Commission.

One source of political disagreement seems to be the tendency to restrict as much as possible the intrusiveness of OPCW operations, particularly in the area of inspections and the use of inspection equipment. There is little, or, rather, no ground to suspect that the intention is to circumvent the Convention. The reason, rather, is the perceived need for more protection against disclosure of information unrelated to the CWC — for instance, confidential business information, and information related to national security. But there is an inherent risk of weakening the effectiveness of verification — an option that obviously many countries would not be enthusiastic about. For example, largely as a result of this debate, the Expert Group on Challenge Inspections has not been able to make any progress in the last several months.

Another serious source of slowdown is the continued disagreement between Russia and the United States, both on several subjects discussed in the Commission, and on other bilateral CW disarmament matters. These issues include detailed procedures for the conversion of chemical weapons production facilities (CWPFs) for peaceful purposes, and the related issues of interpretation of the definition of a CWPF, inspection costs under Article V and under the Bilateral Destruction Agreement (BDA), accuracy of data exchanged under the second phase of the Wyoming Memorandum of Understanding (MOU) and, finally, coöperation in destruction of chemical weapons. The lack of solution to these issues also negatively affects the ratification process in both countries.

#### Russia and the Destruction of Chemical Weapons

In fact, the biggest single problem in the implementation of the CWC is the question of destruction of chemical weapons in Russia. Many concerns have been expressed about Russia's ability to comply with the Convention's requirements on CW destruction — and not without reason. All efforts in the USSR, and later in Russia, to set up a CW demilitarization programme and to proceed to the construction of destruction facilities ran into all kinds of difficulties. Until recently, there was not one single site agreed upon for such facilities. The situation today looks somewhat brighter. The first location — Gorny (Saratov region) has been finalized in a presidential decree; the second one -Kambarka (Udmurtia) is about to be finalized through a similar decree. There are indications that the entire demilitarization programme might soon be finalised and submitted to parliament. The biggest issue is still money. While there are no precise figures available, it can be understood that the Russian officials in charge of CW demilitarization hope that at least 15 per cent of all financing should come from external sources and, preferably, at the 'front end' of the programme of implementation.

International efforts are under way to provide some assistance to Russia. Contrary to some existing misperceptions, the US is not acting alone in this regard. Germany and Sweden are also providing help, and there is hope that other states will also contribute. It appears still that the whole issue of international coöperation with Russia in this area requires further, careful consideration on both sides in order to ensure its eventual effectiveness. Such consideration should, by necessity, be conducted at a political, rather than at a technical, level so that interests and concerns of all parties can be brought together. The same can be said about other problems that, so far, have complicated the US–Russian relationship in the field of chemical weapons.

#### Short Conclusion

This article has attempted to present as comprehensive account of the present status of the Chemical Weapons Convention as can be permitted by its brevity. On balance, one can say that the CWC is not doing badly so far. On the other hand, over the last couple of years of predominantly expert-level work, a number of issues have accumulated that require a much higher level of attention if the CWC is to succeed soon. It is to be hoped that after the NPT review and extension conference, the Chemical Weapons Convention will return to the prominent place on the international agenda which it deserves.

### **Deposited CWC Ratifications**

#### as of 10 March 1995

Fiji — 20 January 1993 Mauritius — 9 February 1993 Seychelles — 7 April 1993 Sweden — 17 June 1993 Norway — 7 April 1994 Australia — 6 May 1994 Albania - 11 May 1994 Maldives — 31 May 1994 Cook Islands — 15 July 1994 Spain — 3 August 1994 Bulgaria — 10 August 1994 Germany — 12 August 1994 Sri Lanka — 19 August 1994 Mexico — 29 August 1994 Turkmenistan — 29 September 1994 Uruguay — 6 October 1994 Paraguay — 1 December 1994 Lesotho — 7 December 1994 Greece — 22 December 1994 Tajikistan — 11 January 1995 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

## **Status of US Ratification Process**

On 23 November 1993, President Clinton submitted the Chemical Weapons Convention to the US Senate for its advice and consent to ratification, which requires a two-thirds majority vote. In his letter of submittal, the President noted that the CWC is "A central element" of his Administration's nonproliferation policy and that it will "significantly enhance our national security and contribute to greater global security".

#### Action in the Senate

During the summer and fall of 1994, three committees of the US Senate — Foreign Relations, Armed Services, and Intelligence — held hearings on the CWC. Several senior Administration officials testified in support of the treaty, including Secretary of State Warren Christopher, ACDA Director John Holum, Deputy Secretary of Defense John Deutch, Chairman of the Joint Chiefs of John Shalikashvili, and CIA Director James Woolsey.

Since the CWC did not come to a floor vote during the 103rd Congress, which adjourned last fall, the Clinton Administration is currently seeking to secure the advice and consent to ratification by the new Senate. Both houses of Congress will also need to pass, by simple majorities, implementing legislation making the provisions of the CWC binding on US citizens and businesses. As soon as the US ratifies, we expect that the remaining number of ratifications needed to reach the threshold of 65 will accumulate rapidly, perhaps in as little as 90 days. Thus, entry into force of the CWC by early 1996 appears well within reach.

#### **Domestic Implementation**

In parallel with the CWC ratification process last year, the Clinton Administration submitted to Congress proposed implementing legislation needed to make the treaty binding on US citizens and businesses. This bill imposed penalties under domestic law for violations of the CWC, establishes a US National Authority to oversee domestic implementation and serve as liaison to the international CWC organization in The Hague, and ensures that on-site inspections will respect Constitutional rights such as the Fourth Amendment bar against unreasonable searches and seizures. The Administration plans to reintroduce implementing legislation to the new Congress in the near future.

Pursuant to the implementing legislation, the Department of Commerce will promulgate regulations, which will be made available for comment before being finalized. The President will also issue an Executive Order assigning responsibilities for CWC implementation within the executive branch. For example, the Department of Defense will be responsible for declaring and hosting inspections of chemical weapons production, storage, and destruction facilities, while the Department of Commerce will oversee CWC implementation and compliance by US industry.

Policy decisions related to CWC implementation will be made by an interagency working group. In addition, an Office of National Authority (ONA), proposed to be established within the Arms Control and Disarmament Agency (ACDA), will provide logistical and administrative support to CWC implementation activities, compile national declarations for submission to the international organizations in The Hague, and serve as US liaison with the Organization and with other member states.

#### Industry Outreach

The US Government has also sought to identify all US chemical and allied companies that will be affected by the CWC. The latest estimate is that approximately 1,500 companies, with plants located at up to 3,000 sites, will have reporting requirements; a small fraction of these sites will be required to host inspections. Because of the extensive involvement of US industry in CWC implementation, the US Government has sought to engage industry representatives at every stage of the negotiating process.

During the Geneva talks, officials from the Chemical Manufacturers Association (CMA) and other industry representatives met regularly with the US delegation to discuss their concerns. The US Government is continuing to consult with industry as we prepare for CWC implementation, and industry representatives have been given the opportunity to comment on drafts of the implementing legislation and the draft reporting forms. ACDA and the Commerce Department are also engaged in an intensive industry outreach effort that includes publications, plans for telephone and computer hot-lines, and an annual series of CWC seminars for industry held in several cities around the country. Industry outreach efforts are expected to intensify after US ratification of the CWC.

Contributed by Donald A. Mahley, Deputy Assistant Director for Multilateral Affairs, United States Arms Control and Disarmament Agency

## Progress in The Hague Quarterly Review no 9 Building the Organization for the Prohibition of Chemical Weapons

In the absence of a Plenary Session to report on in the present edition of Progress in The Hague, this column will instead present a brief overview of the present status of the Chemical Weapons Convention and of the future OPCW.

Importantly, ratifications are going well. Previous projections that there would be some 40 ratifications by early summer appear likely to be borne out. The 27 ratifying states include Australia, France, Germany, Mexico and Switzerland. New ratifications are arriving at the rate of approximately one a week. The parliament of Belarus has voted to ratify the Convention, and Belarus is expected to deposit its instrument of ratification shortly. A number of other important states are thought likely to ratify in the next few months. The 65th ratification then could be expected before the end of 1995, triggering entry into force in mid-1996. This assumes that the United States and Russia ratify before the end of 1995. The consequences of further delay on their part are discussed further below. The delays in the ratifications of other states can be attributed in part to waiting for these two, and in part to the fact that the CWC is a complex instrument, much more so than the NPT and BWC, and drafting implementing legislation and establishing implementing agencies takes some time.

Preparations for the establishment of the OPCW are largely proceeding well. If the CWC enters into force in mid-1996, it will be possible, with some increase in the pace and focus of the on-going deliberations at The Hague, for the OPCW to be a functioning, effective organization by then. Progress to date includes:

- agreement on much of the inspection equipment, and the beginning of procurement;
- good initial preparations for the recruitment and training of inspectors, although another push in this area will be required in the near future;
- agreement on a range of procedures to protect confidentiality of sensitive business information;
- sound progress on drafting the Inspection Manual, working out of details of inspection procedures, and drafting declaration handbooks;
- agreement on the structure of the organization's specialized computer system, on which work is now beginning;
- agreement on a plan and site for the OPCW's new headquarters, which is expected to be complete by mid-1997, and leasing of a site for the OPCW Laboratory and Equipment Store;
- recruitment of a highly qualified staff in the present Provisional Technical Secretariat that can serve as a core of the future Technical Secretariat, and development of an institutional structure for the PTS that can, by and large, serve as a model for the TS.

The principal difficulty at present lies with the delay in ratification by the United States and Russia, the two acknowledged chemical weapons possessors. The Convention would lose much of its authority if it were to enter into force without these two states. Moreover, planning for the operations of the OPCW generally assumes that both of these states will ratify the Convention and that the bilateral agreement between them on the destruction of chemical weapons will be in force; if this is not the case, the setting up costs for the OPCW and its size would be likely to increase substantially. Unfortunately, the bilateral negotiations between these states have encountered difficulties, and these bilateral problems are spilling over into the negotiations in The Hague, making progress difficult on a number of fronts. The recent elevation of the political level at which the bilateral negotiation is being conducted may be an encouraging sign.

#### Actions by Working Groups A and B

Under the Preparatory Commission's new plan of work, there will be three plenary sessions in 1995, in April, July, and December. Given the length of the present intersessional period, it was decided at the previous Plenary to convene short meetings of Working Groups A and B during the intersessional period in order to provide a mechanism to maintain supervision of the work of the expert groups. These meetings, which occurred on 27 February 1995, did indeed prove useful. Working Group A conducted a general review of the work of the expert groups under its super-Surprisingly, however, it failed to adopt the vision. recommendation of the Expert Group on Data Systems that it lift the limitations on expenditure in the 1995 Information Systems Branch budget, as it had been empowered to do by the Commission at its previous session. This failure can apparently be attributed to procedural difficulties unrelated to the substance of the matter. Working Group A also discussed the work in progress on the Commission's budget for 1996; among the principles discussed were that the level of the budget for 1996 should be lower than that for 1995, that no increases in travel or consultant funding should be permitted (excluding even an inflation adjustment), and that proposals for new posts should be separated from the Budget as a whole to allow a "deep consideration of the consequences of the proposal".

Working Group B also had a productive discussion of the work of the expert groups under its supervision. There were some concerns expressed about the pace of work of these groups, including the fact that one Expert Group (Challenge Inspections) was not even able to agree on a report. Some delegations indicated a desire to eliminate political considerations from the work of the expert groups as much as possible. This is possible in some areas; disputes in other areas are irreducibly political. It was also noted that the mere fact that an expert group had not generated a large paper record does not mean that it is not making progress in its work.

Working Group B also considered a working paper, prepared by the Secretariat, on the current status of the CWC implementation effort. The paper noted the especial importance of the bilateral discussions between the United States and Russia to the work of the Commission, and the importance of receiving regular reports from those states on the progress of those discussions. The paper observed that one of the predicates of the Commission's planning is that both the United States and the Russian Federation will be among the original states parties to the Convention, and that the 1990 bilateral agreement on the non-production and destruction of chemical weapons will be in force and in process of implementation at entry into force.

The paper noted that the pace of ratifications of the Convention has increased substantially in recent months, and that, if this continues, the Convention can be expected to reach the 'trigger point' of 65 ratifications around the end of 1995. Given the substantial amount of work that remains to be completed by the Commission, this implies that "the work of the Commission in the coming months must be both prioritised and significantly accelerated" in order to ensure that all is in readiness for the Convention's entry into force. The Secretariat's paper presented a list of areas for priority action. These included:

- arrangements for inspector recruitment and training, which must be in place at 'trigger point' in order to ensure that the inspectorate can be ready by the time that the Convention enters into force;
- the question of how and when facilities that produce low concentrations of Schedule 2 and 3 chemicals in process or waste streams must be declared, a question that must be answered in order to permit the Declaration Handbook to be finalized;
- the coverage of 'production by synthesis' of 'discrete organic chemicals';
- a number of questions related to the development of the Inspection Manual, including criteria for the evaluation of the risk of particular facilities to the object and purpose of the Convention and formats for the inspection mandate and inspection report;
- model agreements for both chemical weapons-related and industry facilities;
- the definition of 'chemical weapons production facilities';
- 'old and abandoned chemical weapons' issues;
- the OPCW's Information Management System;
- the OPCW's staff rules and regulations.

Working Group B endorsed a list of priority tasks related to this list, ranking, in order, tasks specifically identified in the Paris Resolution, with an emphasis on implementation tasks; training of inspectors; inspector recruitment; inspection equipment specification and procurement; preparation of the Inspection Manual; chemical weapons related issues; chemical industry issues; old and abandoned chemical weapons issues; challenge inspection issues; and a number of other matters. The Working Group also made a number of proposals for improving the methods of work of the Commission. These included, *inter alia*, requesting the Secretariat to identify, in some detail, progress on the various tasks assigned to the Commission in the Paris Resolution; requesting the Secretariat to identify areas in which the pace of the Commission's work would hinder progress towards entry into force (a more pragmatic approach to achieving the same goal); rationalization of the workload of the expert groups; and a greater emphasis on informal meetings.

#### Actions by the Member States

Signature and Ratification In addition to the ratification of France, noted above, there have been seven instruments of ratification deposited in the period reported here, those of Greece, Tajikistan, Mongolia, Armenia, Finland, Oman, Romania, and Switzerland, for a total of 27 ratifications. A number of other states are known to be quite advanced in their preparations to ratify the Convention. Belarus's parliament has reportedly approved the treaty, although Belarus's instrument of ratification has yet to be deposited; once it is, Belarus will become the largest CIS state to ratify the Convention. The Convention may be placed before Japan's Diet in the near future. It is also hoped that France will be active in encouraging other states to ratify the Convention and in assisting with their national implementation.

*Meetings, Training, and Seminars* This intersessional period featured two Regional Seminars, the first in Minsk, during 25–27 January 1995, and the second in Cameroon, during 13–15 February 1995. The Minsk Regional Seminar was attended by participants from Belarus, Kazakhstan, Lithuania, Moldova, the Russian Federation and Ukraine; representatives of Poland and Germany also attended. The seminar featured a visit to a local declarable chemical facility, the Production Association 'Khimvolokno' (Chemical Fibre) facility in Mogilev. The Cameroon Regional Seminar was attended by 19 African states, as well as by non-regional participants from France, The Netherlands, Switzerland, Germany, and the USA.

The Module 1 training courses (M1 is the standard introductory module) to be offered by the United States and by the Netherlands have been certified by the Secretariat, joining India's already-certified course. Germany's Module 2 course on Non-Destructive Evaluation has also been certified, as have Switzerland's Module 2 courses on Chemical Industry Production and Logistics. There have also been a number of recent pilot inspector training courses, conducted both as training for candidate future inspectors and as a means of testing and developing training procedures. These included a Dutch, an Indian, and a United States pilot M1 course, and two US Module 2 pilot courses, one on Inactivation, Conversion and Destruction of CW Facilities, and the other on Team Communication and Management.

Other Activities There are preliminary reports of significant progress in Russia's plans to destroy its chemical stockpile; Russia has officially sited one destruction facility and plans for siting a second facility are well advanced.

#### Progress in the Provisional Technical Secretariat

*Staff and Budget* Three senior staff members have left the PTS in the period reported here, the Deputy Executive Secretary, Li Chang-he, the Head of the Health and Safety Branch of the Verification Division, John Parkes, and the head of the Information Systems Branch of the Administration Division, Oscar Fiestas-Tejada. Parkes's replacement, Brian Davey of South Africa, has already been selected. The Executive Secretary has also announced that Reuben Lev, the Director of the Administration Division of the Secretariat, will be leaving the Secretariat in the near future.

Implementation Activities The Secretariat has begun the process of procuring inspection equipment. A Note by the Executive Secretary points out that there are now approved technical specifications for 87 of the 94 items on the list of recommended equipment, and that the Secretariat has received 91 responses from firms in 17 member states to its initial efforts to identify firms capable of supplying equipment. The Secretariat will send requests for tender for items for which at least three potential suppliers have been identified; the requirement of three suppliers has not been met for a "significant" number of items, and the Secretariat has renewed its call to member states to help in identifying potential suppliers. The Secretariat is also moving forward in its work on inspector training; further details are set out below, in the discussion of the Expert Group on Training. The Secretariat is also working on its plans for a course in The Netherlands for National Authorities in the summer of 1995. Like that in the summer of 1994, the course would have a special focus on developing countries.

Outreach Activities Perhaps the most notable outreach activity during the period reported here was a series of contacts with the United States and with Russia. Ian Kenyon, the Executive Secretary of the Commission, travelled to both states to discuss their preparations to implement and ratify the Chemical Weapons Convention. On the trip to Russia, Kenyon was accompanied by Sergeui Batsanov, Director of the External Relations Division; the two met with, among others, Pavel Syutkin, Acting Chairman of the Presidential Commission on Convention-Related Issues of Chemical and Biological Weapons; with an official in Russia's National Security Council (under the Russian President); and with a Deputy Minister of Foreign Affairs. On the trip to the United States, Kenyon was accompanied by John Gee, Director of the Verification Division of the Secretariat. The two met with a number of officials, most notably Senators Lugar and Nunn, of the Senate Foreign Relations and the Armed Services Committee, respectively. Kenyon also addressed a meeting on the CWC organized by the American Bar Association, the Chemical and Biological Arms Control Institute, and the International Human Rights Law Institute of DePaul University Law School, and met with a number of officials in the Washington, DC area. Gee met separately with officials at the National Security Council and at the Department of Defense, among others.

These two meetings were followed by a visit by three members of Russia's Duma to the Secretariat. One of the parliamentarians was Deputy Chairman of the Committee on Defense and two were members of the Committee on Ecology; the three were accompanied by a representative of the above-mentioned Presidential Committee. The group met with Kenyon and senior officials of the Secretariat; they also met with the Dutch Minister of Defense and a number of other senior Dutch officials. The meetings were reported to have gone well.

*Publications* The Secretariat has issued Occasional Paper 7, including papers and a summary of proceedings for the Regional Seminar held in Pretoria in September, and will be publishing Occasional Paper 9 including the same materials for the Regional Seminar held Jakarta in November. Félix Calderón, the Legal Adviser, has completed a detailed paper discussing a number of the legal aspects of the Preparatory Commission, including its status as an international organization and the range of tasks that it must complete in order to prepare for the entry into force of the Chemical Weapons Convention.

#### Progress in Other PrepCom Structures

The PrepCom's various subsidiary bodies made solid progress in the period reported here, although it should be noted that their work will not be final until it is reviewed and approved by the Tenth Plenary Session of the Preparatory Commission. Their most notable accomplishments included: agreement in the Expert Group on Confidentiality on "general principles for the handling and protection of confidential information" and on a number of aspects of the composition and procedures of the Confidentiality Commission; agreement in the Expert Group on Inspection Procedures on a set of procedures to be applied to inspection equipment after inspections to prevent the disclosure of information not related to the purpose of the inspection; the development of OPCW Media and Public Affairs Policy; considerable work by relevant expert groups on the model for a facility agreement for Schedule 2 facilities, on the OPCW's Staff Rules and Regulations, and on the OPCW's Health and Safety Regulations; the further development of the new agreement on the security arrangements for the OPCW's Information Management System; and conclusion of a tenancy agreement for the OPCW Laboratory and Equipment Store.

*Committee on Relations with the Host Country* The committee met twice during the period reported here, once on 16 January and once on 17 February. At the second of these meetings, the committee approved the tenancy agreement for the OPCW Laboratory and Equipment Store. This agreement had been concluded provisionally on 23 December 1994, subject to the approval of this committee and to the securing of the various permits required to establish the facility. Progress can now move forward on the establishment of this facility. The tenancy agreement resolves the problem of the Preparatory Commission's inability to bind the OPCW by simply permitting the OPCW to terminate the agreement, if it wishes. The OPCW Foundation, the body established by the Netherlands to fund and manage the var-

ious elements of the Netherlands' offer to host the OPCW, has provided a three-year guarantee that the facility's rent would be paid.

These meetings also addressed a difficult issue, the contents of the preliminary tenancy agreement for the new OPCW Building. The most serious problem raised by this agreement was the desire of the developer to secure a 15year guarantee of occupancy from the Commission before proceeding with construction. It is not immediately clear how the Preparatory Commission can accommodate this request, given that it is unlikely to remain in existence for 15 years, that it cannot legally bind the OPCW, and that the OPCW does not yet exist and so cannot provide a guarantee. There is some possibility that the Dutch government will be asked for its assistance. There are also interesting difficulties raised by the mechanisms by which disputes related to this agreement are to be resolved; the developer has proposed that the Commission waive its privileges and immunities, while the Commission has proposed an arbitration procedure. Present projections are that, assuming that permitting and planning proceed as scheduled, construction of the OPCW Building can begin by October 1995, and the building can be ready for occupancy by June 1997.

#### Working Group A

#### Expert Group on Programme of Work and Budget

This met on 9 and 10 March 1995. It recommended that the Executive Secretary be authorized to adopt certain allowances for child and spouse dependants; that the Commission suspend the provisions of Financial Rule 4.1.01 "on an exceptional basis only" for the obligation of funds relating to the fitting-up costs of the OPCW Laboratory and Equipment Store; and that the Commission endorse the recommended programme of activities for the expert group and for the Finance Group in 1995, as well as the revised basic parameters for the 1996 budget of the Commission. The group commented on a number of recommendations made by the Finance Group with regard to the Draft OPCW Financial Regulations, to transfer of funds within the OPCW budget, and to transfer of funds within the Commission's budget, and requested that the Finance Group be asked to consider these proposals again. The group also commented on the work of the Expert Group on Training. The group had initial discussions on proposed adjustments to staffing for 1995, but deferred a decision on this item until its next meeting.

*Finance Group* This met from 13 to 17 February, and, as has become the norm for this group, generated a detailed report. The Finance Group made extensive comments on the draft financial regulations of the OPCW, which it requested the Chairman of Working Group A to transmit to the Expert Group on Administration, Financial and Personnel Matters.

*Expert Group on Data Systems* The Expert Group met twice during this intersessional period, once on 9 February, 1995, and once on 6 and 7 March. At its first meeting, the Group agreed on the details of the agreement on the structure of the OPCW's Information Management System (IMS) announced at the ninth plenary session. As these de-

tails take shape, it has become clear that the long-standing dispute over the security arrangements for the IMS has indeed been resolved. There remains a great deal of work to be done in designing and establishing the IMS; except for that component of the IMS represented by the US offer, the trusted portion of the IMS is now little more than a set of plans. It is vital that the IMS be fully operational and tested at the time the Convention enters into force, a monumental task in a period that may be as brief as 16 months. The Expert Group noted at its March meeting that the IMS was projected to be ready, at the earliest, in April 1996, assuming that the IMS budget is fully unfrozen at the April plenary, and that the work of other Groups proceeds on schedule.

Under the new agreement on security arrangements for the IMS, the system will have two components, a 'hightrust' and a standard security element, separated by, for example, a gateway or firewall. The high-trust portion of the IMS will use a trusted operating system and trusted relational database system. The IMS will not handle any sensitive data until after the security features of the IMS have been fully tested for compliance with the OPCW's confidentiality policy. The trusted portion of the IMS will not be permitted to have any connections to systems outside the IMS (such as the Internet); the standard portion of the IMS may have such connections only if they have been implemented with security arrangements approved by the expert group.

The resolution of the question of the IMS's security arrangements will permit plans for the IMS to move forward on a number of fronts. First, the Expert Group has recommended the acceptance of the United States' national offer for the OPCW's IMS. Second, the Expert Group recommended that all remaining reservations on the 1995 Budget for the Information Systems Branch be lifted. Unfortunately, as noted above, Working Group A failed to act on this recommendation, preventing the use of blocked funds at least until the Working Group meets again in April.

The group's second meeting was on 5 and 6 March. At this session, the group reviewed a proposal by the Task Force on Data Systems on possible reallocations of funds within the Information Systems Branch budget for 1995 to implement the newly agreed systems architecture. These reallocations would bring spending on the IMS for the remainder of 1995 into line with this architecture. These reallocations are within the authority of the Executive Secretary.

The Expert Group also agreed on the mandate for a security study, which is to examine information security policy matters, including possible details for the security arrangements for the trusted portion of the IMS and its relation to the remainder of the IMS. Finally, the group also endorsed a proposal of the Task Force on Data Systems that it not meet on a predetermined schedule but instead convene meetings, after consultations and with three weeks' notice, when important decisions must be made.

#### Expert Group on Administrative, Financial and

*Personnel Matters* This met from 20 to 23 February. The Group devoted its entire meeting to article-by-article consideration of the *Draft OPCW Staff Regulations and*  *Rules*, deferring its consideration of the *Draft OPCW Financial Regulations* to a later meeting.

#### Formal Consultations on OPCW Media and Public

Affairs Policy These consultations, which were held on 8 March 1995, agreed on a Draft OPCW Media and Public Affairs Policy. The policy includes an "Indicative List of Areas where Information May be Routinely Provided by the OPCW to the News Media and the General Public" and a draft media and public affairs policy statement to be made by the Director-General. The policy, which sets forth rules on contacts with the news media by all OPCW personnel, appears to have been significantly influenced by the work of the Expert Group on Confidentiality. It states that the OPCW should "promote the image of the OPCW as an accessible international organisation which provides balanced, timely and objective information." The attached Indicative List includes such information as information on OPCW structure, operations and activities, chemical industries, contacts with outside institutions, national bodies concerned with the implementation of the Convention, and verification activities and methodologies. The policy states that information "specifically related to a State Party" may be released "only at the request of or with the express consent of the State Party to which this information refers".

Within inspection teams, the team leader is to have responsibility for observance of the policy. Members of the inpection team are not to initiate contact with the news media or comment on specific inspection activities. In exceptional cases, the team leader may, after prior authorization by the Director-General and consultation with the inspected state party, make statements to the news media or the general public, subject to confidentiality restrictions and general guidelinbes which will be developed by the OPCW. The inspected state party is required to ensure that the inspection team is not subject to attention from the news media that could impair its activities. There are also restrictions on media contacts by the Observer, who is also expected to follow the contents of the media policy. The consultations recommended that Working Group A consider the draft policy and, if appropriate, refer it to the Commission for provisional adoption (pending the adoption of other relevant documents, including the Draft OPCW Policy on Confidentiality).

#### Working Group B

*Expert Group on Safety Procedures* This met from 13 to 16 February 1995. The Group spent considerable time simplifying and redrafting the *Draft OPCW Health and Safety Regulations*. These regulations address such comparatively non-controversial matters as workplace health and safety and health and safety in the OPCW Laboratory. They also address, somewhat more controversially, health and safety principles during inspections, including the observance of inspected state party health and safety regulations, rules for monitoring of health and safety information, and ways of reconciling this monitoring with the inspected state party's confidentiality concerns. The expert group expressed the hope that the regulations could be agreed at its next meeting.

The expert group also received and considered the recommendations of the Task Force on Medical Treatment. The task force had been assigned the job of examining the approaches to medical treatment, especially of chemical casualties, of different states, in order to arrive at an agreed set of procedures for the OPCW. The task force produced a set of general principles on medical treatment in OPCW inspections, on which the expert group made two relatively The task force, after an extensive minor comments. discussion of treatment methods appropriate to particular types of chemical weapons exposure, also produced a first draft of a set of proposed specifications for equipment for use in treating chemical weapons casualties. The task force had some difficulty agreeing on whether the selection of a preferred treatment method should be made on the basis of newly-developed objective criteria, or whether instead a cost-effectiveness criterion should be applied; the expert group recommended that the task force seek to solve this disagreement.

*Expert Group on Chemical Industry Issues* This met from 9 to 12 January 1995, and continued its work on the model facility agreement for Schedule 2 facilities. The group agreed that this document should not "repeat or selectively quote" the Convention, OPCW policies, or Technical Secretariat regulations, and should instead focus on practical arrangements to implement these provisions at a particular site. Accordingly, the working draft of the model facility agreement became considerably more concise during this session.

In other work, the expert group asked the Legal Adviser to provide an opinion on the question of the respective legal status of model agreements and of facility agreements, partly at the initiative of a delegation that wished to clarify that these agreements were not treaties and so did not require separate ratification. The group also received a proposal from the Russian Federation to explicitly exclude from the definition of a 'discrete organic chemical' certain products of the food industry; it deferred consideration of this proposal to its next meeting. Finally, the group noted that it hopes at its next meeting to begin work on a model agreement for Schedule 1 facilities, as well as to continue its work on the Schedule 2 agreement.

Expert Group on Inspection Procedures This met twice during the period surveyed by this report. The first meeting, which was only one day long, occurred on 12 December 1994, and was for the purpose of considering a report by the specialist Task Force on Inspection Equipment Issues that proposed a set of operational requirements and technical specifications for a sample collection kit for munitions. The task force's report noted that such a kit could be required for investigations of alleged use of chemical weapons, and might also be needed for activities related to old or abandoned chemical weapons. The expert group adopted the proposed requirements and specifications with some amendments. The specifications are of some interest, because of the delicacy of the task of sampling from munitions; for instance, they require that the opening device be operable from 300 metres away, and meet stringent containment requirements. The group deferred the issue of the operational use of this equipment (including, presumably, in what types of inspections and in what circumstances its use would be permitted) for later consideration.

The expert group's next meeting, from 30 January to 2 February 1995, was considerably longer and very productive. Most importantly, the group agreed upon a document entitled "Measures in Relation to Approved Equipment Following Inspection Activities" that attempts to resolve some of the confidentiality (and, to a lesser extent, health and safety) concerns associated with the use of inspection equipment. It is closely linked to the paper on "general principles for the handling and protection of confidential information", which the Expert Group on Confidentiality had produced at a previous meeting. The document provides rules on the decontamination or other removal of information unrelated to the inspection from inspection equipment - or, in some cases, destruction and/or surrender of the equipment — immediately following an inspection. Although no such procedures are explicitly contemplated in the Convention, the interest in protecting confidentiality, which the Convention does protect, led to the adoption of these procedures.

The rules permit decontamination to occur if either the inspection team leader or the representative of the inspected state party (ISP) chooses. The rules set forth a set of general procedures for initiating and carrying out decontamination or disposal of equipment for health and safety purposes. Then, in considerably more detail, they outline procedures for the "treatment of equipment for confidentiality reasons". These procedures are to begin with the removal, if possible, of information unrelated to the purpose of the inspection. (This information might, for instance, be in the form of recorded data, dust, or chemical residue.) If removal is not possible, or does not succeed, "the inspection team and the ISP may instead agree to transfer the affected equipment, under joint seal, to the Technical Secretariat" for decontamination under the supervision of both parties. In an "exceptional case", the ISP may instead choose to retain detachable parts of the equipment on site, either replacing these parts in a manner acceptable to the Technical Secretariat, or reimbursing the TS for the equipment. In a "very exceptional case", if no agreement can be reached on any of the foregoing procedures, the ISP may retain the inspection equipment, either replacing it in a manner acceptable to the TS or reimbursing the TS for the equipment. In all cases, reimbursement is to be immediate (before the inspection team leaves the point of entry to the ISP), in Dutch Guilders, and at "full immediate replacement cost" (a term whose meaning may be subject to some debate). The retained equipment is to be disposed of "to the satisfaction of the inspection team". (This provision, which permits the destruction of the inspection equipment, seems to be intended to ensure that inspected states parties do not have economic incentives to retain the inspection equipment.)

The rules provide a distinct regime for recording media, presumably including computers, recordings of measurements of instruments, photographs, and the like. The ISP is to receive a copy of all such media. If the ISP "has reasons to believe" that information not related to the purposes of the inspection has been recorded, the information will be removed by the inspection team in the presence of the ISP representative, if technically feasible by copying relevant information to a new, agreed medium and then decontaminating the original through the procedures set forth above. In "exceptional cases" where this procedure can not be followed, the recording medium may be retained and replaced or reimbursed, as above. For any of the foregoing procedures, the inspection time is to be extended if necessary.

The expert group also reviewed the reports of a number of task forces. The group recommended the approval of the technical specifications for seven items of protective and safety equipment developed by the Task Force on Inspection Equipment Issues (Protective and Safety). The group did not approve one item, a chemical dosimeter, following a recommendation of the task force based on confidentiality concerns; two other items, a flammability/explosive monitor and the "reusable boots", were deferred for future consideration. The group also deferred considering the task force's recommendation that the foregoing technical specifications explicitly define "chemical weapons" by reference to the Convention's General Purpose Criterion, a definition that would emphasize that protective and safety equipment should also protect if possible against unscheduled chemicals. The group also requested the Secretariat to prepare a proposal for the inclusion of a team decontamination kit in the Commission's equipment list.

The expert group considered the work of the Task Force on the Analytical Database, and approved a number of its recommendations, including a large set of spectral data for identifying some scheduled chemicals by MS, IR, and NMR. (The OPCW analytical database will form the archival source for field instruments and laboratory analysis, which will be used for identifying the distinctive 'fingerprints' of specific chemicals, both in the laboratory and in the field.) Additional spectral data, however, remain to be obtained or evaluated.

Interestingly, the Task Force on the Analytical Database had recommended that the expert group "consider the incorporation in the OPCW analytical database of the spectra of the non-scheduled chemicals relevant to the Convention contained in Annex 3 to this report". Annex 3 contained spectral data on a number of degradation products of scheduled chemicals and "related" chemicals, as well as on a number of "riot control agents". The expert group did not comment on this recommendation, but its list of future tasks for the task force included further evaluation of "spectra of chemicals that might fall within the scope of the Convention (e.g., degradation products of scheduled chemicals, possible riot control agents)".

The group then considered the work of the specialist Task Force on Inspection Equipment Issues (Sample Preparation), and approved the proposed contents of a sample preparation kit for IR analysis, a procedure for sample splitting for soil samples and bulk solid samples, and the addition of sample splitting equipment to the (previously approved) standard sample preparation kit. The task force is to meet again to consider sample preparation for on-site GC/MS analysis. In further work on inspection equipment, the group also approved a set of general requirements for health and safety equipment, and technical specifications for 15 items of health and safety equipment, which had been provisionally approved in the group's fifth report.

The group agreed that WGS-84 should be used by the Technical Secretariat as a single geographical reference system. There are a large number of such reference systems, many developed for regional use; WGS-84 is a system developed to serve as a global standard for use with Global Positioning System devices. The group discussed whether data should be submitted to the OPCW using only this system or using one of a range of interconvertible systems. The group also considered a paper on the question of whether the Secretariat should establish a quality assurance/quality control system, and requested a more detailed proposal on this issue. The group also reviewed a Secretariat paper assessing the major risks to which inspectors would be likely to be exposed, but found that it required a more specific assessment of risks in order to evaluate a proposed list of occupational health and safety equipment.

The group reviewed and commented on a *Draft OPCW Equipment Procurement Policy*, and agreed that the Secretariat should apply this procedure until such time as the modified draft could be finally approved. This is important, as it means that initial procurement of inspection equipment can now begin.

The group considered, and, somewhat surprisingly, declined to accept an opinion of the Legal Adviser on the relationship between Parts X and XI of the Verification Annex when an investigation of the alleged use of chemical weapons is initiated pursuant to Article IX. The core question addressed by the legal opinion was whether, in an investigation of alleged use of chemical weapons, the territorial state party may invoke managed access to limit the activities of the inspection team. The legal opinion concluded, after an analysis of the relevant provisions of the Convention, that it could. While the group's report did not question that conclusion, it stated that the group "could not accept" the opinion as written "as a basis for resolving the issue", and cited as an obstacle a paragraph of the opinion that could be interpreted as limiting the rights of the inspected state party in regard to managed access. It should also be noted that this meeting of the expert group immediately followed a meeting of the Expert Group on Challenge Inspections that was sufficiently contentious to fail to produce a report, perhaps increasing the sensitivity of states to challenge inspection issues.

The expert group delayed its final approval of the paper on 'Sampling and Analysis during Investigations of Alleged Use of Chemical Weapons', which it had provisionally approved on 25 October 1994. The group also deferred consideration of a Note by the Executive Secretary entitled 'Draft Understanding on the Status of "Experts" in the Context of Investigations of Alleged Use In Regard to their Privileges and Immunities'. This note had proposed that "qualified experts" in investigations of alleged use be treated in all respects like inspectors, and that this should include granting them the same privileges and immunities as inspectors. While the group agreed with this conclusion, it also noted that the qualified experts would have to comply with the obligations an inspector is under as well, and requested a paper spelling out, inter alia, the contractual arrangements for qualified experts. The inspectorate's confidentiality-related obligations were presumably seen as important in this connection.

Expert Group on Confidentiality This met twice during the period covered by this report. At its first meeting, on 15 December 1994, the group completed its paper on "general principles for the handling and protection of confidential information", which it proposes to include in the draft integral OPCW policy on confidentiality. In addition to defining strict handling and dissemination rules for confidential information, the policy contains a number of noteworthy features. It states that the access of Technical Secretariat staff to confidential information shall be on a need-to-know basis, and that each individual access shall be recorded in a permanent log; that states parties shall be notified at least 30 days in advance of proposals to accord routine access to confidential information relating to that party's territory to a particular staff member; that analysis of information within the Secretariat may increase the confidentiality level accorded to that information; that rigorous internal procedures involving the approval of senior TS staff will govern access to and copying of confidential information; that a number of specified measures will govern access to the OPCW IMS; and that strict rules will govern the handling of samples from inspections to prevent disclosure of information.

The policy also sets forth a number of principles related to inspections. These include the rule that all information obtained during an on-site inspection will be classified according to the state party's wishes, and that it will be accorded the highest classification level in the absence of other information. They also include principles intended to prevent the disclosure of non-relevant confidential information, including information collected (intentionally or otherwise) with approved inspection equipment, inspectors' clothing, and personal articles. The policy states that the inspection team is to provide the inspected state party with a list of information found relevant to the purposes of the inspection, along with copies of that information. Other, nonrelevant information "shall not be further disseminated in any form", and "shall be returned to the inspected State Party or destroyed under its supervision". Unrelated information is to be identified on the basis of the inspection mandate. The inspection team retains the right to collect and take along information that it deems relevant on the basis of this mandate, provided that this information is included in the team's document listing preliminary team findings, a copy of which is provided to the inspected state party.

The policy lists a number of procedures that the inspected state party may invoke to prevent the disclosure of non-relevant information, without prejudice to its obligation to demonstrate compliance. (Certain aspects of these procedures that relate to inspection equipment have been elaborated in a separate document by the Expert Group on Inspection Procedures, q.v.) These procedures include: additional cleaning of inspection equipment, changing of clothes before or after a particular inspection activity, leaving personal articles behind before entrance to a particular area, the transfer of affected equipment under joint seal to the TS for decontamination, the retention on site of detachable parts carrying confidential information unrelated to the Convention, and "after exploring all other possibilities", the retention of equipment on site. The expert group's report noted the importance of ensuring that these procedures do not "impede or delay verification activities", and requested

Working Group B to address the possible "planning, organisational and budgetary consequences of the possible retention of the inspection equipment".

At the group's next meeting, during 6-8 February in The Hague, the group considered a series of issues related to breaches of confidentiality. The group found, after discussing the coöperation and support that the Convention requires states parties to render to an investigation by the Director-General of an alleged breach of confidentiality, that the nature of this coöperation and support would be determined on a case-by-case basis, and so did not require further elaboration. The group then discussed a proposal that concurrent enforcement jurisdiction for breaches of confidentiality be established in the Netherlands, in order to ensure that enforcement could occur in cases in which national jurisdiction cannot be or is not exercised. The group requested that consultations continue on this proposal; several member states reserved their judgement on its desirability. The group also discussed a proposal, issued in a discussion paper by the Executive Secretary, under which states parties would assume liability for damage caused by breaches of confidentiality committed by the Technical Secretariat in their territory. (This is the approach taken by Germany's implementing legislation.) The group decided against this approach, noting that this problem can be addressed "as it arises, by applying existing principles of public international law and private international law and by using the dispute resolution mechanisms provided for in the Convention". The group also briefly discussed state parties' possible exercise of jurisdiction against legal or natural persons other than Technical Secretariat staff members who commit breaches of confidentiality, without coming to any conclusions on this issue.

The group also discussed the composition and operating procedures of the Confidentialty Commission. The group's analysis drew on a discussion paper by the Executive Secretary on this question. The group recommended that the commission's function will be to resolve disputes involving both a state party and the Organization, although the Conference of the Parties may elect to utilize the commission for the resolution of additional disputes, and states parties may elect by mutual consent to submit other disputes to the commission. The process of nominations to the commission should be open to any state party, and states should propose persons that reflect "the highest standards of efficiency, competence and integrity"; "participation should equitably reflect the geographic make-up of States Parties, as well as serving to secure the confidence of disputing parties". The commission is to have a mandate from the Conference of the Parties, but otherwise is to operate "without interference or direction" from other organs of the OPCW. (Interestingly, this rule appears not to rule out the possibility of interference or direction from individual states parties.) The commission is to have access to a range of appropriate expertise. It will be "encouraged to act without undue delay, possibly within a prescribed maximum time frame". Its mandate, which appears to be an unusual mixture of conciliation and arbitration, is to be to aim initially at resolving the dispute before it "in a manner that is acceptable to the disputing parties, and is consistent with the rights and obligations of States Parties and the Organization under the Convention". Where a dispute cannot be resolved consensually, the commission "should be empowered to report its findings and make recommendations to the Conference of States Parties or if so authorised by the Conference to the Executive Council". Issues remaining to be resolved include the binding nature of these recommendations, the precise composition of the commission, whether nominees to the commission are to serve in their personal capacity or as representatives of governments, and the term of appointments to the commission.

Expert Group on Training This met from 28 February to 1 March 1995 to discuss the implementation of the General Training Scheme (GTS). The Group recommended that the Secretariat develop plans to host three workshops, one focused on harmonizing the Module 1 (M1) training programmes (based on experience with pilot M1 training courses), one on adapting course content for Module 2 (M2) courses to the training needs of the candidates and the Organization, and one on harmonizing evaluation criteria for persons charged with evaluating students during training programmes. The group also commented on papers by the Secretariat on evaluation of inspector trainees in M1 and M2, and asked that the Secretatiat prepare a revised draft taking these comments into account. The evaluation process is somewhat contentious because it will be used to select which of the inspector trainees will eventually be hired as inspectors. The group proposed that Working Group B recommend a final deadline of 6 May 1995 for the submission of detailed formal offers of Module 2 and Module 3 (M3) training.

The group also discussed the status of M2 and M3 offers, noting that a number of shortages have been filled by member states; that two blocks of M2 training can, with the offer of a low cost full service training facility and certain other assistance by the Host Country, be presented by Secretariat staff; but that there remain significant shortfalls in a number of areas, including in several important blocks of M2 and in the blocks of M3 related to CW Destruction, Storage, and Production facilities. In some areas, such as Module 1 training, there is in fact a surfeit of training offers; accordingly, the group agreed on a set of criteria for selecting the best training offers from member states, which include overall cost, course effectiveness, effect on other training offers, and the ability of the state to offer training when required for the GTS. (An evaluation prepared by the Secretariat shows that the United States Module 1 training offer would cost some 11,083 Guilders per student, almost twice as much as the next most expensive offer.) The group took note of preliminary cost estimates by the Secretariat for Module 2 and Module 3 training of approximately 4,000 Dutch Guilders (approx. \$2,350) per student per week for Module 2, and up to 6,000 Guilders (approx. \$3,500) per student per week for Module 3. The group also took note of the Secretariat's finding that a preliminary screening of applications for inspector positions revealed that approximately 49 per cent of the applications did not meet the primary requirements set out in the vacancy notices, and that, although there are a suitable number of candidates for certain positions, there are shortages in others, such as chemical production technologists and logisticians. The group noted the Secretariat's assessment that the lack of experience of the applicants precludes any reduction in the length of the Module 1 training course, and that all trainees should attend the entire 20 week training programme in order to enhance team bonding.

*Expert Group on Challenge Inspections* This met from 23 to 26 January 1995; its meeting was notable for the fact that the group found itself unable to agree on the language of a report, and so did not produce one. In this respect the group did not necessarily do worse than those groups that can only agree on a report by depriving it of any content, as occasionally occurs; however, the lack of a report is certainly an indicator of the large degree of contentiousness at the meeting.

The group discussed a range of topics, without reaching agreement on any of them. One such topic was whether it was appropriate for the group to produce a list of illustrative examples of "appropriate information on the basis of which the concern (of possible non-compliance) has arisen". The latter is an item of information on the form (agreed upon by the expert group at a previous meeting) to be used by states parties requesting a challenge inspection; the language ultimately derives from Article IX, para. 9 of the CWC. A second topic was whether it was necessary to develop further operational requirements for inspection equipment in challenge inspections; there were some indications that this was not felt to be necessary. The group also discussed the possibility of developing objective criteria for determining whether the right to request a challenge inspection has been abused; a number of proposals were discussed, but none agreed upon. The group discussed the format for the inspection mandate for a challenge inspection, without agree-

The SIPRI–Saskatchewan–Frankfurt Group is organizing a conference on *Effective National Implementation of the CWC*, to be held in Bad Homburg, near Frankfurt, during 8–10 September 1995. Representatives of CWC national authorities and of chemical manufacturing associations from Western countries have been invited, as have officials of the OPCW Provisional Technical Secretariat. Observers from other geographical groups and non-governmental organizations have also been invited. The major sponsor of the meeting is the Volkswagen Foundation. Additional information is available from:

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ing on a specific format, and addressed the question of the time interval between submission of a challenge inspection request and notification of the inspected state party, without agreeing on anything more than its previous finding that such notification should occur "as soon as possible". The group also had an extensive discussion on the possibility of agreeing upon illustrative lists of activities to occur in challenge inspections.

#### Expert Group on Old and Abandoned Chemical

Weapons This met from 17 to 20 January 1995, and considered a series of issues that it had discussed at previous sessions, without recording significant progress on these issues in its report. The group once again discussed the definition of "usability" of old chemical weapons. (Recall that, under the Convention, a chemical weapon produced between 1925 and 1946 need only be treated as a chemical weapon, and subjected to the Convention's strict verification procedures, if it can be used as a chemical weapon; otherwise, it may be disposed of as an old chemical weapon.) An important question in this discussion has been whether a munition whose casing is corroded but whose chemical fill is "usable" (or would be if it could be extracted safely for reuse, a difficult task) should be treated as "usable". The group also discussed "extensively" the current draft of the paper setting out the proposed regime for abandoned chemical weapons, without agreeing on a final version. These issues are highly political, and that it is understandable that the group encountered difficulties in resolving them.

The group also discussed the question of the status of abandoned chemical weapons buried on the territory of a state party after 1976 or dumped in its waters after 1984. Such weapons are of special concern to states that have had chemical weapons used on their territory or in their waters in conflicts occuring after these dates (such as Iran). These weapons raise a number of questions. Because of their recent vintage, they are not exempted from the Convention's declaration and destruction requirements; however, it is difficult to declare them when their location is not known. Moreover, it is possible that chemical weapons of which a territorial state asserts it is unaware may become the subject of a challenge inspection. The existence of CW remaining from recent conflicts also raises the question of the form of assistance to be provided by the TS to states with abandoned chemical weapons on their territory when the abandoning state party is either unknown or is not a state party. The expert group requested the Secretariat to prepare a paper addressing these concerns.

In other work, the expert group commented on the draft sections of the Declaration Handbook dealing with old and with abandoned chemical weapons. Finally, the expert group discussed the issue of initial inspections of small quantities of old or abandoned chemical weapons found after entry into force of the Convention. Discoveries of very small quantities of old or abandoned chemical weapons are comparatively frequent, and it is important to ensure that the initial inspections performed on these weapons do not overtax the OPCW's limited inspection resources.

This review was written by R Justin Smith, the HSP researcher in The Hague.

## **News Chronology**

## November 1994 through February 1995

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 (pp 6–14) 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 Estonia, "strategically important goods" become subject to export and transit controls, including dual-purpose goods applicable in the manufacture of CBW weapons. {Radio Tallinn 1 Nov in BBC-SWB 11 Nov}

**1 November** The OPCW Provisional Technical Secretariat now has 110 staff members on fixed term contracts representing 44 nationalities [see also 30 Aug]. {*OPCW Synthesis* 15 Nov}

1 November The US Defense Department generates a draft execution plan for its Counterproliferation Support Program, which, following action in August by Deputy Defense Secretary John Deutch further to the Department's Report on Nonproliferation and Counterproliferation Activities and Programs to the Congress [see 6 May], now has a funding line of its own in the defence budget. According to subsequent press reports {Inside the Air Force 25 Nov; Inside the Army and Inside the Navy 5 Dec}, the draft envisages an expenditure of some \$616 million on the programme during the period FY 1995 through 2001. This would provide additive funding for projects already underway elsewhere in the budget. A substantial proportion of the projects have to do with CBW weapons, such as research and development projects seeking new agent detection technologies, weapons for destroying underground storage facilities, and improved decontamination methods. One project is an Air Force study of a non-nuclear plasma weapon that would generate short intense pulses of sterilizing radiation capable of destroying BW agents inside storage containers. Overall, the draft groups the Support Program's projects into four categories: "passive defense projects", "deterring WMD use and counterforce", "surveillance and intelligence projects", and "special activities". The Congress, in its actions on the FY 1995 Defense budget, has already approved \$60 million for the initial year of the programme.

A further draft of the plan is reportedly generated on 30 November. {*Inside the Navy* 12 Dec} The version that is later provided to the Congress has been coördinated both with the civilian leadership of the Defense Department and with the Joint Requirements Oversight Council of the Joint Chiefs of Staff Organization. {*Defense Week* 3 Jan}

**1 November** The US Commerce Department discloses its estimate of the numbers of US companies likely to be affected by the Chemical Weapons Convention. The total number of such companies may be up to 6,000 [see also 7 Sep] of which 5–15 may be affected by the Schedule 1 regime, another 100 by the Schedule 2 regime, and 200–300 by the Schedule 3 regime. The remainder would be affected only by the reporting requirements for "unscheduled discrete organic chemicals". {*BNA Chemical Regulation Daily* 3 Nov}

**2 November** In Texas, at a pre-trial hearing before the US District Court in Galveston in the case of Gulf War veterans against corporate suppliers of CBW-related technology to Iraq [see 3 Jun], a cut-off date of 22 November is set for adding further named plaintiffs to the litigation. Lawyers acting for the plaintiffs suggest that the number of veterans involved might eventually reach 100,000.

Meanwhile, unrelated to the lawsuit, erstwhile presidential candidate Ross Perot is supporting a team of Dallas scientists in its inquiries into Gulf War sickness. {AP in *Houston Chronicle* 25 Nov}

3 November In the UK, Parliament learns from the Director General of CBDE Porton Down. Dr Graham Pearson, about the work done at Porton in the 1960s assessing the effects of the drug LSD on troops: "The assessment was made that although LSD could be synthesised, it was immensely expensive and being a solid it would be difficult to disseminate further, and as the effects were not highly predictable, the conclusion was reached that LSD would not present a significant battlefield hazard". {Hansard (Commons) written answers 3 Nov} The experimental work had taken place between 1961 and 1972, involving about 72 Service volunteers in laboratory and field trials. The LSD was administered orally in water, the maximum dose being no more than 0.2 milligrams. The US Army had supplied Porton with 10 grams of LSD in December 1965 and with another 10 grams in June 1966. Dr Pearson later gives descriptions of two particular sets of LSD experiments: 'Moneybags' in 1964, and 'Recount' in 1966. {Hansard (Commons) written answers 21 Nov, 7 Dec, 8 Dec 94 and 16 Jan 95}

**4 November** Iraq has consistently declared to the United Nations that it produced a total of 4340 tons of lethal chemical agents during its now-defunct chemical weapons programme, according to UNSCOM spokesman Tim Trevan, quoted in the *Washington Post*. In contrast, Iraq's declarations of total acquisition/production of CW-agent precursors has ranged from 13,221 tons in October 1993 to 17,657 tons in March 1994. As to suppliers, UNSCOM has found that, before 1986, Iraq purchased most of its CW-agent precursors from western Europe and the United States. From 1986 India was "more or less" the main supplier. {*Washington Post* 4 Nov}

**5 November** In the United States, a conference on Gulf War syndrome [see 10 Oct] takes place at the William Joiner Center for the Study of War and Social Consequences at the University of Massachusetts at Boston. {*Boston Sunday Globe* 6 Nov} Some 29,000 of the 697,000 Gulf War veterans have now signed on to the special Gulf War registry opened by the Veterans Administration to document individual cases. There is mounting concern among veterans that the illness is contagious. {*International Herald Tribune* 15 Nov}

**8 November** In the US Congressional elections, the Republicans take control of both Houses. Chairmanship of the Senate Foreign Relations Committee is expected to pass to Senator Jesse Helms who, it is predicted by some, will oppose ratification of the Chemical Weapons Convention. {*New York Times* 11 Nov}

A week previously, ACDA Director John Holum, speaking of the Convention at a press conference in Beijing, had said: "I am optimistic that we'll be able to get it approved and ratified by the United States Senate early in 1995. It was delayed because three separate committees have to consider it and they didn't get their reports completed by the end of the session." {US Information Service}

**10 November** In Japan, the Ministry of International Trade and Industry, coöperating with the Japan Chemical Industry Association, is pressing ahead with preparations for implementing the CWC, so *Japan Chemical Week* reports. The Ministry is working to present implementing legislation for passage through the Diet during the next ordinary session. {*COMLINE Daily News: Chemicals and Materials* 16 Nov}

**11 November** In Zagreb, police arrest Peter Walaschek on an Interpol warrant. Proceedings for his extradition to the United States begin and are still continuing three months later, pending a decision of the Croatian Supreme Court. In 1988, Walaschek, a German national, had jumped bail in the United States while awaiting sentencing by the Baltimore court that had found him guilty of illegally exporting to Iran 90 tons of the mustard-gas precursor thiodiglycol manufactured by Alcolac Inc [see 29 Jan 89]. US authorities describe him as a potential key witness against the Iranian diplomat once stationed in Germany who had organized the Iranian procurement, Seyed Kharim Ali Sobhani. {Baltimore *Sun* 15 Nov 94 and 23 Feb 95}

**13–20 November** From the US Senate, a staff delegation inquiring into CWC ratification issues visits The Hague and then Moscow. In The Hague it meets with senior officials of the OPCW Provisional Technical Secretariat and also with members of particular national delegations. In Moscow it meets with officials of the Duma Defence and Foreign Affairs Committees, the Presidental Committee on CBW Convention Problems and the Ministries of Defence and Foreign Affairs. The delegation also meets Drs Lev Fedorov, Vil Mirzayanov and Vladimir Uglev.

**14 November** President Clinton issues a new Executive Order, no 12938, consolidating and amending two existing ones (EO 12735 [see 16 Nov 90] and EO 12930) aimed at countering the proliferation of weapons of mass destruction. {US Newswire 15 Nov}

**14 November** The US Defense Department Advanced Research Projects Agency has just released a study it had completed in May identifying technologies, equipment and training which US forces will need in the years ahead in operations other than war [see also 21 Jun]. The report identifies several capability shortfalls and assigns relative priorities to remedial development projects. The resultant list of required technologies — on which ARPA is now basing a concerted R & D effort, partly funded from the Technology Reinvestment Program — overlaps with projects also favoured for the Counterproliferation Support Program [see 1 Nov]. Thus, among its priorities are

"tactical detection of weapons of mass destruction", including CBW weapons (especially in the hands of terrorists), and "detection and destruction of underground facilities". Also given top priority by ARPA are "non-lethal weapons systems" [see also 22 Mar and 19 Aug]. {*Inside the Navy* 14 Nov}

**14–17 November** In Baghdad, UNSCOM Deputy Executive Chairman Charles Duelfer meets with senior Iraqi officials to discuss deficiencies in the information which Iraq has given to the UN about its past weapons programmes, especially in the BW area. The head of the Military Industry Organization, General Amer Rashid, promises strong efforts to satisfy UN demands. {Reuter 13 Nov; AFP 17 Nov}

**15 November** From Moscow, a visiting team of US officials and bipartisan members of Congress — including the Assistant to the Secretary of Defense for Atomic Energy, Dr Harold Smith, Representative Steve Buyer and Representative Glen Browder — has just returned from meetings with Russian defence officials and members of the Duma for talks on the Russian chemdemil programme, the third such visit of the year. Export controls and the war in former Yugoslavia had also been on the agenda. The Chairman of the Duma, Ivan Rybkin, told the team that he has asked President Yeltsin "to come forward with budget and initiatives to get this [chemdemil programme] moving". {Congressional Press Releases 15 Nov; *Washington Times* 13 Dec}

**15 November** In London the allegations that the military government of Burma is using biological weapons against rebellious Karen villages along the border with Thailand [see 3 May] are repeated in a report by Christian Solidarity International and Baroness Cox, Deputy Speaker of the House of Lords, who has just returned from a visit to the region. {London *Times* 15 Nov; *Hansard (Lords)* 17 Nov; London *Sunday Times* 20 Nov}

**15–16 November** In Buenos Aires, the Argentine Republic hosts for the Latin American region an International Seminar on Non-Proliferation of Chemical and Bacteriological Weapons [see 6–9 Dec 93]. The seminar is organized by the Ministry of Foreign Affairs, International Trade and Worship in coöperation with the governments of Australia, Canada, Norway and the United States. Besides these five countries, there is participation from Brazil, Colombia, Costa Rica, Chile, Ecuador, Mexico, Panama, Peru, Spain and Venezuela. The proceedings include a forum for information about the work done by the Australia Group on non-proliferation of CBW weapons and about the export control regimes for sensitive and war material established by participating states. {PC-IX/B/WP.11} Australia provides a paper (in Spanish) summarizing the past work of the Australia Group.

**15–18 November** The North Atlantic Assembly meets in Washington for its 40th annual session. Among the resolutions before it is one from the Scientific and Technical Committee which urges "member Governments and Parliaments of the North Atlantic Alliance...to ratify the Chemical Weapons Convention as rapidly as possible". {NAA resolution 253}

**15–18 November** The US Army Chemical and Biological Defense Command Edgewood RDE Center hosts its annual scientific conference on chemical and biological defence research.

Among the presentations is one from Edgewood on the synthesis and physiological activity of certain quinoline and quinoxaline analogues of medetomidine. The abstract of the presentation begins thus: "Centrally acting  $\alpha_2$ -adrenergic compounds show antihypertensive actions with sedative properties. More selective  $\alpha_2$ -adrenergic compounds with potent sedative activity have been considered to be ideal next generation anesthetic agents which can be developed and used in the Less-Than-Lethal Technology program [see 12 Aug 93 and 16-17 Nov 93]. Unlike opioids, these compounds are devoid of the usual liabilities associated with respiratory depression, physical dependence and environmental concern after dissemination. Recently we have shown that a naphthalene analog of medetomidine is also a very potent and selective 2-adrenergic stimulant..." {Fu-Lian Hsu and Robert M Przeslawski in the conference Abstract Digest}

**15–22 November** In Iraq, the 15th UN biological inspection team, UNSCOM 104, is at work. It comprises six people led by Richard Spertzel of the United States. {AFP 17 Nov}

**18 November** In Cambodia, government aircraft have been spraying poison over parts of Preah Vihear Province, according to a communiqué issued by the National Army of Democratic Kampuchea which also states that, since 12 November when the spraying began, 58 people have died as a consequence, others also being affected by the poison. {Radio of the Provisional Government of National Union and National Salvation of Cambodia 18 Nov in FBIS-EAS 22 Nov}

**18 November** Russia and the United States agree to a joint evaluation of Russian chemdemil technology. Russian scientists will brief their US counterparts on the neutralization process they have developed for CW agents, which will then be tested at US military installations. The agreement, *Addendum to the 1994 Plan of Work for Assistance to the Russian Program for the Destruction of Chemical Weapons within the Framework of the Bilateral Agreement of 30 July 1992* [see 14 Jan and 15 Feb], is signed by the Assistant to the US Secretary of Defense for Atomic Energy, Harold Smith, the Chief of the Russian Defence Ministry RKhB Protection Troops, Colonel-General Stanislav Petrov, and the Acting Chairman of the President's Committee on CBW Convention Problems, Pavel Suitkin. {*Washington Times* 13 Dec; *Krasnaya Zvezda* 15 Dec in FBIS-SOV 15 Dec}

**18 November** In Amsterdam, an international conference, *Chemical Weapons: Past without Future?*, is organized by the European Institute for Foreign Affairs (formerly the Glasnost & Perestroika Institute). It is chaired by Dr A J J Ooms.

**18 November** The United States imposes sanctions against two Swiss companies for allegedly providing assistance, in the form of construction machinery, to Libya's chemical weapons programme. The two companies — Loop SA (also known as Rainstar Ltd) and CDM Engineering SA — are currently in liquidation. No Swiss laws were violated. {Reuter 18 Nov; *Federal Register* 1 Dec}

**18 November** In the United States, *Science* publishes the second, epidemiological, part of the inquiry led by Professor Matthew Meselson of Harvard University into the 1979 outbreak of anthrax in Sverdlovsk, USSR [see 15 Mar 93]. The

abstract reads: "In April and May 1979, an unusual anthrax epidemic occurred in Sverdlovsk, USSR. Soviet officials attributed it to consumption of contaminated meat. US agencies attributed it to inhalation of spores accidentally released at a military microbiology facility in the city. Epidemiological data show that most victims worked or lived in a narrow zone from the military facility to the southern city limit. Farther south, livestock died of anthrax along the zone's extended axis. The zone paralleled the northerly wind that prevailed shortly before the outbreak. It is concluded that the escape of an aerosol of anthrax pathogen at the military facility caused the outbreak."

Although the findings of the study indicate without any doubt at all that the release of anthrax spores came from a known BW facility in the city, they do not indicate whether the origin was a weapons programme such as the Biological Weapons Convention prohibits or a BW-protection programme such as the Convention permits.

**18–20 November** In Dallas, Texas, the US Defense Department Advanced Research Projects Agency sponsors an international conference on *Old Issues and New Strategies in Arms Control and Verification* chaired by Dr James Brown of Southern Methodist University. There is a panel on the Biological Weapons Convention in which the speakers are Australian CD Ambassador Richard Starr, Dr Marie Chevrier of the University of Texas at Dallas, Dr Graham Pearson and Ambassador Tibor Tóth.

**19 November** On Johnston Atoll in the Pacific, a US Army M55 rocket already drained of its sarin nerve-gas payload explodes while undergoing destruction in the JACADS chemdemil facility. The explosion is totally contained, no one is hurt, and there is no release of agent. {*Chemical & Engineering News* 12 Dec}

**19 November** In the UK the law firm of Leigh Day & Co announces that it will start proceedings for personal injuries on behalf of former soldiers who had been used as guinea pigs in chemical warfare experiments. One such veteran, Michael Roche, founder of the Porton Down Volunteers Association [see 10 Oct], had just obtained legal aid. {London *Independent on Sunday* 20 Nov}

**20 November** In Bosnia-Hercegovina, in fighting near Bihac, joint Krajina Serb and Bosnia Serb forces "attack defence lines at Veliki Skocaj with poisonous gases" [see also 11 Sep], according to Radio Bosnia-Hercegovina {in BBC-SWB 22 Nov} Two days previously Krajina Serb aircraft had dropped napalm bombs in the area. {London *Daily Telegraph* 19 Nov}

**20 November** In London the Gulf War Veterans Association has its inaugural meeting and is likely to become involved in the litigation over the so-called Gulf War Syndrome: the product liability claims against 30 companies in the United States [see 2 Nov] and, pending the outcome of legal-aid applications, the compensation claims by up to 416 service personnel against the UK Defence Ministry [see 9 Sep]. {*Independent* 21 Nov; *Daily Telegraph* 24 Nov}

The Defence Ministry informs Parliament next day that 40 patients "have so far been examined by the military medical consultant physician appointed to investigate personnel who believe their health has been adversely affected by Operation

Granby" [see also 31 Oct]. {*Hansard (Commons)* written answers 3 Nov}

**21 November** In Scotland, a claim against the UK Ministry of Defence for compensation for Gulf-War-related illness is made at the Court of Sessions in Edinburgh on behalf of a former Territorial Army nurse, Katherine Lamb. She is blaming her present debilitated condition on the 15 injections of vaccines she had been given plus the Nerve Agent Pretreatment Set [see 26 Oct] tablets she had been required to take every eight hours upon arrival in the Gulf area. {*Guardian* and London *Times* 22 Nov}

Meanwhile, in England, legal-aid certificates have been granted for more than 20 similar claimants [see 20 Nov] to take the Defence Ministry to court. And the War Pensions Agency decides to grant a war pension to a still-serving veteran of the Gulf War, Cpl Robert Lake, who had had an adverse reaction to his anthrax immunization. {*Independent* 24 Nov}

**21 November** In Washington the Assistant Secretary of State for Politico-Military Affairs, Thomas McNamara, announces that a determination pursuant to Section 81 of the Arms Export Control Act (which, in regard to "chemical or biological weapons proliferation", provides for "sanctions against certain foreign persons") has been made, publication of which would, however, be harmful to US national security. {*Federal Register* 1 Dec}

**21 November** The US Army releases a report by the Army Safety Center on its investigation of the chemdemil incinerator under construction at Tooele Army Depot in Utah [see 3 Oct]. The report concludes that, contrary to what the facility's former safety officer, Steve Jones, had been saying, safety at the plant has not been compromised. It does, however, recommend that the Army Corps of Engineers should examine the alleged design flaws. The director of Army Safety, Brigadier Thomas Garrett, says: "We found a plant that is about where it should be, given the projected start date [September 1995] for full operations". {Baltimore *Sun 22* Nov; *New York Times* 24 Nov}

The investigation by the Utah Occupational Safety and Health Administration has also been completed {*Washington Post* 12 Oct}, but its findings have not been released.

**22 November** The UK government has undertaken "to look at ways in which we can co-operate with Russia to end production facilities for biological weapons", so the House of Commons is told by a Defence minister. {*Hansard (Commons)* oral answers 22 Nov}

**22 November** In the United States a team of 15 Russian inspectors arrives at the former chemical weapons production facility at Newport Army Ammunition Plant in Indiana to conduct a trial inspection under Phase II of the Wyoming Memorandum of Understanding [see also 24-25 Oct]. {*Chicago Tribune* 23 Nov}

**23 November** In China, the Imperial Japanese Army in 1939 set up a BW laboratory, known as Bo8609, at the former medical college of Zhongshan University in Guangzhou, the capital of southern Guangdong Province, according to a Chinese historian quoted in *China Daily*. {*International Herald Tribune* and *Guardian* 24 Nov}

**23 November** In Russia, at Izhevsk in Udmurtia, a Moscow official says that safe chemdemil facilities are expected to be created in Udmurtia (repository of about a third of Russian chemical weapons, at military bases in Kambarka and Kizner [see 26 Sep]), by 1996. The official, Aleksandr Ivanov, is identified by TASS as Deputy Chairman of the Presidential Committee for Conventional Problems of Destruction of Chemical Weapons. He is speaking at a seminar on the elimination of chemical weapons attended by military experts, chemists, ecologists and medical experts from Moscow, Tatarstan, Perm, Nizhniy Novgorod, Volgograd and Saratov. {ITAR-TASS 23 Nov in FBIS-SOV 23 Nov}

**24 November** India publishes particulars of the Module One training course it is offering for trainee OPCW inspectors and inspection assistants. The course has now been certified by the OPCW Provisional Technical Secretariat. It will take place, for 20 trainees, during 23 January to 3 March 1995 in Gwalior, at the CBW Defence Research and Development Establishment there. {PC-IX/B/WP.8}

**24–26 November** In the Hague, at the Peace Palace, the Hague Academy of International Law organizes a colloquium, *The Convention on the Prohibition and Elimination of Chemical Weapons: a breakthrough in multilateral disarmament*, in coöperation with UNIDIR and the OPCW Provisional Technical Secretariat.

**25 November** In Myanmar (Burma), Lt-Gen Khin Nyunt, secretary-1 of the State Law and Order Restoration Council, characterizes as "fabricated news" the recent report [see 15 Nov] that SLORC has been trying to liquidate some national races by using biological and chemical weapons. {Radio Myanmar 25 Nov in FBIS-EAS 28 Nov}

**26 November** In the UK, a documentary on international BW antiproliferation efforts and their complication by the biotechnology industry is screened on BBC television. {*The Germ Genie* on BBC-2 *Assignment* 26 Nov}

**27 November** From southern Iraq, Marsh Arab refugees crossing into Iran have been found with symptoms of "chronic long-term poisoning" according to the doctor who has just led a mission to south-western Iran for the UK Overseas Development Administration. Dr Mukesh Kapila is quoted in a British newspaper as attributing the symptoms of these men, women and children to chemicals put into their water supplies by Iraqi authorities as part of a campaign of persecution against the Marsh Arabs and against Shia insurgents based in the marsh-lands [see also 20 Aug 93 and 23 Nov 93]. {*Independent on Sunday* 27 Nov}

**28 November** In Bosnia-Hercegovina, in fighting on the Trnovo front, Bosnian Serb forces "are increasingly frequently using chemical agents and napalm bombs" [see also 20 Nov], according to Radio Bosnia-Hercegovina {in BBC-SWB 30 Nov}.

**28 November** In the UK, the President of the Board of Trade makes the following statement on his plans to introduce legislation to implement the Chemical Weapons Convention in Britain: "The United Kingdom remains committed to the chemical weapons convention and legislation to facilitate its ratification will be introduced as soon as parliamentary time and other

legislative priorities permit". {*Hansard (Commons)* written answer 28 Nov}

**28–30 November** In Jakarta, the government of Indonesia in conjunction with the OPCW Provisional Technical Secretariat hosts a regional seminar, the *Asia Pacific Seminar on the National Implementation of the Chemical Weapons Convention.* Participating are representatives of 20 regional states both signatory and non-signatory (Bhutan), as well as representatives of non-regional states (Cuba, Nigeria, Poland and the USA) representing their respective regional groups. There are also participants from non-governmental organizations, including CBACI, SIPRI and the Harvard Sussex Program. {PC-IX/B/WP.13; *CWCB* no 26} Foreign Minister Ali Alatas tells reporters: "Indonesia had signed the Convention and hopes to ratify it soon because all preparations have been made". {Antara 28 Nov in FBIS-EAS 29 Nov}

29 November-1 December The Australia Group meets in Paris [see also 16-19 May]. The Czech Republic, Poland and the Slovak Republic attend for the first time, as new members of the Group. The UK Foreign & Commonwealth Office subsequently publishes the following account: "There were only two significant items for discussion on the agenda for the plenary a reflection of the maturity of the group. Interest in joining the AG had been expressed by several countries, all of which, as major suppliers and transshippers of chemicals, were credible candidates for membership. Discussions on the Australia Group's relationship with the Chemical Weapons Convention, and the need to counter Iranian-led criticisms of the Australia Group and national export controls dominated the agenda. It was agreed that Australia Group members should continue to counter critics by lobbying sympathetic non-aligned countries, both bilaterally and with delegations in the Hague. A successful regional seminar on CBW non-proliferation had recently been hosted by Argentina [see 15-16 Nov], and Japan announced that it was planning to hold a similar Asian regional seminar in January." {Notes on Security and Arms Control 1994 no 10}

**30 November** In Taiwan, officials of the Industrial Development Bureau say they have commissioned an assessment of the restrictions which the Chemical Weapons Convention would impose, after it is in force, on import of scheduled chemicals into Taiwan. The Bureau is reported to be consulting the Board of Foreign Trade and the Ministry of National Defence on how to "lobby other nations to allow Taiwan to sign the Convention". {CNA 30 Nov in FBIS-CHI 30 Nov}

**1 December** In Nigeria, the Council on National Authority on the Chemical Weapons Convention convenes a seminar in Lagos on The CWC and the Chemical and Allied Industries. The seminar is attended by some 250 industry officials. {*ASA Newsletter* 21 Dec}

**1 December** The Executive Secretary of the OPCW Preparatory Commission publishes his report for the eighth intersessional period (3 October to 2 December), to which he has added a retrospective on 1994. The retrospective notes both "solid achievement" in the work of the Commission during 1994 and "a certain slackening of impetus". It also notes that "development of the Information Management System (IMS) has met a major difficulty in the inability of Member States to agree on

security standards and this in turn has led to the effective halting of the IMS project". The Executive Secretary "appeals to those States that have been involved in the dispute to resolve their differences". Among the details presented on work during the latest intersessional period, the report observes that only one member state had provided the data requested for study of an Article XI database — a database that would "facilitate the exchange of information relating to economic and technological development in the field of chemicals". {PC-IX/6}

**1 December** The North Atlantic Council, meeting in ministerial session in Brussels, issues a communiqué which includes the following: "We continue to consider as essential tasks the early entry into force of the Chemical Weapons Convention and the elaboration of measures to strengthen the Biological Weapons Convention". {*US Department of State Dispatch* 19 Dec}

**1 December** The US Army releases the report on a "courtesy chemical surety inspection" which had been conducted at the Tooele Chemical Agent Disposal Facility by the Army Inspector General a month before the former senior safety officer there, Steve Jones, had publicized his opinion that safety systems were inadequate [see 23 Sep]. The IG report lists numerous safety deficiencies. In its press release disclosing the IG report and in an attached explanatory note, the Army notes findings in the IG report that are broadly consistent with those in the later report by the Army Safety Center [see 21 Nov].

A copy of the Army IG report had earlier been sent anonymously to Jones' lawyer and would be receiving much coverage in newspapers next day. {*Washington Post* and Baltimore *Sun* 2 Dec; *New York Times* 4 Dec}

**1 December** Paraguay deposits its instrument of ratification of the Chemical Weapons Convention, becoming the 17th signatory state to do so.

**2–14 December** In Iraq, the UN ongoing monitoring and verification work in the BW area [see 15–22 Nov] moves towards commencement of "interim monitoring". Numerous dual-purpose items of equipment at different facilities around the country are being identified, inventoried and tagged for monitoring; and re-inventorying has been necessitated by, in UNSCOM's words, "Iraq's failure to declare all such equipment and to notify movement of it and because of damage to tags already installed". {S/1994/1422} Two biological inspection teams are currently at work: the 13th (UNSCOM 99) and the 16th (UNSCOM 105).

**5 December** In Tokyo district court, a local ward council wins permission to cremate and bury the remains of at least 67 people believed to have been victims of experiments conducted by a biological-warfare unit of the former Imperial Japanese Army. The remains were uncovered in July 1989 at a construction site in Shinjuku-ku, Tokyo, which had been the location of a military institute — the former Army Medical College — connected to the biological-warfare unit. Action to prevent the cremation had been brought by a citizens' group seeking to preserve what Professor Keiichi Tsuneishi of Kanagawa University described as "substantial evidence of Japanese war crimes during the Second World War". The Japanese Government has not formally acknowledged existence of the BW unit and has been suspected of seeking to destroy evidence of it. The citizens' group subsequently appeals against the decision to the Tokyo

high court, which will rule in a year or two. {Kyodo 5 Dec; *Guardian* 7 Dec; *New Scientist* 25 Feb 95}

**5 December** In Japan, Chinese Academy of Social Sciences vice president Bu Ping talks to reporters after visiting the site of a former chemical weapons production facility on Okuno Island, Hiroshima Prefecture. He speaks of the chemical munitions abandoned in China by the former Imperial Japanese Army and of injuries they have been causing to Chinese workers [see also Aug]. He calls for remedial action by the Japanese Government. Earlier in his visit to China, Bu Ping had visited a similar facility in Kitakyushu, Fukuoka Prefecture. {Kyodo 5 Dec in FBIS-EAS 5 Dec}

**5 December** In Moscow, at a Greenpeace news conference, the chairman of the Russian Union for Chemical Security, Lev Fedorov [see 25 Oct 94] urges Russian ratification of the Chemical Weapons Convention, which he says is being hampered by the military. He also says that some 4.5 million chemical munitions had been dumped by Soviet authorities in the White, Barents, Kara, Black, Okhotsk and Japan Seas since World War II. The chairman of the Saratov Union for Chemical Safety, Vladimir Petrenko [see 9 Jun 93] speaks of an "unauthorised destruction" of chemical weapons having been conducted earlier in the year at Shikhany. {Interfax 5 Dec in FBIS-SOV 6 Dec; *RFE/RL Daily Report* 7 Dec}

5-6 December In Budapest, the Conference on Security and Co-operation in Europe meets in summit session. The actions of the assembled Heads of State and Government of the 52 member states include adoption of an agreed text, Principles Governing Non-Proliferation, which contains the following: "The participating States strongly believe that the proliferation of weapons of mass destruction, and missiles to deliver them. poses a threat to international peace, security and stability and hereby affirm their commitment: to prevent...the acquisition, development, production, stockpiling, and use of chemical and biological weapons..." The text goes on to oblige participating states "to enhance and strengthen existing norms against the proliferation of weapons of mass destruction", specifying mechanisms whereby this may be achieved. Other actions taken include changing the name of the CSCE to Organization for Security and Co-operation in Europe (OSCE). {Trust & Verify Dec}

**5–8 December** In Switzerland an international Chemical and Biological Medical Treatment Symposium takes place at the NC Laboratories, Spiez, attended by 75 scientists and doctors from 23 countries. The symposium, conceived as the first of an annual series, is chaired by Dr Brian Davey of South Africa. It has been organized jointly by the host laboratory, Battelle Memorial Institute, and Applied Science and Analysis, Inc. *{ASA Newsletter* 21 Dec; *CBIAC Newsletter* Winter 95*}* 

**5–8 December** In The Hague, the OPCW Preparatory Commission convenes for its ninth plenary session [see 26–29 Sep]. Participating are 90 of the 159 CWC signatory states, a marked increase over the previous plenary. The increase is due mainly to the participation of more of the member states which have representation in Brussels but not The Hague. Important decisions taken include provisional agreement on a developer and design for the OPCW Building; approval of certain actions relating to the OPCW Information Management System which will

allow some loosening of the associated log-jam; adoption of a range of understandings on chemical industry issues; agreement on procedures for proficiency testing of Designated Laboratories; and approval of a revised curriculum for a training course for National Authority personnel. The Commission also renews the contract of its Executive Secretary, Ian Kenyon, for a further 12 months. It elects Finn Fostervoll of Norway as Chairman of the Commission for the six-month period beginning on 8 February 1995, with the representatives of South Africa, Pakistan, the Czech Republic, Ecuador and the United States as the Vice-Chairmen for the same period. The session ends one day earlier than had originally been anticipated. {CWCB 26, pp 7–10}

**6 December** In Utah, at a meeting of the Tooele Citizens Advisory Committee on chemdemil, findings are presented from the fourth formal investigation into safety at the incinerator now being completed at Tooele Army Depot [see 1 Dec]. The director of the Division of Solid and Hazardous Waste of the Utah Department of Environmental Quality states that, although his agency had found minor problems, it had found little to substantiate allegations that the design and operating policy of the chemdemil facility had potentially catastrophic flaws. The meeting is told that the investigation broadly confirmed those by the Army Safety Center and by the Utah Occupational Safety and Health Administration [see 21 Nov]. {*Salt Lake Tribune* 7 Dec}

**7 December** In Moscow, President Yeltsin issues an order approving lists of dual-use chemicals, equipments and technologies that are to be placed under export control because of their potential application in the manufacture of chemical weapons. The order requires that the government implement a process for monitoring the export controls, and replaces an earlier Presidential Directive [see 16 Sep 92]. {ITAR-TASS in FBIS-SOV 8 Dec; *Rossiyskaya Gazeta* 17 Dec in FBIS-SOV 20 Dec}

**7 December** Romanian preparations for implementing the Chemical Weapons Convention nationally are described in a paper distributed as a plenary document of the OPCW Preparatory Commission. {PC-IX/B/WP.12}

**7 December** Lesotho signs and deposits its instrument of ratification of the Chemical Weapons Convention.

**8 December** In Moscow, Dr Vil Mirzayanov [see 1 Sep] tells reporters that the State Institute of Organic Chemistry and Technology, his former employer, is now suing him for R33 million in damages to reputation caused by what he had been publishing about GSNIIOKhT. Mirzayanov says that he made disclosures at the instigation of the Institute. {Interfax 8 Dec in *RFE/RL Daily Report* 9 Dec}

**8 December** The UK Government, responding to an oral question in the House of Lords about reasons for its delay in submitting CWC implementing legislation [see 28 Nov], announces that the Department of Trade and Industry will issue a discussion document early in the new year to canvass the views of industry. An identical answer is given in response to a written question in the House of Commons. In the Lords, the responding minister suggests that, even if Britain is not among the original states parties, it will not necessarily lose out on the benefits of unrestricted trade in scheduled chemicals: there is a

three year grace period after the Convention enters into force before restrictions on trade in Schedule 2 chemicals begin. {*Hansard (Lords)* oral answers and *Hansard (Commons)* written answers, 8 Dec}

8 December In the UK, Parliament is told by the Defence Ministry that, of the 185 Gulf War Veterans concerned about their health who have come forward for medical assessment, 65 have so far been examined and "all have been found to be suffering from identifiable complaints, none of which are peculiar to service in the Gulf". The Ministry says that it has not investigated the possibility that the combination of inoculations and drugs made available to personnel serving in the Gulf [see 21 Nov] could cause health problems such as those that have been labelled 'Gulf War Syndrome'. The Ministry is responding to what becomes a long and detailed series of questions about the medical attention received by ailing veterans of the war and about the anti-CBW medical protection they had been given.{Hansard (Commons) written answers 8 Dec, 9 Dec, 14 Dec, 16 Dec, 19 Dec, 20 Dec, 13 Jan, 24 Jan, 25 Jan, 26 Jan, 2 Feb, 3 Feb, 8 Feb and 17 Feb 95}

8 December In South Africa, the manager of Protechnik Laboratories [see 12-13 Sep], Phillip Coleman, tells visiting foreign diplomats and reporters that his company makes small quantities of CW agents such as mustard gas for research into CW protective measures. Protechnik had been set up in 1986, contracted by the South African Defence Force to evaluate CW protective equipment after reports that South African troops then fighting in Angola might be exposed to chemical weapons. The company had been purchased by the state arms agency, Armscor, three months previously. Now announcing the purchase, the managing director of Armscor, Tielman de Waal, says that Protechnik would play an active role in the South African implementation of, and adherence to, the Chemical Weapons Convention, and says South Africa has no stocks of chemical weapons. {Reuter 8 Dec; Johannesburg Business Day 9 Dec in FBIS-AFR 12 Dec; Jane's Defence Weekly 17 Dec}

8 December In the US Senate, the Chairman of the Committee on Veterans' Affairs, Senator Jay Rockefeller, releases a detailed report prepared by the majority staff of the committee, Is Military Research Hazardous to Veterans' Health? Lessons Spanning Half a Century, which draws from staff investigations and hearings conducted over the past two years [see 6 May and 5 Aug]. The report reviews, critically and with recommendations for future policy, all the major military programmes in which US volunteers have been deliberately exposed to chemicals - including the vesicant-agent trials of World War II, Operation Whitecoat involving Seventh Day Adventists, the radiation and radiological-weapons studies in the late 1940s and 1950s, and the CW incapacitating-agent programmes of the CIA and the Army - culminating in the issuing of drugs and vaccines not yet approved by the Food and Drug Administration to Desert Shield/Storm personnel for purposes of protection against CBW attack. {S.Prt.103-97} The press release from Senator Rockefeller's office says: "The report concludes that for the past 50 years, well-established ethical codes have required that people who participate in experiments be given a choice of whether to participate and be warned of the risks. In many of the examples cited in the report, including the use of investigational drugs and vaccines in the Persian Gulf War, the Pentagon did neither." {Congressional Press Releases 7 Dec} The report thus fuels the concerns of those who fear that the so-called Gulf War Syndrome [see 5 Nov and 8 Dec UK] may somehow be associated with pyridostigmine, botulinum toxoid and anthrax vaccine. {AP in *Boston Globe* 8 Dec}

**9 December** The Government of Switzerland informs the OPCW Preparatory Commission that Swiss ratification of the CWC and legislation to implement the Convention have now been approved by the two chambers of Parliament. Once the three-month consultation period stipulated in the Constitution has elapsed, the decision on depositing the instruments of ratification will be taken. {PC-IX/B/WP.14}

**10 December** In Cambodia, the National Army of Democratic Kampuchea issues a report again [see 18 Nov] accusing the Government of using chemical weapons against the Cambodian people. The communiqué states that the Government "used war planes to drop toxic gas bombs in Kulen district of Preah Vihear Province" and that three children had been killed. {Radio of the Provisional Government of National Union and National Salvation of Cambodia 11 Dec in BBC-SWB 13 Dec}

**10 December** The Sultan of Oman issues a decree ratifying the signature of the Chemical Weapons Convention by Oman. {Radio Oman 10 Dec in BBC-SWB 13 Dec}

**11 December** In the United States, a death sentence is executed in the state of Texas by means of lethal injection. {AFP in *Independent* 12 Dec} It is the 30th judicial killing of the year, and the 257th since the US Supreme Court resanctioned capital punishment in 1976. In US jails there are some 3000 people currently sentenced to death. {*Guardian* 5 Jan}

12 December In the UK Parliament, the use of human subjects in experimentation [see 19 Nov] at the Chemical and Biological Defence Establishment, Porton Down, is considered by the House of Lords. The Countess of Mar, introducing the issue, speaks of there being chronically sick men among people who had been used in such experimentation, and states that the Establishment has not properly adhered to four of the principles set out in the Declarations of Helsinki concerning medical research on human beings. She goes on to speak of the predicament of the people who have become chronically sick after serving in the Gulf War and also of the health problems observable among sheep farmers exposed to organophosphate sheep-dips. The minister responding for the government, Lord Henley, states that the Helsinki principles are all most carefully implemented at Porton through the oversight work of the independent panel of experts constituting the CBDE Ethics Committee, which he describes. He asks for the evidence to be produced which shows that volunteers for Porton experiments have suffered harm to their health. He "refutes flatly" the allegation that the Ministry of Defence has refused to do anything about the mysterious illnesses of Gulf veterans. {Hansard (Lords) 12 Dec}

**13 December** In Egypt, allegations of Egyptian–Libyan coöperation in the production of chemical weapons had been raised by the Director of the US Central Intelligence Agency, Dr James Woolsey, during his recent visit, according to the Cairo newspaper *Al Shaab*, which reports further that Dr Woolsey had been challenged by Egyptian officials, who denied the

allegations, to provide the names of the "hundreds" of Egyptian technicians said to be working in Libya. {DPA 13 Dec}

**13 December** In Russia, a team of 15 US inspectors has just spent three days at the State Institute of Organic Synthesis Technology at Shikhany in the Saratov region [see also 22 Nov]. Institute director A Kochergin tells reporters that the visitors had taken samples from equipment and ground surfaces, none of which had "revealed the presence of toxic substances". {ITAR-TASS 13 Dec in FBIS-SOV 13 Dec}

**14 December** In Chechnya, the parliament declares that Russian troops "are using needle bombs and chemical weapons, and are also opening fire on refugees". {ITAR-TASS 14 Dec in FBIS-SOV 15 Dec} It proposes that observers be sent from Russia to Chechnya. The allegations of use of chemical weapons are categorically denied by the Russian Defence Ministry, where the head of the Radiation, Chemical and Biological Protection Forces, General Petrov, observes that such weapons had not even been used in the war against fascism. {ITAR-TASS 15 Dec in FBIS-SOV 15 Dec} Chechen allegations of Russian chemical warfare continue to be heard over the coming weeks. {UNIAN 21 Dec in FBIS-SOV 22 Dec}

14 December The US Defense Department releases a preliminary report on ailing Gulf War veterans from its Comprehensive Clinical Evaluation Program (CCEP). Some 11,000 people still on active duty (or in the reserves or the National Guard) among the 697,000 veterans of the Gulf War are now participating in the CCEP, and the report says that 1019 of them have been fully evaluated. In 86 percent of these cases, a known medical illness can be diagnosed, including musculoskeletal diseases (16%), digestive diseases (7%), respiratory diseases (6%) and, in about a guarter of the fully evaluated cases, psychological conditions including depression, anxiety and Post Traumatic Stress Disorder. Diagnosis in the other 14 percent of cases, however, remains elusive. These preliminary CCEP findings appear similar to those which have emerged from the studies of 17,000 other Gulf War veterans thus far conducted by the Department of Veterans Affairs [see 5 Nov]. The Assistant Defense Secretary for health affairs, Dr Stephen Joseph, speaks as follows: "It's clear that we have not identified a single or unique cause or agent which would be responsible for a large number or significant proportion of the illnesses in our Persian Gulf veterans. The broad spread of symptoms and diagnoses that we're finding points very strongly away from there being a single illness or disease." (AP in New York Times 14 Dec; Washington Post 14 Dec; Chemical & Engineering News 19 Dec} [See also 8 Dec UK]

**14 December** In Washington, at the Biological Weapons Breakfast Series cosponsored by the Chemical and Biological Arms Control Institute and the Center for Strategic and International Studies, Professor Matthew Meselson of Harvard University speaks on The Sverdlovsk Anthrax Outbreak of 1979 [see 18 Nov] and its Implications for Today.

**14–15 December** NATO defence ministers meet for sessions of the NATO Defence Planning Committee and the Nuclear Planning Group. On their agenda is follow-up work to the recently completed study *Assessment of the Proliferation Risks to NATO*. This classified study, which NATO foreign ministers, it seems, had just approved at the North Atlantic Council meeting

[see 1 Dec], reportedly presents a region-by-region review of sources of supply of nuclear and CBW weapons, local expertise, knowledge of production techniques and production capacity, and also sets out "key judgements" about implications for NATO. {*Atlantic News* 13 Dec; *Defense News* 23 Jan 95} The defence ministers' communiqué states that "NATO as a defensive Alliance must address the range of capabilities needed to discourage weapons of mass destruction (WMD) proliferation and use and, if necessary, to counter this risk by improving the protection of NATO populations, territory and forces". The Defence Group on Proliferation will be determining the range of capabilities needed. {*Atlantic News* 16 Dec}

**15 December** The Chernomyrdin-Gore Commission, meeting today, has the Chemical Weapons Convention on its agenda.

**15 December** Iran is being frustrated in its attempts to establish an overseas procurement network for acquiring foreign technology for its weapons programmes, according to a survey being conducted by the UK Defence Intelligence Staff reported in *Economist Foreign Report* {15 Dec}. This is the latest in a series of recently published reports attributed to one intelligence agency or another of Iranian efforts to acquire CBW and other weapons. Thus, a month previously, *Foreign Report* {17 Nov} had quoted what it portrayed as German intelligence papers "warning that an Indian consortium is building a pesticide plant in Iran which might be linked to the production of chemical weapons" [see also 21 Feb 92].

Some three weeks later, an unidentified senior Israeli official is quoted in *Yediot Aharanot* as saying that Iran is developing its capacity to produce chemical weapons and is stockpiling large quantities. The newspaper also states that Iran has launched a project to develop biological weapons at pharmaceutical plants. {AFP 4 Jan 95}

**15 December** The UN Security Council receives its eighth six-monthly report on the work of UNSCOM under Gulf War ceasefire Resolution 687 (1991). The report covers the period 10 June to 9 December. Much of the effort expended had gone into establishing and testing the ongoing monitoring and verification (OMV) system [see 7 Oct], but the report notes that, since October, "the Commission has been forced to redirect more of its total resources to resolving outstanding issues in relation to the past programmes and to the establishment of the export/import mechanism required under paragraph 7 of Security Council resolution 715 (1991)." Computerized data-bases are being developed for all-source data.

Establishing the OMV system has required, the report says, "the collation and analysis of data about Iraq's dual-purpose capabilities, the preparation of monitoring and verification protocols for each site to be monitored, the inventorying and tagging of identified dual-purpose items, the installation of sensors, the establishment of the Baghdad Monitoring and Verification Centre and communications with remote-controlled sensors, and the dispatch of resident monitoring groups to Iraq to serve in the Centre."

Establishing the export/import mechanism has involved "further seminars...with international experts to elaborate the items to be covered by the mechanism and to create a practical, effective and durable system". The report lays stress on the need for the mechanism to be operational prior to any easing of the UN sanctions on Iraq.

Establishing a complete and accurate record of past Iraqi weapons programmes in now-proscribed areas has involved not only continuing dialogue between UNSCOM and Iragi authorities but also intensified contacts between UNSCOM and governments of countries which had in the past supported or supplied the programmes. As a result, further shortcomings in the Iragi disclosures of past work have become apparent. The report says: "The Commission has both direct and indirect evidence that Irag is still failing to declare equipment and materials acquired for and capable of use in proscribed programmes and that its accounts of certain of its projects do not reflect their true purpose and their role as part of now proscribed weapons programmes. In general, in relation to the past programmes, Iraq has not volunteered information and has shown marked lack of transparency, disclosing information only when confronted with evidence by the Commission. Iraq maintains its claim, not believed by the Commission, that it has destroyed all documentation related to these programmes and that no other tangible proofs exist to support its accounts. Indeed, events of the past six months have strengthened the Commission's conviction that important documentation still exists and that the Iragi authorities have taken the conscious decision not to release it freely to the Commission."

Iraq's past BW programme [see 23 Sept and 14–17 Nov] has presented the greatest problem here. "Iraq's account is minimal and has no inherent logic. While access has been provided to interview the personnel involved in the declared programme, interviewees refused to answer questions relating to the programme, providing only incomplete and misleading information. While Iraq maintains that the programme was in the early research stages and would be defensively oriented, the indications all point to an offensive programme. In these circumstances, the Commission cannot yet provide a material balance for this programme."

As to the declarations required from Iraq under the OMV plan, which include disclosure of potentially dual-use civilian equipments and facilities, the report says that the "situation is better" — except, again, in the biological area. Iraq had, however, submitted new declarations in November, thus facilitating the progress towards OMV which was now starting to be realised in the biological area [see 2–14 Dec].

In the chemical area, in contrast, the report states that OMV "is...proceeding well". The chemical monitoring group [see 2 Oct] operating out of the Baghdad Monitoring and Verification Centre is now "completing the protocol-building and tagging process at sites of secondary importance, such as universities, while conducting ongoing monitoring and verification of key sites". It continues: "Four chemical sensors have been installed at one site and a further 20 should be installed at other sites in January 1995. Monitoring cameras and flow meters should be installed by the same date. A small chemical laboratory will be installed at the Centre in February 1995." {S/1994/1422}

**15 December** The UN General Assembly adopts a resolution welcoming the final report of the Special Conference of BWC States Parties [see 19–30 Sep 94] and requesting the UN Secretary-General to provide all necessary assistance to the Ad Hoc Group which the Conference had established. {A/RES/49/86}

There is no resolution of the Assembly on the Chemical Weapons Convention.

**15 December** The American Defense Preparedness Association sponsors a seminar on non-lethal warfare technology [see 14 Nov]. The seminar is addressed by the Commandant of the US Air Command and Staff College, Colonel John Warden. Antipersonnel chemical weapons are not included among the numerous illustrations of the technology which he presents. {*Defense Week* 9 Jan}

**17 December** In Japan, a former staff officer of the Japanese Imperial Army discloses records indicating that the United States had acquired data on Japanese BW experiments [see 5 Dec] from himself and two former colleagues in return for immunity from prosecution as war criminals. The three officers had been questioned on their BW work by a special scientific investigation mission sent by the General Headquarters of the US Army Pacific Command in October 1945. The interrogator had stated that all information provided by the three men would be submitted in a secret report to the President of the United States. One of the three men, a colonel, was regarded as the right-hand man of Lt-Gen Shiro Ishii. {Kyodo 17 Dec in FBIS-EAS 19 Dec}

**19 December** In Iraq, UNSCOM inspectors have recently found some 25 litres of diagnostic media for cholera, tuberculosis and plague, according to unidentified "diplomatic sources". The finding is said to have excited speculation that Iraq has been pursuing a wider BW research programme than had previously been supposed [see 15 Dec UN]. {Reuter 19 Dec}

**19 December** The Council of the European Community approves a regulation establishing an EC regime, under Article 113 of the Treaty of Rome, for the control of exports of dual-use goods [see 13–14 Jun 94]. The Council also approves a decision on joint action, under Treaty of Maastricht Article J.3 (the Common Foreign and Security Policy), for implementing the regime. Both legal acts will come into effect on 1 March 1995. Included in the joint action is a list of dual-use goods subject to export controls. The list is an aggregate of MTCR, CoCom, NSG and Australia Group lists. Included in the regulation is a 'catch-all' provision whereby an exporter is to become obliged to obtain an export licence once informed by his authorities that the goods concerned, even ones not on the control list, may be intended for use in connection with, *inter alia*, CBW weapons. {*Atlantic News* 5 Jan; *Defense News* 9 Jan}

**20 December** The UK Defence Ministry defers a response to a parliamentary question about "the danger posed by Second World War bombs buried at RAF Llandwrog" in North Wales, the bombs being "German chemical bombs". {*Hansard (Commons)* written answers 20 Dec and 31 Jan} It later states that tabun nerve gas was the CW agent which had been stored at the base. {*Hansard (Commons)* written answers 16 Feb}

**20 December** In the UK Parliament, the putative Gulf War Syndrome is debated in the House of Commons [see also 8 Dec]. A former Health minister, Edwina Currie, introducing the issue, identifies a broad range of theoretical explanations for the undiagnosed illnesses, including the possibility of adverse reactions to the numerous vaccines, drugs, pesticides and other chemicals to which veterans had been exposed. She is critical of the way some sufferers have been treated, and calls for a joint investigation of their illnesses by the Department of Health and the Ministry of Defence. Responding for the government, Armed Forces Minister Nicholas Soames describes the Defence Ministry's medical assessment programme. He rejects the call for an independent inquiry, saying: "in the absence of any confirmed scientific evidence that there is a health problem resulting from Gulf service, I do not believe that there are any grounds at present for such an inquiry". He adds: "[D]espite the lack of scientific evidence we keep a genuinely open mind. We shall continue our investigations based on a medical and scientific evaluation of the growing data bank resulting from our medical assessment programme and we shall monitor other developments closely, especially those in the United States of America." {*Hansard (Commons)* 20 Dec}

21–22 December In The Hague there is a high-level meeting of the 23 former CoCom and CoCom-coöperating countries at which they reaffirm their commitment to establish CoComfollowon arrangements [see 28-30 Mar]. Work to this end is subsequently described as follows by the British government: "Multilateral negotiations to establish an export control regime to tackle new threats posed by excessive build-up of conventional weapons and related technology are continuing. Working groups have been established to agree and recommended [sic] on those goods to be controlled, the procedures for exports, the membership of the organisation and related administrative matters. The Government are committed to controls which are straight forward, responsible and transparent but which do not place an unnecessary bureaucratic burden on legitimate trade. They should be linked to identifiable threats and consistent with our international commitments." {Hansard (Commons) written answers 10 Jan}

**22 December** Iraq possesses hundreds of biological weapons and tens of Scud missiles hidden from UN inspectors according to a former army general, Wafiq al-Samirra'i, quoted by Agence France Presse. {Voice of the Islamic Republic of Iran 23 Dec in FBIS-NES 29 Dec} [See also 19 Dec]

**22 December** Greece deposits its instrument of ratification of the Chemical Weapons Convention, the 19th signatory state to do so.

22 December In the US Senate Foreign Relations Committee, a trip report is submitted on the staff mission to The Hague and Moscow on issues regarding Senate ratification of the Chemical Weapons Convention [see 13-20 Nov]. The report recommends that the Committee should consider holding further hearings on the treaty in the new Congress on four specific topics: "1) the transfer of information under the Wyoming MOU; 2) progress on US-Russian agreement on the implementation of the Bilateral Destruction Agreement (BDA); 3) an examination of US costs associated with implementation of the BDA and CWC; 4) the affect, if any, the CWC might have on signatories known to be involved in the proliferation of weapons of mass destruction, such as China and Iran, and on roque nations which have refused to sign the CWC, such as Iraq." The trip report adds: "The Committee may also wish to invite the three Russian dissident scientists [Drs Vil Mirzayanov, Vladimir Uglev and Lev Fedorov] to discuss the CWC in a public session or in a private meeting in the United States".

**23 December** In the United States, the Bureau of Export Administration publishes a notice announcing that it is developing regulations and procedures on the obligations of chemical in-

dustry under the Chemical Weapons Convention. Some 6000 commercial chemical facilities may be affected [see 1 Nov]. The notice sets a one-month deadline for submission of written comments prior to drafting the regulations. {*BNA Chemical Regulation Daily* 6 Jan}

**27 December** In Washington, newly declassified documents on the former US radiological weapons programme [see 15 Dec 93] are disclosed. They indicate that the principal offensive value of radiological weapons had been seen to lie in their ability to terrorize and paralyse industrial cities through radioactive contamination. The documents also include 1947 Army papers on the possibility of combined radiological/biological and radiological/chemical weapons. {AP in *Washington Post* 27 Dec}

**28 December** In Washington a report by the US General Accounting Office is released on the Army's disposal programme for chemical munitions, materiel and facilities that are not specifically included in the US stockpile of unitary chemical weapons. The Army's estimates for destruction of the US stockpile of binary munitions and for disposing of former chemical weapon production facilities are that the binary chemdemil can be done for \$190 million and the CWPF disposal for \$420 million, both within a period of ten years. {GAO/NSIAD-95-55}

**28 December–31 January** In Iraq, the United Nations has now commenced "interim monitoring" in the BW area under the plan for ongoing monitoring and verification of WMD-nonarmament by Iraq [see 15 Dec]. The first UNSCOM biological monitoring group, IBG-1, is at work. Its task is "to obtain for the key sites the information that Iraq should have declared and which is required to create monitoring and verification protocols for those sites" [see 2–14 Dec]. These key sites will then be monitored by the group. {S/1994/1422}

**29 December** In New York, US District Court Judge Jack Weinsten signs an order delaying until 17 January the shutdown of the Agent Orange compensation fund. He has thus allowed an extra fortnight for Vietnam-War veterans and families of veterans to apply for a share of the \$21 million still remaining. {*USA Today* 29 Dec; *Boston Globe* 30 Dec} The \$180 million fund had been established under his oversight a decade previously after chemical manufacturers reached an out-of-court settlement with veterans suing for compensation for allegedly Orange-related illnesses [see 6 Mar 91].

**30 December** President Clinton transmits to the US Congress a new status report on efforts to obtain Iraqi compliance with UN Security Council resolutions. On the financial situation of UNSCOM the report says: "Without more cash, UNSCOM will have to begin phasing down its operations in December and completely disband by mid-February 1995. Some countries in the region have agreed to provide emergency funding. While this may take care of the immediate crisis, lack of funding will be a chronic problem." {US Newswire 4 Jan}

**30 December** The US Army directs that the workforce at Tooele Army Depot be reduced from the currently approved level of 754 to 560 in FY 1996. This action is subsequently criticized as jeopardizing safety in the projected chemdemil operations in the incinerator nearing completion there [see 6 Dec]. {*Inside the Army* 16 Jan}

**31 December** In Chechnya, secessionist forces explode chemical landmines in the path of Federal troops advancing on Groznyy, according to a report from the Russian Federal Troops Command [see also 14 Dec]. The report states that the mines are set off by radio signal, causing 40-kg containers of chlorine to rupture with consequent casualties among the military and civilian population. Secessionists also pour liquid hydrogen cyanide over highways, according to the report. {ITAR-TASS 1 Jan}

To investigate the report, a special group of observers is later dispatched by the Russian provisional Commission Monitoring the Observance of Constitutional Rights and Freedoms, so it is announced by Commission Chairman Valentin Kovalev, Deputy Speaker of the State Duma. {ITAR-TASS 4 Jan in FBIS-SOV 5 Jan} But the leader of the Yabloko Group in the Duma, Grigoriy Yavlinskiy, characterizes the report as official rumourmongering designed to facilitate use of chemical weapons by Federal forces. {Interfax 4 Jan in FBIS-SOV 5 Jan} A similar suggestion had been made in Groznyy the day previously by Chechen deputy foreign minister Ruslan Chimayev. {Interfax 3 Jan in BBC-SWB 4 Jan}

The Russian army's chief medical officer, General Ivan Chizh, tells a press conference on 17 January that there was no evidence of Chechen forces having used chemical weapons: his Medical Directorate had seen no evidence of poisoning by chemical substances. {NTV 17 Jan in BBC-SWB 19 Jan}

**3 January** From Japan there is a report that sarin nerve-gas has recently been detected at a village near Mount Fuji where local people have complained of nausea and breathing difficulties. As in the Matsumoto episode [see 28 Jun 94], Japanese authorities have been unable to trace the source. {London *Times* 3 Jan}

**3 January** In New Delhi, government and chemical industry representatives meet once again to consider the impact of CWC implementation upon the industry. The meeting is chaired by the Secretary of the Department of Chemicals and Petrochemicals in the Ministry of Chemicals & Fertilisers, K K Mathur, with participation from the Ministry of External Affairs and Department of Defence Research and Development. Secretary Mathur is reported to have assured industry that the Convention would provide a nondiscriminatory approach to trade in scheduled chemicals, with all nations having equal rights; also that states parties are expected to coöperate in areas of technology including research and development.{New Delhi *Financial Express* 3 Jan}

**3 January** Iran issues a statement in The Hague recalling that it had been the victim of 252 CW attacks by Iraq from which 40,000 people were still suffering after-effects. The statement continues: "The Embassy of the Islamic Republic of Iran strongly refutes any allegation that Iran is engaged in any kind of activities related to chemical weapons issues [see 15 Dec 94]. The Islamic Republic of Iran, as a main victim of weapons of mass destruction, has under no circumstances attempted, nor will it ever attempt, to develop or posess these antihuman weapons. It attributes great value to the Chemical Weapons Convention." {*Media Monitor* 3 Jan}

**3 January** German chemical companies, *Stern* magazine reports, are among those being sued by US veterans of the Gulf War for damages for illness allegedly caused by exposure to

chemical weapons which the companies had enabled Iraq to acquire [see 2 Nov]. The companies named in the billion-dollar lawsuit, which is being brought by some 2000 US veterans, include Degussa AG of Frankfurt, Heberger Bau, Preussag AG of Hanover, Sigma GmbH, and Thyssen AG of Düsseldorf. {*Stern* 5 Jan}

**3 January** In the UK Defence Ministry, the new post of Assistant Chief Scientific Adviser (Non-Proliferation) is taken by Dr Graham Pearson, who will continue as Director General of CBDE Porton Down until 31 March. Dr Graham Coley, hitherto Assistant Chief Scientific Adviser (Projects), assumes responsibility for CBDE operational matters; on 1 April he will become Managing Director of CBDE under its new dispensation as an element within the Defence Evaluation and Research Agency. DERA, operating on a trading fund, is to comprise the Defence Operational Analysis Centre, the numerous institutions that constitute the Defence Research Agency, the Directorate General for Test and Evaluation, and CBDE [see also 20 Aug 94]. CBDE itself is being reorganized into five functional areas -Hazard Assessment, Detection & Protection, Decontamination, Medical Countermeasures, and Site Operations - led by Dr David Anderson, CBD Sector Director; responsibility for scientific and technical policy, strategy and quality is to rest with Divisional Technical Director. Dr Rick Hall.

Later, Dr Pearson writes that CBDE will continue "contributing to the technical debate in regard to chemical and biological...arms and export control". {*ASA Newsletter* 16 Feb}

**3 January** Death of Sherry Stetson Mannix, chemical weapons negotiator with the US Arms Control and Disarmament Agency since leaving the US Air Force in 1984.

**4 January** In the United States, a death sentence is executed in the state of Texas by means of lethal injection [see also 11 Dec 94]. It is the 86th execution in Texas since 1982. {*Guardian* and *Independent* 5 Jan}

4 January The US Institute of Medicine publishes an interim report from its Committee to Review Health Consequences of Service during the Persian Gulf War [see 28 Feb 94]. The report. Health Consequences of Service during the Persian Gulf War: Initial Findings and Recommendations for Immediate Action, reviews investigations of the putative Gulf War Syndrome currently being conducted by the Departments of Defense, Veterans Affairs and Health and Human Services [see 14 Dec 94]. The report is critical and presents numerous recommendations, one of them proposing that the establishment of a single comprehensive data system enabling researchers to track the health of Gulf War veterans be coördinated by the Vice President of the United States. Other recommendations propose ways of extending work at present overseen by the Persian Gulf Veterans Coordinating Board. The US Congress had called upon the National Academy of Sciences (of which the Institute is a part) to conduct the review some 18 months previously.

As to CBW, the report says that there is no evidence that chemical or biological weapons were used in the Gulf War, and that the unexplained illnesses could not be attributed either to CBW or to accidental exposure to stored CBW weapons or research material. Nor was it likely, the report says, that the "nonspecific complaints associated with service during Operation Desert Storm" were caused, as some had suggested [see 8 Dec 94], by administered BW vaccines or the nerve-gas prophylactic pyridostigmine. The report does, however, recommend that, in order to "resolve uncertainties", research should be conducted into interactions of pyridostigmine and various pesticides and insect-repellents. And the report supports the proposed large-scale epidemiological study.

**4 January** The US Senate Republican Policy Committee issues a 'legislative forecast' for the first session of the new Congress. This states that the Senate Armed Services Committee is "expected to revisit the national security implications of the Chemical Weapons Convention". As regards the Foreign Relations Committee, the forecast makes no prediction, but it does say that, "due to the Clinton Administration's failure to provide answers to basic questions posed by the Armed Services Committee and Republicans on the SFRC, the committee did not move forward on the CWC" [see also 8 Nov 94].

**4 January** In the United States, construction at Aberdeen Proving Ground of a \$150 million pilot plant for studying non-incinerative chemdemil gains support during a joint meeting of the Maryland Citizens' Advisory Commission for Chemical Weapons Demilitarization and an Army advisory committee from the National Research Council. {Baltimore *Sun* 8 Jan}

4-6 January In Geneva the Ad Hoc Group established by states parties to the 1972 Biological Weapons Convention at their Special Conference three months previously [see 19-30 Sep 94] convenes under the chairmanship of Ambassador Tibor Tóth of Hungary for an inaugural procedural session, with 49 states parties participating. UN Centre for Disarmament Affairs Deputy Director Sohrab Kheradi serves as Secretary. The Group agrees a programme of work for a session during 10-21 July: and it decides that another session will be held during 27 November to 8 December, in the course of which a decision on work during 1996 would be taken. Four Friends of the Chair will be appointed on specific issues: Definitions of Terms and Objective Criteria (from the NAM); Confidence-Building and Transparency Measures (from the Eastern European Group); Measures to Promote Compliance (from the Western Group); Measures Related to Article X (also from the NAM). {BWC/AD HOC GROUP/WP.2\*}

**5** January Japan is to send a fact-finding mission to China later this month to begin making arrangements for disposing of poison-gas shells abandoned in China by the former Imperial Japanese Army. Having regard to the likely entry of the Chemical Weapons Convention into force at the end of 1995, Japan is considering starting the actual disposal work in 1996. So say unidentified government sources quoted in *Yomiuri Shimbun*, which reports, further, that the Chinese Government has informed Japan that about two million munitions containing a total of about 100 tons of CW agent are involved, at some 30 locations in northeastern China [see also 5 Dec 94]. {Kyodo 5 Jan}

**5** January In Iraq, the regime is hiding more than 80 Scud missiles and 200 biological bombs, according to an opposition broadcast from the north of the country. {Voice of Iraqi People in FBIS-NES 9 Jan} The same information is published in the London newspaper *Al-Hayah* {5 Jan in FBIS-NES 9 Jan}, with attribution to staff Major-General Wafiq al-Samirra'i [see 22 Dec 94], formerly director of Iraqi military intelligence until his departure to North Iraq. The paper also quotes him as vehemently

criticizing President Saddam Hussein for squandering "tens of billions of dollars on the nuclear, germ and chemical industries".

The general is later quoted, in a statement released by the Iraqi National Congress (an opposition coalition based in Iraqi Kurdistan which the general had joined in December), as saying that Saddam Hussein had taken a decision early in 1988 to attack Tehran with chemical weapons. Implementation of this decision was forestalled when, in April 1988, the war with Iran turned in Iraq's favour. {AFP 10 Jan}

**5 January** In Poland, draft legislation authorizing the President to ratify the Chemical Weapons Convention receives its first reading in the Sejm and is referred to the Defence, Internal Affairs and Legislative Committees. {PAP 9 Jan}

7 January In Washington it is being said that US aid to Russia may be withheld unless Russia augments its contribution to the US-Russian exchange of information on past chemical-weapons programmes under Phase II of the Wyoming Memorandum of Understanding [see 10-14 Oct 94]. Attributing an unidentified "senior State Department official", the Washington Post reports that Russia is being told that failure to deliver the data may disrupt disbursement of Nunn-Lugar funds. Such disbursement requires prior Presidential certification to the Congress each year that Russia is complying with arms-control agreements; this year's certification is apparently being delayed. In a special report to the Senate Foreign Relations Committee on Russian compliance with CBW agreements [see 1 Oct 94], the administration had voiced certain specific "concerns" and "questions". The matter is reportedly on the agenda of the US-Russian ministerial talks due in ten days time in Geneva. {Washington Post 7 Jan; Chemical & Engineering News 16 Jan}

Nunn–Lugar assistance had been mentioned in a press statement put out the day previously by the Senate Foreign Relations Committee as virtually the only foreign aid bill ever supported by incoming chairman Senator Jesse Helms. {*Defense News* 9 Jan} From FY 1992 through 1995, Nunn–Lugar funds totalling \$1270 million have been made available, but only a fraction of that has yet been obligated. {*Bulletin of the Atomic Scientists* Jan/Feb}

The commander of the Russian Radiation, Chemical and Biological Protection Troops, Col-Gen Stanislav Petrov, issues a statement rejecting reports that Russia is not complying with the Wyoming MOU. He says: "American experts carried out the latest inspection in the last days of the past year. The experts examined the production programme of one of the enterprises and made sure that Russia's reporting was truthful." He also states that Russia has no forces interested in retaining chemical weapons, as the West knows full well. {ITAR-TASS 12 Jan in BBC-SWB 18 Jan}

**9** January In Chechnya, secessionist sources report that Federal Russian aviation, in its bombardment of Groznyy, has dropped more than 30 chemical bombs, killing citizens. {TURAN 9 Jan in FBIS-SOV 10 Jan} Three days previously, Russian Duma deputy Ayvars Lezdinsh had told reporters that Federal forces had dropped chemicals into a Groznyy reservoir, contaminating the water [see also 14 Dec 94]. {Radiostantsiya Ekho Moskvy 6 Jan in FBIS-SOV 9 Jan}

**9 January** In Warsaw, at a press conference on the tasks of Polish armed forces concerning the observance of the CWC,

Colonel Wladyslaw Karcz speaks of the requirement to destroy the country's stocks of chemical weapons [see 15 Jan 93] if Poland ratifies the Convention [see 5 Jan]. These stocks consist of the irritant agent adamsite, held in storage since World War II. Destruction is estimated to cost some \$2.8 million. {PAP 9 Jan}

**9** January The UK Government is asked why an official report on the death from mustard gas of a schoolboy in 1942 should remain in sealed files at the Public Records Office while being publicly available in the United States. The situation is being cited as "another example of how Britain's secrecy laws have been used to cover up clear cases of official neglect". The boy, Henry Mills, had reportedly been playing with part of a mustardgas bomb he had found on an Army dump in Newport. {*Guardian* 10 Jan} Responding to Parliamentary questions, the Ministry of Defence states variously that it does not hold a copy of the report, that medical records relating to individuals are withheld from the Public Records Office as "medical in confidence", and that not all UK material now declassified in the United States has survived in British archives. {*Hansard (Commons)* written answers 17 Jan}

**10 January** In New York, technical talks between UNSCOM and a visiting Iraqi team are in progress. Iraq has provided new documentation on its CW program during 1983-87. {Reuter 10 Jan}

Speaking to reporters after briefing the Security Council on the work of UNSCOM, Chairman Ekéus indicates that, after all, more than six months may be needed to ascertain that the Ongoing Monitoring and Verification system in place in Iraq since October [see 7 Oct 94] is working properly: "Iraq in the autumn stopped providing us with necessary information. This delayed things and forced us to ring alarm bells". {Reuter 10 Jan} [See also 15 Dec 94]

**10 January** In Washington, departing Director of Central Intelligence James Woolsey testifies before the Senate Select Committee on Intelligence. Also testifying are the Director of the Defense Intelligence Agency, Lt-Gen James Clapper, and the Assistant Secretary of State for Intelligence and Research, Toby Gati. {Reuter 10 Jan}

The prepared statement of Dr Woolsey includes several references to CBW weapons proliferation. It makes mention of "our own evidence that Irag is still hiding Scud missiles, chemical munitions, elements of its nuclear weapons development program, and its program to develop biological weapons". It says: "Iran's chemical weapons program - developed during the 1980s in response to Iraqi CW attacks - is expanding, and Iran also maintains an offensive biological warfare program and a clandestine nuclear weapons program". And: "We are watching the progress of Libya's development of underground chemical weapons facilities and are using our intelligence, where possible, to deny Qadhafi foreign assistance. But Libya's persistence is likely to result in the completion of its second chemical weapons production facility by late in this decade. As you may recall, Libya completed work on its Rabta CW facility in 1988." {FDCH Congressional Testimony 10 Jan}

**11 January** Tajikistan deposits its instrument of ratification of the Chemical Weapons Convention, the 20th signatory state to do so.

**12 January** The UN Security Council conducts its 23rd bimonthly review of the economic sanctions imposed on Iraq, once again deciding not to lift them.

**12–14 January** In Kaliningrad near Moscow there is a NATO advanced research workshop on the problem of sea-dumped chemical weapons. {*International Herald Tribune* 5 Jan}

**13 January** OPCW headquarters are to be housed in The Hague in a new eight-storey building designed by Kallmann, McKinnell and Wood, located between the Catsheuvel and the Netherlands Congress Centre. A provisional decision to this effect taken last year now becomes final upon expiration of the period agreed for formal opposition. Financing problems have yet to be resolved, but it is expected that construction will begin in October for completion in 1997. {*De Telegraaf* 14 Jan}

**13 January** UN Secretary-General Boutros Boutros-Ghali writes, on the occasion of the second anniversary of the opening for signature of the Chemical Weapons Convention, to the foreign ministers of 137 states members and three non-members of the United Nations. The 50-plus states he does not write to include those that have not signed the treaty and also the 19 that have both signed and ratified it. He appeals for the personal leadership of the ministers in the completion of their countries' ratification processes. He observes that, if the CWC is to enter into force during 1995, which is the 50th anniversary year of the United Nations, the 65th ratification will need to be deposited not later than 4 July. {Reuter 27 Jan; *Washington Times* 31 Jan}

**14 January** UK Defence Secretary Malcolm Rifkind has announced the formation for the first time in the British Army of a specialized NBC Defence regiment. The new unit will support the Army's existing NBC defence arrangements at all levels. It will also have counter-terrorist and civil protection duties. Its equipment will include *Fox* NBC reconnaissance vehicles and also the joint US/UK Integrated Biological Detection Systems currently under development. {*Jane's Defence Weekly* 14 Jan}

**16 January** The OPCW Provisional Technical Secretariat issues a vacancy notice for Head of Information Systems Branch, a P-5 position within the PTS Administration Division. Notices of candidature are due in by 15 March.

**16 January** In the UK, the chief executive of the Chemical and Biological Defence Establishment at Porton Down, Dr Graham Pearson, states that his labs have been using more animals recently because of the increased emphasis that has been placed on BW defence since the Gulf War. {*Hansard (Commons)* written answers 16 Jan}

**16 January** The US General Accounting Office releases a report reviewing the Army's prediction of how long chemical weapons can safely be stored, and reviews also the Army's contingency plans for disposing of chemical weapons that have become dangerous. During the period 1983 through 1993, a total of 1824 chemical munitions, mostly sarin-filled M55 rockets, were found to have developed external leaks. The report recommends the Defense Secretary to direct the Army to expand its monitoring activities and to develop a contingency plan for emergency disposal of M55 rockets. {GAO/NSIAD-95-67}

**17 January** Mongolia deposits its instrument of ratification of the Chemical Weapons Convention, the 21st signatory state to do so.

**17 January** The US Government Printing Office has now published the Senate Armed Services Committee hearings on the CWC [see 18 Aug 94]. {S.HRG.103-835} The print includes several written submissions for the record provided to the Committee after the hearing, notably summaries of past Executive-branch consideration of the need to retain CW retaliatory capability and also of the riot-control-agent issue.

The print also includes a 'sanitized' transcript of a closedsession briefing by the US intelligence community "on the chemical weapons threat and an assessment of its ability to monitor and verify compliance with the CWC" [see 11 Aug 94]. The briefing had been given by two CIA officials: Major-General John R Landry, National Intelligence Officer for General Purpose Forces, and Carolyn Stettner, chief of the CB Issues Team of the Arms Control Intelligence Staff.

General Landry had used six slides for his threat briefing. These grouped countries into ones which, in the assessment of the intelligence community, had "Active CW Programs", "Inactive CW Programs" (four countries), "Inconclusive CW Programs" (two countries, on which "information is insufficient to make a determination of the existence of a program") and "Watch Programs" (ten countries, "assessed to have the political motivation and the technical capability to develop an offensive CW program, but reliable information regarding the existence of such programs is too limited to make a call"). The slides also identified "supplier" and "facilitator" countries. Countries with "active" programmes (apparently numbering 13 or perhaps 15, depending on how what is left after the 'sanitization' is viewed, nine of them being among the signatories of the CWC) were differentiated according to whether they were or were not judged to possess stockpiled CW agent in an amount exceeding one ton. This threshold was explained as reflecting the view of the Chairman of the Joint Chiefs of Staff that "the militarily significant level of CW holding that will be of concern under some circumstances is 1 ton" [see also 14 Jan 94]. General Landry further explained that countries without such stockpiles could nevertheless have been judged to have "active" programmes because they were engaged either in "R&D" (all of them) or "Production" (all but two of them) or "Weaponization" (five of the programmes were assessed as not having reached this state). A further differentiation of activeprogramme countries was according to whether the evidence of their possessing a stockpile (presumably of at least one agentton, though this is not clear) was or was not inconclusive; General Landry had also said that one of the listed countries "in our judgment at the moment does not possess stockpiles". One of the slides detailed CW capabilities of eight selected countries, identifying categories of CW agent and munition possessed. The identities of only four of them remain undeleted in the print: Russia, Iraq, Libya and North Korea.

**18 January** UK Foreign Secretary Douglas Hurd, appearing before the House of Commons Foreign Affairs Committee, is asked why Britain is being so laggardly in ratifying the CWC [see also 8 Dec 94]. He speaks of the competing demands on legislative time that face the Department of Trade and Industry, which has the lead on the requisite domestic legislation. He says that "the Government collectively has to take a view", add-ing: "In this particular case the DTI have to take a view about

their own priorities". His expectation is that the UK will ratify, but not during the present session of Parliament. Pressed, he agrees that the government could in principle bring forward the enabling legislation. {HC papers (Session 1994-95) 34-vi}

18 January In the UK, the opposition Labour Party calls for "a full and independent medical inquiry" [see 20 Dec 94] into the putative Gulf War Syndrome {news release 18 Jan}. Shadow Defence Secretary David Clark says that a Labour government "would have a full epidemiological study". Armed Forces Minister Nicholas Soames issues a statement saying that "the latest scientific and clinical data, both in the UK and the US, confirms that there is no evidence for a Gulf War Syndrome". He says further that, in the 77 cases among British Gulf War veterans thus far examined, medical experts have found evidence of conditions unrelated to Gulf War service. The all-party House of Commons Defence Committee announces that it will inquire into the syndrome next month. {Reuter 18 Jan; Daily Telegraph 19 Jan} Meanwhile, some 45 afflicted veterans have been granted legal aid to sue the Ministry of Defence for negligence [see 21 Nov 94], and many more applications are still being processed. {Independent 19 Jan}

**18 January** The World Health Organization Governing Board decides to defer decision on whether the last known stocks of smallpox virus, held in Russia and the United States, should now be destroyed. {*International Herald Tribune* 20 Jan} The UK has been arguing against the destruction, part of its case being the possibility that some countries may have retained clandestine stocks of the virus for use as a BW agent. {*Guardian* 2 Feb}

**18 January** In Washington, at the annual meeting of the Arms Control Association, president and executive director Spurgeon Keeny says that "without concerted effort by this administration" ratification of neither START II nor the Chemical Weapons Convention will be approved by the US Senate. {*Arms Control Today* Jan/Feb}

**20 January** Korean veterans of the Vietnam War suing US chemical manufacturers over Agent Orange [see 5 Jan 94] appear before a judicial panel in San Francisco in an attempt to block transferral of their case to New York — to the court of Judge Jack Weinstein [see 29 Dec 94] who, in 1984, had engineered a settlement between US claimants and the companies. Of the 320,000 South Koreans who fought in the Vietnam War, some 4700 have filed reports claiming Orange-related medical problems. {*San Francisco Examiner* 19 Jan}

**20 January** In Japan the Diet begins its 1995 session, during which the government will seek parliamentary approval of the Chemical Weapons Convention, so it was reported earlier in the week by *Asahi Shimbun* [see also 10 Nov]. The newspaper states that parties to the Convention are required by the treaty to dispose of any chemical weapons they may have abandoned abroad since 1925, for which reason Japan would be spending a "huge amount of money" on technology, personnel and equipment for dealing with the chemical weapons it had abandoned in China. {Kyodo and AFP 15 Jan; Jiji 23 Jan}

**21 January** Sweden is providing SEK 2.6 million to assist Russia destroy its stocks of chemical weapons in Kambarka, so

the Foreign Ministry announces. {ITAR-TASS 21 Jan in BBC-SWB 24 Jan}

**21 January** In the United States, a report recently issued by the Defense Science Board of the Defense Department advocated improvement in US military capabilities for conducting military operations in built-up areas. Specific recommendations included the suggestion that nonlethal chemical agents for calming rioters should be developed. Even though deployment of such weapons might be prohibited by international convention, the United States should nevertheless pursue them, in case of hostile use against US forces. *{Jane's Defence Weekly* 21 Jan}

**24 January** In the UK, Parliament receives responses from the Ministry of Defence to questions about the reports of CBW agents having been detected in the field during the Gulf War and also about the propensity for false alarms of the CBW-agent detectors that had been used then [see also 29 Nov–3 Dec 93 and 26 Oct 94]. It learns that NAIAD could occasionally be triggered by jet-engine exhaust, and perhaps also CAM and the RVD. It also learns that what had initially been reported from Kuwait as a tank of CW agent [see 7 Oct 94] later proved to be fuming nitric acid, a rocket propellant. {*Hansard (Commons)* written answers 24 and 25 Jan}

**24 January** President Clinton, in his State of the Union message, says that the United States will "lead the charge...to eliminate chemical weapons" during the year ahead.

**24 January** The US Government Printing Office has now published the Senate Foreign Relations Committee hearings on the CWC [see 23 Jun 94]. {S.HRG.103-869} The print includes written responses for the record from the Executive branch to questions that had been submitted after the hearings, including a series of detailed questions from Senator Helms.

**25–27 January** In Minsk, the government of Belarus in conjunction with the OPCW Provisional Technical Secretariat hosts a regional seminar on the Chemical Weapons Convention, primarily for representatives of chemical industry in the Commonwealth of Independent States. There is a visit to a civil production facility involving discrete organic chemicals in Mogilev. {OPCW/PTS press release 1 Feb}

**27 January** Armenia deposits its instrument of ratification of the Chemical Weapons Convention [see 25 May 94], the 22nd signatory state to do so.

**27 January** The UK Government tells Parliament that during 1945–49 the UK had dumped into the sea about 120,000 tonnes of CW munitions, mostly containing mustard gas or phosgene, and, during 1955–57, another 25,000 tonnes including German tabun nerve-gas bombs [see also 9 Oct 94 and 20 Dec 94]. Four main dump sites had been used: 50–100 miles west of Hebrides, 80 miles north-west of Northern Ireland, 250 miles south-west of Lands End in the western approaches, and in Beauforts Dyke in the north channel. Most of the munitions had been sealed in redundant cargo ships, which were then scuttled in deep water. An exception was the dumping of some 14,000 five-inch phosgene-filled artillery rockets during July-October 1945: these had simply been jettisoned in their crates. *{Hansard (Commons)* written answers 27 Jan and 9 Feb}

**29 January** In Algeria the Council of Ministers endorses a bill on ratification of the Chemical Weapons Convention. {Algerian Radio 29 Jan in BBC-SWB 31 Jan}

**30 January** Iran is only months away from completing the secret nerve-gas factory it has been working on for the past two to three years, according to a report by the German external intelligence agency BND quoted in the *Washington Times* {30 Jan} [see also 15 Dec 94 and 3 Jan]. The BND report is said to state that three Indian companies — Tata Consulting Engineering, Transpek, and Rallis India — had been acting for the project as procurers of German technology, ostensibly for production of pesticides.

The following week a recent CIA report is quoted in the London *Sunday Times* {5 Feb} as naming four facilities in Iran where mustard gas and tabun and sarin nerve-gases are being produced. The CIA report is also said to say that Iran is working on a binary nerve gas and is trying to acquire the capability for ballistic-missile delivery of chemical and biological weapons. The newspaper quotes US intelligence sources as saying that "German and Indian firms provided equipment and raw materials, normally used in pesticide plants, that have helped Iran develop the weapons". It speaks of petrochemical plants in Bandar Abbas as being among the sites of "Iran's new chemical and biological weapons facilities".

The *Sunday Times* also reports that an "international effort involving the intelligence agencies of most western countries is under way to prevent more raw materials reaching Iran".

**31 January** India denies assisting Iran to build a poison-gas factory, as has been alleged [see 15 Dec 94 and 30 Jan; see also 4 Nov 94]. An official spokesman states that projects for the construction of pesticide factories in Iran had been put out to international tender, and Indian companies had won these tenders in open global competition. {UPI 31 Jan; ISI Diplomatic Information Service 31 Jan in BBC-SWB 2 Feb}

**31 January** Iraq's putative clandestine biological-weapons programme is headed by Dr Rihab Rashid Taha al-Azawi, so it is reported in the British and US press. Dr Taha gained her doctorate in the UK in 1984, from the University of East Anglia. She is currently the director of the facility at Al Hakem. This is said to be one of three key sites in the Iraqi BW programme, the other two being at Salman and a research centre near Iskandariya. {*Evening Standard* 31 Jan; *New York Times* 16 Feb}

**31 January** The UK Foreign and Commonwealth Office discloses the presence in a Cardiff hospital of a member of the Iraqi National Congress [see 5 Jan] undergoing treatment for thallium poisoning. He had been brought in from Iraqi Kurdistan, apparently the victim of a Baghdad-sponsored programme of assassination that has killed other opponents of the regime. {*Guardian* 1 Feb; *Independent* 1 and 2 Feb}

**31 January** In the UK, the Department of Trade and Industry publishes its discussion document on the implications for industry of the Chemical Weapons Convention [see 8 Dec 94]. In relation to the UK implementing legislation that is currently being prepared, the document poses a number of questions on which comments are sought by the end of March.

**31 January** US Under Secretary of State Lynn Davies tells reporters that the administration has decided to stall Senate action on ratification of the CWC in anticipation of questions about the trustworthiness of Russia. She is reported as saying that Washington does not want Moscow's failure to notify other signatories how it intended to implement the CWC to cloud Senate consideration of START II, which is now before the Senate Foreign Relations Committee. {UPI 31 Jan}

**1 February** In the UK, the Surgeon General, Vice-Admiral Tony Revell, tells the House of Commons Defence Committee [see 18 Jan] that the military doctor examining patients suffering from the putative Gulf War Syndrome, Wing Commander Bill Coker, is to increase his examinations. Thus far he has examined only 79 of the 230 patients referred to him by civilian doctors. {for PA 1 Feb; *Daily Telegraph* 2 Feb}

**2 February** In Cairo the summit meeting between President Mubarak of Egypt, Prime Minister Rabin of Israel, King Hussein of Jordan and PLO Chairman Arafat concludes with the adoption of a communiqué in which the leaders "reaffirm their determination to continue the Middle East peace process to implement a just and comprehensive peace in the region". Further: "The parties reaffirmed their intention to...achieve equal security and mutual confidence at lower levels of armaments, appreciating President Mubarak's disarmament proposal on weapons of mass destruction [see 12 Dec 90 and 10 Jun 92], the parties shall pursue a mutually verifiable Middle East zone free of weapons of mass destruction, nuclear, chemical, biological, and their delivery systems." Consultations at foreign-minister level on implementation are to begin in Washington next week. {AFP 3 Feb}

**3 February** In the UK, a total of about 16 kilograms of sarin nerve gas have been consumed from 1985 to the present in protective research at the Chemical and Biological Defence Establishment, Porton Down, so the House of Commons is told. Agent GE, which during the late 1940s and early 1950s had seemed a more attractive agent than sarin despite its lesser toxicity because it was rather easier to make, had been produced then in quantities totalling about 320 kg. {*Hansard (Commons)* written answers 3 Feb}

3 February The US Joint Chiefs of Staff have approved the use of so-called 'nonlethal weapons' [see 15 Dec 94 and 21 Jan] in the forthcoming US evacuation of UN forces from Somalia. The approval extends to what the Wall Street Journal {3 Feb} describes as "smurf grenades", which knock people down without permanently harming them, but does not extend to laser blinding weapons. Defense Department officials are later quoted by the New York Times {15 Feb} saying that the Pentagon is hoping to use the Mogadishu operation as a proving ground for a new generation of experimental weapons intended to stun or ensnare foes rather than kill them. According to the Times, the approved nonlethal weapons are rubber bullets, a bean-bag shot gun and two kinds of supersticky foam. They had been selected by Central Command officers working with law-enforcement agency personnel in southern California. Another authorized weapon, according to a later newspaper report, is a foam system that creates a suds-like barrier 200 feet long, 20 feet wide and 4 feet high, laced with tear gas {Washington Post 24 Feb}. Three varieties of "pepper spray" are also to be available. {Washington Post 25 Feb} US Marines off Somalia begin shipboard training with the new weapons on 6 February. {Reuter in *Boston Globe* 19 Feb}

**3 February** The US Department of Veterans Affairs announces the eligibility for benefits of Gulf War veterans who developed chronic undiagnosed ailments within two years of the war and have had them for at least six months [see 10 Oct 94]. Chronic symptoms for which benefits will be paid include fatigue, skin problems, headaches, muscle pains, joint pains, nerve disorders, neuropsychological problems, respiratory problems, sleep disturbances, stomach problems, heart problems, abnormal weight loss, and menstrual disorders. Benefits are to range from \$89 per month compensation for 10 percent disability to \$1823 for 100 percent. {Long Island *Newsday* 4 Feb}

**4 February** In Moscow, health problems of former workers at the V-gas factory in Novocheboksarsk are described in a statement released by 'Soyuz-3', an organization of present and former Khimprom workers which is a collective member of the Union for Chemical Safety [see 25 Oct 94]. The statement is an appeal for help. It says that, of the estimated 3000 people who had participated in V-gas production, which had taken place from 1972 to 1987, an increasing proportion, now more than half, are sick, and that most of them have been unable, for reasons of bureaucracy, secrecy and neglect, to receive medical attention. {M S Svetlakova, "To the international community", 4 Feb, e-mail distribution.}

**6 February** Israel, with European and US assistance, is building an \$8.5 billion production facility for CBW weapons, according to the Lebanese newspaper *Al-Liwa*, which states further that construction — at an unspecified location in "occupied Palestine" — is expected to be finished in mid-summer. {IRNA 6 Feb in BBC-SWB 8 Feb}

**6 February** The US Commerce Department budget for FY 1996 which President Clinton submits to the Congress includes a \$3.5 million request for the Bureau of Export Administration to administer and enforce the inspection and reporting requirements placed by the Chemical Weapons Convention upon chemical manufacturing facilities. {*BNA Management Briefing* 7 Feb}

**7 February** In Japan, a subcommittee of the Chemical Product Council, which advises the Minister of International Trade and Industry, presents an interim report on the legislative and other measures necessary for implementing the Chemical Weapons Convention in Japan. Among the matters addressed in the report is the necessity of minimizing damage to the corporate image of businesses that become subject to routine inspection under the Convention. MITI will reportedly be presenting draft implementing legislation to the Diet during its current session [see 20 Jan]. {*Japan Chemical Week* 16 Feb; *Yomiuri Shimbun* 17 Feb}

**7 February** Finland deposits its instrument of ratification of the Chemical Weapons Convention, the 23rd signatory state to do so.

**7 February** In Washington, the US Deputy Assistant Secretary of State for export controls, Martha Harris, tells a meeting of the National Security Industrial Association that establishment of the CoCom-successor organization [see 21-22 Dec 94] is being delayed by the issue of Russian arms sales to Iran. France and the UK are insisting that Russia become a founder member of the new organization, but the United States is insisting that Russia must first stop the sales. {*Defense News* 20–26 Feb}

**7 February** In Washington, the American Bar Association, the Chemical and Biological Arms Control Institute and the DePaul University International Human Rights Law Institute sponsor a conference on *Implementing the Chemical Weapons Convention: The Nuts and Bolts of Compliance.* 

**8 February** Oman deposits its instrument of ratification of the Chemical Weapons Convention [see 12 Dec 94], the 24th signatory state to do so.

**8 February** The UK Defence Ministry, asked in Parliament about its medical examinations of veterans who believe themselves to be suffering from the so-called Gulf War Syndrome [see 1 Feb], announces that the Royal College of Physicians is to conduct "an independent clinical audit" of the medical assessment programme and its results to date. The statement continues: "It has been our intention to make public the detailed preliminary findings of the assessment programme at an appropriate stage when sufficient Gulf veterans have been examined under the MOD medical assessment programme, and I have agreed with the Surgeon General that he should do this in a letter to the *British Medical Journal* after 100 such assessments have been made." So far about one-third of the 233 veterans who have come forward have been assessed. {*Hansard (Commons)* written answers 8 Feb}

The formation of a Gulf Syndrome Study Group by the Working Party on Chemical and Biological Weapons, an independent group of scientists and doctors, is later announced by its administrator, Elizabeth Sigmund. {PA 12 Feb}

**9 February** Germany is to relax its existing controls on exports of dual-use goods in order to harmonize them with those of other member states of the European Union in accordance with the EC regulation on the subject which comes into force on 1 March [see 19 Dec 94]. {Inter Press Service 9 Feb}

**10 February** In Japan, six former members of an Imperial Army BW unit [see also 17 Dec 94] recall the work of the unit in a 74-page book, *The Truth about Unit 731*, published by a small citizen's group in Iwate. {AP in *Ottawa Citizen* 11 Feb}

**10 February** Peru is accused by top military officials in Ecuador of using aircraft to spread toxic gases over Ecuadorean defence positions in the increasingly bitter border conflict. An Ecuadorean general further accuses Peru of drugging its own troops with coca leaves so as to force them onto the attack.

In Lima, Peruvian military officials dismiss the accusations as "Ecuadorean idiocies". {Reuter 10 Feb}

**13 February** In Belarus, parliament acts to ratify the Chemical Weapons Convention. {TASS 13 Feb}

**13–15 February** In Yaoundé, the government of Cameroon in conjunction with the OPCW Provisional Technical Secretariat hosts the Second African Regional Seminar on National Implementation of the Chemical Weapons Convention.

**14 February** In Cairo, at a meeting of member states of the Arab League, Egypt submits a draft for a treaty that would create a zone free of weapons of mass destruction in the Middle East [see also 2 Feb]. The zone would include all 22 members of the League together with Iran and Israel. {Reuter in *Financial Times* 15 Feb; Reuter 15 Feb}

**15 February** Dr Vil Mirzayanov, the Russian chemist once charged with revealing secrets about his country's chemical weapons [see 8 Dec and 22 Dec 94], states: "Chemical weapons have no practical use and have no value as a deterrent. They should be totally abolished as a class of weapons". He is interviewed in the United States while attending the annual meeting of the American Association for the Advancement of Science, which, like other US institutions, is honouring him as a whistleblower in the cause of human rights. He goes on to advocate speedy ratification of the Chemical Weapons Convention by the United States, stating that "If the US does not ratify the CWC, there is no doubt that Russia will also refuse to do so and the process of disarmament will come to a halt". {Press statement 13 Feb; Reuter 15 Feb}

**15 February** Romania deposits its instrument of ratification of the Chemical Weapons Convention, the 25th signatory state to do so.

**15 February** In the UK, the opposition Labour Party publishes animal welfare proposals after making an official visit to the Chemical and Biological Defence Establishment at Porton Down {press release 15 Feb}. During the period 1989–92, the number of animal experiments conducted at the Establishment each year had declined from 9000 to 4500, but the number had since risen sharply (to 6700 in 1993) {*Hansard (Commons)* written answers 2 Feb}. The main reason for the rise was said to be a crash programme of research into BW agents such as anthrax [see also 16 Jan] {*Guardian* 16 Feb}

15 February The UK Defence Ministry, responding to further Parliamentary questions about the putative Gulf War Syndrome [see 8 Feb], states that it has received notification of 483 potential claims in respect of alleged ill health as result of service in the Gulf, one-third of them from serving armed-forces personnel. Of the 233 people who have requested medical assessment, about a quarter are serving. Initial findings from the assessment programme, which has thus far examined 90 patients, are described (in language nearly identical to that used in a similar response a fortnight previously) as follows. "[T]hose diagnosed so far are suffering from medical conditions which can be categorized as follows: approximately 25 percent are suffering from psychological conditions; 20 percent from serious, but well-recognized, medical conditions; 10 percent from chronic fatigue syndrome and the remainder from minor physical ailments. None of the conditions has been found to be peculiar to service in the Gulf. There is no single illness, major or minor, common to those examined and no evidence to suggest the existence of a Gulf war syndrome." {Hansard (Commons) written answers 15 Feb} [See also 14 Dec US]

**16 February** President Clinton transmits to the Congress the final statutory report on Executive Order 12375 under which President Bush had declared a national emergency with respect to proliferation of CBW weapons [see 16 Nov 90] and empowered the Secretary of State to impose sanctions on

foreigners found to be involved in proliferative activities, an Order since superseded by a new one [see 14 Nov 94]. The report reviews the Administration's CBW arms-control efforts. On the BWC Special Conference, it states that the objective of the mandate which the conference agreed for the new Ad Hoc Group [see 19–30 Sep 94 and 4–6 Jan] "is to develop a legally binding instrument to strengthen the effectiveness and improve the implementation of the BWC", continuing: "The United States strongly supports the development of a legally binding protocol to strengthen the Convention".

The report speaks thus of the Australia Group: "The AG also reiterated its conviction that harmonized AG export licensing measures are consistent with and indeed actively support, the requirement under Article I of the CWC that States Parties never assist, in any way, the manufacture of chemical weapons. These measures also are consistent with the undertaking in Article XI of the CWC to facilitate the fullest possible exchange of chemical materials and related information for purposes not prohibited by the Convention, as they focus solely on preventing assistance to activities banned under the CWC. Similarly, such efforts also support existing nonproliferation obligations under the BWC." {US Newswire 16 Feb}

**16–22 February** In the United States, at Atlanta, there is a NATO advanced research workshop on the problem of pollution stemming from past production of nuclear and chemical weapons in countries of the former Soviet Union. The workshop is held in conjunction with the annual meeting of the American Association for the Advancement of Science.

**19 February** Iraq's putative arsenal of biological weapons [see 5 Jan] is described in further detail by a London newspaper, the *Sunday Times* {19 Feb}. The weapons are said to be 200 anthrax bombs, buried near Tikrit. This information is attributed, as in the earlier reporting, to General al-Samirra'i, formerly chief of Iraqi military intelligence, who had told the newspaper (over satellite telephone from Iraqi Kurdistan) that he had first seen documentary evidence of the weapons during the months immediately prior to his defection in November 1994. He had also told the newspaper that he had named apparently to the United Nations — several aides to President Saddam Hussein who had hidden in their homes "research manuals that detail the production methods for biological warheads".

Two days later, General al-Samirra'i addresses an open letter to UNSCOM Chairman Ekéus on the subject of Iraqi concealment of missiles and CBW weapons, saying: "I confirm what I told the inspectors last week". {Reuter 21 Feb; Radio State of Kuwait 21 Feb in BBC-SWB 23 Feb}

In the meanwhile the *Sunday Times* story is described as "entirely false" by the head of foreign relations of the ruling Baath party, Abdel Razak al-Hashimi, who adds: "Articles spreading disinformation about Iraq always come before the UN Security Council reviews sanctions" (which the Council does every two months). {AFP 20 Feb}

**19–23 February** UNSCOM Executive Chairman Rolf Ekéus, accompanied by senior officials, is in Iraq for high-level talks, both technical and political. He had said in New York prior to departure that UNSCOM, for its on-going monitoring and verification work in Iraq, still lacked necessary baseline data on past Iraqi weapons programmes, mentioning biological weapons specifically: his experts doubted Iraq had a gigantic BW pro-

gramme but were extremely concerned that information was concealed. {Reuter 16 Feb} His special assistant Tim Trevan had told reporters in Bahrein: "In the area of biological weapons we are still at the stage that we received a report from the Iraqi side which frankly we don't believe [see also 15 Dec 94 UN]. The problem is that we don't know what we don't know". Trevan had spoken in particular of the need for an accounting of the supplies of complex growth media imported by Iraq [see 19 Dec 94]. And he had said also: "The suspicion was and remains that AI Hakem [a protein production plant west of Baghdad: see 31 Jan] was designed to grow bacteria for biological warfare". {DPA 17 Feb}

Speaking immediately after the talks, Chairman Ekéus tells reporters that, "very considerable progress" had been made. Thus, new information on past CW programmes had been supplied which, although not yet analysed, seemed substantive, promising and important. The same could not be said in the area of biological weapons. Here, "there are very important elements which Iraq has not disclosed. The gap has not narrowed but widened." {COMPASS Newswire and Reuter 23 Feb} He says that Iraq must quickly provide the missing information on its past biological work if his next status report to the UN Security Council on the work of UNSCOM, due in April, is to be conducive to the lifting of sanctions. {DPA 23 Feb}

Back in New York, Chairman Ekéus gives additional, hitherto undisclosed detail to reporters after briefing the Security Council on his visit. Iraqi imports of growth media had amounted to some 20 or 30 tonnes during 1988 and 1989, in theory enough to produce maybe 3000 kilograms of bacteria. Iraq had claimed that the material had been distributed for medical diagnostic purposes [see 19 Dec 94]. Ekéus says: "Only a small amount of growth media is needed for diagnostic medical purposes, but Iraq imported a very large amount. This can only coincide with the production of biological weapons." {Reuter and AFP 27 Feb}

**21 February** In Myanmar (Burma), after a month-long siege, government forces take the Kawmoora stronghold of the Karen National Union using heavy artillery and, according to Karen sources, chemical weapons [see also 25 Nov 94]. Speaking across the border to Thailand by mobile telephone, a Karen officer says: "They fired some kind of chemical from their 130mm mortars. When the shells exploded everybody had bloody noses and felt weak and dizzy." A Thai officer says some of the shells fired by the Burmese appeared to have effects similar to tear gas. A statement released by the Bangkokbased Burma Issues says that unknown chemical agent had been used late on the previous night, shortly before the Karens withdrew: "Preliminary information, still being checked by border sources, indicates that, as the night progressed, explosions containing a foul-smelling substance causing disorientation and unconsciousness were interspersed with new artillery pieces, possibly including 130mm howitzer-type artillery and 200mm siege mortars. While some soldiers affected by the reported chemical shelling recovered from the effects, others are reported to have died from chemical poisoning." {UPI 21 Feb}

Subsequent statements by Thai authorities tend to be dismissive of the reports of chemical warfare, citing absence of corroborative medical or chemical-analytical evidence. Army commander General Wimon Wongwanit says the reports are untrue because the Burmese forces were not carrying gas masks. {Thai Television Channel-9 22, 23 and 23 Feb in BBC-SWB 24 and 28 Feb; UPI 23 Feb; AFP 24 Feb} The US Embassy in Bangkok dispatches an official to the border area to investigate {UPI 23 Feb}. The Canadian Embassy is also investigating {Southam News in *Ottawa Citizen* 25 Feb}

**21 February** In Canada and Norway, national authorities are investigating the claims of people who had served in the Gulf War area that they are suffering from the putative Gulf War Syndrome — 20 Norwegians and 20–30 Canadians. In the United States about 13,000 US veterans of the war have now registered with the clinical evaluation programme established to investigate such complaints [see 14 Dec 94]. {*Hansard (Commons)* written answers 21 Feb}

**22 February** The Executive Secretary of the OPCW Preparatory Commission issues a discussion paper predicting that 65 ratifications of the CWC — the trigger point for entry into force — will be achieved "around the end of 1995" and noting that in some Expert Groups there were "few tangible signs of progress on a number of important issues". He says that the Commission must now speed up its work if it is not to arrive at the trigger point unprepared, thus jeopardizing in particular "the timely and efficient conduct of the General Training Scheme for inspector trainees". The paper goes on to identify and prioritize the outstanding tasks. {PC-X/B/WP.10}

**22 February** In Washington, Hillary Clinton visits ailing Gulf War veterans at the Walter Reed Army Medical Center and tells reporters that the White House wants to trigger a "new thinking" on how best to respond to the plight of the mysteriously afflicted veterans. In the Oval Office, President Clinton presents a sick veteran with his first monthly cheque from the new compensation programme [see 3 Feb]. There is talk of the White House setting up its own task force to investigate the putative Gulf War Syndrome [see also 4 Jan]. {Gannett News Service 23 Feb}

**22 February** Peru is again using toxic gases [see 10 Feb], as well as flamethrowers, in the border conflict with Ecuador in the area of Tiwinza, according to an official statement issued in Quito. {Voice of America 23 Feb; Reuter in *International Herald Tribune* 24 Feb}

**23 February** In Cairo, talks between President Hosni Mubarak, Foreign Minister Amr Moussa and visiting Israeli Foreign Minister Shimon Peres end without resolution of the dispute over the nuclear-weapons Non-Proliferation Treaty. Egypt has stated that it will withhold approval for indefinite extension of the treaty unless Israel joins it [see also 14 Feb]. {*International Herald Tribune* 24 Feb}

**23 February** USACDA Director John Holum testifies in the US House of Representatives before an International Relations subcommittee on his agency's authorization request for FY 1996 and 1997. The 1996 request totals \$76.3 million and includes \$17 million to fund the US obligation to the OPCW and its Preparatory Commission during the fiscal year.

Director Holum informs the subcommittee that, since December, he has led two delegations to Moscow for high-level discussions on the bilateral CW agreements. {Federal News Service 23 Feb}

**23 February** The United States Representative to the UN, Ambassador Madeleine Albright, sets off on a weeklong mission to member-countries of the Security Council in order, she

#### as of 10 March 1995 Bosnia-Hercegovina Angola Macedonia, FYR of Botswana Uzbekistan Egypt Yugoslavia Eritrea Libya Bhutan Mozambique Iraq Sao Tome & Principe Jordan Somalia Kiribati Sudan Lebanon North Korea Solomon Islands Antigua & Barbuda Syria **Barbados** Taiwan Belize Tonga Grenada Tuvalu Jamaica Vanuatu Suriname Andorra Trinidad & Tobago 159 states have signed the CWC, 27 of which have deposited instruments of ratification

**CWC Non-Signatory States** 

explains, to strengthen resolve against any premature lifting of the UN sanctions against Iraq. Among the briefings materials which accompany her are satellite images of various parts of Iraq, including a photograph said to show that the country's "largest chemical weapons production plant", destroyed during the Gulf War, has now been rebuilt [see 15 Dec 94 UN]. Ambassador Albright will be arguing that, if Iraq received large amounts of money from selling oil, and if UN inspectors were no longer present in the country, Iraq would be able to "resume full-scale chemical weapons production within two years". {Voice of America 23 Feb; *International Herald Tribune* 6 Mar}

**24 February** The Executive Secretary of the OPCW Preparatory Commission issues a note on responses thus far received to his request to member states for names of companies interested in bidding for contracts to supply specified types of inspection equipment [see 1 Aug 94]: 91 companies in 17 member states have expressed interest, but not all items of equipment have yet been covered. {PC-X/B/3}

**24 February** France dispatches its instrument of ratification of the CWC to its mission in New York for deposit with the UN Secretary-General. {Reuter in *International Herald Tribune* 4-5 Mar}

**26 February** In China, a Japanese government team arrives to begin work on dealing with chemical weapons abandoned by the former Imperial Japanese Army [see 5 Jan]. The team consists of about 15 people from the Foreign Ministry, the Defence

Agency and private chemical companies. It will stay until 13 March and will assess chemical weapons buried in Hangzhou, Chuzhou and Nanjing in northeastern provinces of China. It is expected to begin work on sealing unearthed weapons in steel containers for transport to storage facilities, and will also study the feasibility of unearthing other abandoned weapons. Japan and China have thus far held three rounds of working-level talks on the subject, and two Japanese fact-finding missions have been dispatched to locate the weapons. There will be further talks on the ultimate disposition of the weapons. {Jiji 9 Feb; *Daily Yomiuri* 19 Feb; Kyodo 27 Feb}

**26 February** In the United States, former workers at the US Army CBW test facility at Dugway Proving Ground, Utah, who have health problems which they believe originate in their past CBW work, have organized themselves into the 'Dugway League'. This now comprises dozens of Dugway veterans and was founded in Spring 1994 for the purpose of causing the Army to acknowledge mistakes and pay reparation. The League is seeking the help of former US Congressman Wayne Owens, the attorney who several years ago helped the

'Downwinders' of Nevada, Utah and Arizona. {*Salt Lake Tribune* 26 Feb}

27 February In Pretoria, the Surgeon-General of the South African National Defence Force, Lt-Gen Niel Knobel, describes as a "blatant lie" the charge that South Africa still possesses chemical and biological weapons and that Libya is recruiting South African scientists associated with them. The charge had been made by unidentified US intelligence sources quoted in a London newspaper, the Sunday Times {26 Feb}, which alleged that the CBW weapons had been developed in the 1980s for purposes of assassinating anti-apartheid leaders at home and abroad [see also 11 May 90 and 14 Nov 91]. General Knobel tells a press conference that "we destroyed all lethal, incapacitating and irritating chemical and biological agents in 1993" [see also 22 Aug 94 and 8 Dec 94]. The country had had the ability to develop chemical weapons, but had never possessed more than the few grams of CW agents needed to develop protection against them. A spokesman for former President F W de Klerk denies that any such weapons had ever been used to assassinate anti-apartheid figures. {Xinhua 27 Feb; Washington Post 28 Feb}

## **Forthcoming Events**

A NATO Advanced Research Workshop on Development of On-Site Analytical Instruments for Use in the Verification of the CWC will take place in Warsaw during 1–3 April 1995.

The US Army Edgewood RD&E Center will host an International Workshop on the Biocatalytic Degradation of Chemical Warfare Related Materials during 3–5 April 1995.

The tenth plenary session of the OPCW Preparatory Commission will take place in The Hague during 3–7 April 1995.

The Lawyers Alliance for World Security will present its W. Averell Harriman Award to the US Chemical Manufacturers Association for its contributions to the CWC in Washington on 8 May. A Regional Seminar on the CWC organized by Côte d'Ivoire authorities in conjunction with the OPCW/PTS will take place in Yamoussoukro during 9–11 May 1995.

The Pugwash Study Group on Implementation of the Chemical and Biological Weapons Conventions will hold its third workshop during 19–21 May 1995 in Noordwijk, Netherlands.

A Regional Seminar on the CWC organized by South Korean authorities in conjunction with the OPCW/PTS will take place in Seoul during 5–7 June 1995.

A seminar on CBW Verification organized by Swedish authorities will be held on 10–11 June 1995 in Stockholm,

open to invitees and participants in the 5th CBW Protection Symposium (see below).

The Fifth International Symposium on Protection Against Chemical and Biological Warfare Agents will take place in Stockholm, Sweden, during 11–16 June 1995.

The Ad Hoc Group of the States Parties to the Biological Weapons Convention will reconvene in Geneva during 10–21 July 1995.

An invitation-only conference on *Effective National Implementation of the CWC* sponsored by the Volkswagen-Stiftung will be held in Bad Homburg, Germany, during 8–10 September 1995 [see box on p 14].

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