

# ⑧ CHEMICAL WEAPONS CONVENTION BULLETIN

INTRODUCTORY ISSUE

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This is the first issue of the Chemical Weapons Convention Bulletin. It will appear quarterly. It will summarize important developments and documents relevant to the projected Chemical Weapons Convention now being negotiated in Geneva. It will also give notice of recent literature and forthcoming events.

## THE CHEMICAL WEAPONS CONVENTION

Charles C. Flowerree

The effort to achieve agreement on a convention to rid the world of chemical weapons, which for nearly two decades has moved at a languid pace -- when it has moved at all, seems at last to have gained noticeable momentum. During the past year, negotiators laboring under the auspices of the little publicized 40-nation Conference on Disarmament (CD) in Geneva have succeeded in resolving or narrowing differences on many of the military-technical issues which but a short time ago seemed to present insuperable obstacles to the conclusion of a world-wide convention. Significant strides have been made in elaborating a "rolling text," that is, the text of an agreement that from session to session is being expanded and refined.

The importance of this effort rests on several considerations. As a consequence of the development of supertoxic chemical agents and improved means of delivery, there is heightened concern about the chemical warfare (CW) threat in future conflicts. The existence of a major Soviet CW capability is of particular concern to the population of Western Europe, but the relative ease and modest cost of developing a chemical warfare capability has widened the scope of the threat to world-wide dimensions. The 1925 Geneva Protocol, which bans the use of chemical weapons, but not their manufacture or stockpiling, unfortunately has no teeth. During World War II the combatants found it in their mutual interest to observe the protocol. Since then, however, there have been several instances of reported use, the most recent being by Iraq in its war with Iran. Many of the adherents to the Protocol, including the United States and the Soviet Union, have reserved the right to respond in kind to a chemical weapons attack. These various considerations have led to the recognition that the only insurance against the use of chemical weapons in future conflicts is [continued]

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their complete elimination under strict international control.

For some years now there has been general agreement on the basic outline of a multilateral CW convention. Briefly, it would prohibit the development, production, acquisition, possession, transfer, or use of chemical weapons as these are defined by the treaty; all such weapons would be destroyed and production facilities would be eliminated. States party to the convention would be required to declare their CW stocks and production facilities and to present plans for getting rid of them. Verification of compliance with the provisions of the treaty would be entrusted to an international authority that would be responsible for the proper functioning of the treaty regime and provide the mechanisms to ensure compliance.

As of April 1988, the Geneva negotiators had succeeded in elaborating general provisions covering many of the major elements of this basic outline. Appropriate language has been incorporated in the "rolling text," but bracketed words and phrases signifying lack of consensus still abound in some areas and many details remain to be worked out. A summary of agreed elements follows:

o The provisions of the convention would apply to toxic chemicals produced or stockpiled for hostile military purposes. Whether herbicides or riot control agents ("tear gas") are to be included has not yet been decided. Also covered are precursors (chemical reagents that take part in the production of a toxic chemical in the manufacturing process or serve as a key component of binary chemical weapons) and munitions and equipment designed to deliver chemical weapons.

o Each party will be required to make a declaration within 30 days of the convention's entry into force stating whether it has chemical weapons, giving specific data on the quantity and location of its stocks and a detailed inventory of its declared chemical weapons. [continued]

The Chemical Weapons Convention Bulletin is published under the auspices of the Federation of American Scientists Fund, in cooperation with the Arms Control Reporter of the Institute for Defense and Disarmament Studies. The goal of the Bulletin is to provide information and analysis toward an effective multilateral treaty which will eliminate chemical weapons and help prevent the exploitation of biomedical technologies for hostile purposes.

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In addition, parties are required to report any chemical weapons of another state that may be on their territory and any transfers or receipts of chemicals covered by the convention.

o Any state possessing chemical weapons must submit a plan for their destruction to the international authority. Destruction would begin within one year of entry into force and be complete within 10 years. The process would be subject to immediate verification by on-site inspection and would be subject to continuous monitoring by the international authority.

o Declarations would also be required for production facilities within 30 days of entry into force. Such facilities would have to cease production immediately and parties would be required to report actions they have taken to render plants inoperable, to be completed within three months, and submit plans for their eventual elimination. Some plants might have to be utilized for the destruction of weapons, but after 10 years all would have to be eliminated. The process of eliminating production facilities would be subject to on-site verification by the international authority.

o Within 30 days and then annually, parties would have to declare certain chemicals specified in the convention that they have on hand or may be producing for purposes not prohibited, such as toxic chemicals used in medical research or treatment. Stocks of such chemicals are not to exceed 1,000 kilograms, and annual production is limited to a single small-scale facility subject to continuous monitoring.

o For key precursor chemicals, large-volume production of commercial chemicals with CW potential and certain other toxic commercial chemicals, parties must furnish specific data such as initial and annual production. Verification would be accomplished by data analysis except for key precursors which would be subject to immediate and systematic inspection.

o The international authority responsible for the proper functioning of the convention will be composed of: (a) a consultative committee, the principal organ, on which each state party to the treaty would be represented and which would meet annually or in special session as required; (b) an executive council of limited membership (perhaps 15) chosen from among the parties which would oversee on a continuous basis the implementation of and compliance with the provisions of the convention; it would maintain records, make reports to the consultative committee and propose the establishment of subsidiary bodies as necessary; and (c) a technical secretariat which will carry out the day-to-day activities necessary to ensure compliance, including conducting inspections and serving as the point of receipt for reports or complaints lodged by one party against another.

The chemical industry world-wide is naturally concerned about the constraints that a CW convention of sweeping scope will place on its mode of operation. A heartening development is the active role that chemical industry representatives in several countries have taken in helping to develop measures that will ensure effective verification without unduly burdening the industry. Experts from the chemical industry and manufacturing associations of Western Europe, Japan, and the United States have held a series of meetings to review the status of the Geneva negotiations and to identify areas in which the industry could offer advice, which they have done in informal meetings with a group of technical experts [continued]

from the negotiations. The participants have drafted papers suggesting approaches on such issues as:

- o The protection of confidential business information;
- o Protocols for inspections;
- o Data-reporting methodologies for commercial chemicals covered by the convention;
- o Technical requirements for an international inspectorate; and
- o Monitoring devices and techniques.

Some of the issues remaining to be resolved in the negotiations include:

- o The composition and specific functions of the various elements of the international authority, how the authority will make its decisions, and how it will be financed;
- o Specific procedures for conducting on-site inspections on challenge;
- o Timing of the destruction of weapons stocks, including the question of whether smaller states should begin destruction before large powers have reduced their stocks to a lower level;
- o Listing of particular chemicals to be placed under control;
- o Procedures for amending the treaty provisions and control lists as circumstances may dictate; and
- o Incentives for smaller states involved in regional confrontations to join the Convention.

Ambassador Charles C. Flowerree was US representative to the Conference on Disarmament in 1981 and 1982. This editorial is a revised excerpt from an article that appeared in the April 1988 issue of Arms Control Today.

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## NEWS CHRONOLOGY    SHIKHANY TO THE MOSCOW SUMMIT    OCTOBER 1987 - JUNE 1988

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### GUIDELINES

1987

The news chronology section of the Chemical Convention Bulletin is prepared according to the following guidelines:

- o Items will be selected for relevance to the Chemical Weapons Convention.
- o Priority will be given to reports of events, such as official statements, negotiations and inspection visits. Ordinarily, commentary will not be included in the chronology. Unattributed statements will be avoided.
- o The chronology will cover events world-wide, not just US-USSR.
- o Every item will be sourced.

3-4 October Chemical weapons of the USSR are exhibited at the Shikhany military facility of the Soviet Chemical Troops. Attending this unprecedented display are some 150 representatives from 45 states participating in the Conference on Disarmament (CD) negotiations in Geneva, plus more than 50 journalists.

[The display had been initiated when USSR Foreign Minister Edward Shevardnadze spoke as follows at the CD on 6 Aug: "In order to build an atmosphere of trust, and in the interests of an early conclusion of an international convention, the Soviet side invites the participants in the chemical weapons negotiations to visit ... Shikhany to see standard items of our chemical weapons and observe the technology for the destruction of chemical weapons at a mobile facility. Later we will invite experts to the special chemical weapon destruction plant now being built in the vicinity of the town of Chapayevsk." In the same speech, Shevardnadze declared the Soviet Union's acceptance of "the need to make legally binding the principle of mandatory

challenge inspections without the right of refusal." (CD/PV.428)]

On display are 19 chemical weapons: ten munitions for cannon and rocket artillery, two warheads for tactical missiles, six aircraft munitions and one hand grenade. A poster alongside each one gives its combat designation, its caliber, the name and weight of its toxic fill, the type of fuse and explosive, the weight of the munition, and materials used in its construction. Thus identified as what a subsequent Soviet publication would call "the Soviet Army's chemical warfare agents" are mustard/lewisite mixture, thickened lewisite, sarin, thickened soman, VX, thickened VX and the irritant CS. On the second day a mobile apparatus for destroying chemical weapons by a process involving hydrolysis and incineration is demonstrated. (CD/789 (USSR) of 16 Dec; International Defense Review Dec 87)

Lt-Gen Anatoly D Kuntsevich, Deputy Commander of the Soviet Chemical Troops, described as "a leading expert from the USSR Ministry of Defense and the USSR Academy of Sciences" (CD/789), speaks to the visitors as follows: "The question might arise if all the chemical charges adopted by the USSR were put on display. In answer to this question I state that all of them were shown, with the exception of similar modified versions which slightly differ by their design and the materials used for their production." (TASS in English from Shikhany, 4 Oct) This statement is amplified in the following day's Pravda (4 Oct, in FBIS-SU 9 Oct), which carries an interview with Col-Gen Vladimir K Pikalov, Commander of the Chemical Troops: "We displayed all our existing CW delivery means: tube and rocket artillery, tactical rockets, aircraft, and shortrange weapons. We displayed all our toxic agents and all our chemical munitions, with the exception of certain modified types that are not fundamentally different in terms of apparatus or armament from those that were shown." During a televised press conference in Moscow the following month, Pikalov would say (according to one overseas translation): "In Shikhany we showed real examples of chemical ammunition currently issued to the Soviet armed forces. They were designed both in the 1950s and in the 1980s. There is no other ammunition in the USSR." (Soviet TV 10 Nov, in BBC SWB-SU 12 Nov)

7-8 October A third round of the US-Soviet CW Nonproliferation Discussions is held in Bern. Ambassador Yuri K Nazarkin, head of the USSR CD delegation, and William Burns, US Deputy Assistant Secretary of State for politico-military affairs, lead the two sides. (TASS 8 Oct, in FBIS-SU Oct)

7-9 October An international conference, 'Implementing a Global Chemical Weapons Convention,' is held in Ottawa under the joint auspices of the Canadian Centre for Arms Control and Disarmament and the American Academy of Arts and Sciences. (Arms Control Chronicle Dec 87)

9 October The Iranian Government requests the UN to investigate what it states had been a large-scale Iraqi chemical bombardment of the Iranian border town of Sumar the previous day. (UN doc S/19193)

12 October The Board of Directors of the US Chemical Manufacturers Association (representing corporations owning 99% of US chemical capacity) approves the following recommendations:

"1. The Chemical Manufacturers Association should aggressively declare its strong support for a treaty to ban chemical weapons.

"2. CMA should urge the U.S. Government to effectively protect confidential commercial and proprietary information under the treaty.

"3. CMA should strongly advise the U.S. Government that expansion of the scope of the treaty beyond

Schedule [3] would be ill-advised and counterproductive.

"4. CMA should continue to work with U.S. negotiators to develop the least disruptive inspection protocols consistent with this nation's security needs. In this regard, CMA should advise the U.S. Government that it believes a fool-proof routine verification system to be technically infeasible.

"5. CMA should promote a consensus on the treaty with chemical industry associations internationally." [See further 25-26 Jan 88] (Text from CMA)

13 October The Soviet Government files its report on biological research centers and laboratories with the UN Department of Disarmament Affairs in accordance with the agreement reached at the Second Review Conference of States Parties to the Biological Weapons Convention. The report lists 7 facilities, all civilian, with maximum containment units and 12 with lower-level containment of which 5 are military, including one at Sverdlovsk with no pathogens. (Translated text from US ACDA)

14 October Soviet Deputy Foreign Minister Vladimir F Petrovsky tells the General Assembly: "And quite recently we have supplemented multilateral efforts by making still another major step and proposing, on a bilateral basis, a verifiable exchange of data between the USSR and the USA on their chemical arsenals prior to the signing of the convention." (Soviet UN mission press release, 13 Oct) [See further 10 Nov]

15 October The US Government files its biological-research report [see 13 Oct], listing five facilities with maximum containment units (four civilian and one at Fort Detrick) and one with a lesser level. (Text from US ACDA)

16 October President Reagan certifies to Congress that final assembly of 155mm binary chemical artillery projectiles "is necessitated by national security interests of the United States and the interests of other NATO member nations." (Congressional Record 19 Oct H8738) A stipulation of the 1986 Defense Authorization Act is thus satisfied, allowing otherwise fenced appropriations to be released for quantity-production of the projectiles.

16 October France, in the First Committee of the UN General Assembly, reiterates its contention that States Parties should be allowed to maintain 1000-2000 agent-ton 'security stocks' of chemical weapons under the treaty for up to eight years after it enters into force. (Text from French Foreign Ministry)

2 November A report from the Defence Committee of the Western European Union Assembly states: "Official allied statements about Soviet [chemical-weapons] stockpiles would be more credible if they were more consistent, if they made some reference to the assumptions on which the assessment was based and probably if they were expressed as a possible range between a high and a low limit." (WEU doc 1115)

#### BRACKET FORMAT

( ) source references

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comments

**10 November** USSR Deputy Foreign Minister Petrovsky speaks as follows at a televised press conference in Moscow: "The problem of banning chemical weapons was the subject of detailed discussion during the meetings between Comrade Shevardnadze, USSR Minister of Foreign Affairs, and US Secretary of State Shultz in Washington and Moscow [15-18 Sep, 22-23 Oct (Moscow) and 30 Oct]. The Soviet side took additional steps toward the US position, including on those issues accorded particular importance by the US side. This concerns primarily the American proposal that, even before the convention is signed, the USSR and USA exchange data on their chemical weapons and production facilities. In Washington we proposed implementing the first phase of this exchange as early as at the concluding stage of the talks and giving each other data on the size of existing stocks, and the number and locations of facilities for the production and storage of chemical weapons. We also proposed that prior to signing the convention we also implement the second phase, providing even more detailed information. Moreover, at that second stage each side would have the right to make on-site inspections at three declared facilities of its choice, as well as to inspect by request any three undeclared locations, should they give rise to suspicion."

Petrovsky also says: "At the current, responsible stage of work on the convention on eliminating chemical weapons we cannot fail to be surprised by the position of certain other parties to the talks in Geneva, specifically France. The proposals tabled by France in the summer of this year for a so-called safety margin run counter to the goals and principles of the convention banning chemical weapons that is being elaborated, inasmuch as they provide for the possibility of producing chemical weapons after the convention has come into force." (Soviet TV 10 Nov, in BBC SWB-SU 12 Nov; Krasnaya Zvezda 11 Nov, in FBIS-SU 12 Nov)

**15-18 November** Soviet military experts visit the FRG chemical agent destruction plant near Munster [which the CD had visited in June 1984 (CD/518)]. The delegation is led by Sergei Batsanov, deputy chief of the section for nuclear energy and chemical weapons at the Soviet Foreign Ministry, and includes Vsevolod Sokolov, chief of construction work at the new Soviet chemical demilitarization plant near Chapayevsk. FRG Col Rotlaender tells the visitors: "We are constantly finding bombs, shells, and grenades filled with highly toxic substances. Chemical munitions tests were carried out here in 1914-1918 and 1939-1945. Plenty of unexploded ammunition is still to be found in the ground. The destruction installation has been in operation since 1982. Since then we have destroyed 75 tonnes of mustard gas and 325 tonnes of contaminated materials." (dpa 16 Nov; Washington Times 17 Nov)

**18 November** The British Government tells Parliament: "We have received no requests to store other countries' chemical weapons here. If any such request were ever to be received, it would be a matter for decision by the Government of the day in the light of all the circumstances prevailing at the time." (Hansard (Commons) 18 Nov, written answer)

**19-20 November** A Soviet delegation visits Tooele Army Depot in Utah [which the CD had visited in Nov 1983]. They are shown details of the "actual weapons making up the United States chemical arsenal, such as mortars, rockets, land mines, one-ton bombs and 155-millimeter projectiles" and including the Weteye bomb, and the 155-mm binary artillery shell. (New York Times 20 Nov)

Soviet CD negotiator Nikita Smidovich, a member of the delegation, says to the New York Times: "This is a major step. It shows quite clearly that we are entering into a different stage in our negotiations: the stage where we can exchange a lot of information on chemical weapons." (ibid) Nazarkin says further (according to TASS): "In our view, such an exchange of visits improves the atmosphere during the discussion of a convention banning chemical weapons. Work on the document has entered the concluding stage, and it may be signed as early as the first half of

1988." (TASS 20 Nov, in BBC SWB-SU 26 Nov)

But US CD Ambassador Max Friedersdorf tells the New York Times: "I think that's overly optimistic. There has been progress this year, but there remains an awful lot of detail before a treaty can be concluded." (NY Times op cit)

**23 November** The CD Ad Hoc Committee on Chemical Weapons reconvenes in Geneva, initially for 'private consultations by the Chairman with delegations present' (23-27 Nov) and then for 'open-ended consultations' (until 16 Dec) in preparation for its resumption of work on 12 Jan 88. (CD/795)

**24 November** Israel conducts a major CW civil-defense exercise (AP, in Philadelphia Inquirer 25 Nov; Jerusalem Post 5 Dec). Gas masks, formerly stored at 3 locations only, are now available at 200 distribution centers, with plans for a further 400. (London Times 8 Dec)

**30 November** The UN General Assembly adopts without vote two resolutions on chemical weapons. One is the now-traditional resolution urging the CD to intensify its efforts in the CW negotiations (A/RES/42/37A). The other empowers the UN Secretary-General to investigate allegations of use of CW (and biological) weapons, and, with the help of qualified experts, to develop efficient investigatory procedures, reporting on them to next year's Assembly (A/RES/42/37C). [The similar resolution in 1982 (A/RES/37/980), and therefore the recommendations on verification machinery which followed from it (A/38/435 and A/39/488), had been vitiated by the non-unanimity of its adoption.]

**30 November-17 December** The seventh round of the US-Soviet Chemical Weapons Treaty Talks takes place in Geneva. The two sides discuss a bilateral data exchange. The next round is scheduled for early 1988 [see 8 March 88]. (TASS 30 Nov and 17 Dec, in FBIS-SU 1 and 18 Dec; Boston Globe 17 Dec)

**1 December** In the FRG, the Darmstadt Public Prosecutor's office announces that twelve German firms are being investigated on suspicion of illegally supplying Iraq with chemicals and equipment for chemical weapons. (dpa 1 Dec, in FBIS-WE 2 Dec; Der Spiegel 7 Dec; Stern 10 Dec)

**4 December** In the USA, the 1988 Defense Authorization Act is signed into law by President Reagan. (Washington Post 5 Dec) In section 126 it has the following language [which, in the House bill, had been substantially stronger]: "Chemical munitions of the United States stored in Europe on the date of enactment of this Act should not be removed from Europe unless such munitions are replaced contemporaneously with binary chemical munitions stationed on the soil of at least one European member nation of [NATO]."

Not authorized is the further \$25 million that had been sought for procurement of Bigeye, but the additional \$59.3 million requested for procurement of 155mm binary artillery projectiles is authorized, as well as funds for development of long-range stand-off chemical delivery systems. (House of Representatives report 100-446)

**7 December** The Director General of the European Council of Chemical Manufacturers' Federations (CEFIC) writes to the Chairman of the CD Ad Hoc Committee with critical comments on the latest 'rolling text' (CD/782) in its application to civilian chemical industry. The letter opposes 'Schedule [4]' and, for industry controls, advocates challenge rather than routine inspections. [See 12 Oct for US CMA views] The letter offers to provide "expert advice in all the fields where we have reservations." (CEFIC letter dated 7 Dec)

**10 December** The Joint Statement following the US-Soviet summit meeting in Washington includes this: "The leaders expressed their commitment to negotiation of a verifiable, comprehensive and effective international convention on the prohibition and destruction of chemical weapons. They welcomed progress to date and reaffirmed the need for intensified negotiations toward conclusion of a truly global and verifiable convention encompassing all chemical weapons-capable states. The United States and the Soviet Union are in favor of greater openness and intensified confidence-building with respect to chemical weapons both on a bilateral and a multilateral basis. They agreed to continue periodic discussions by experts on the growing problem of chemical weapons proliferation and use." (Washington Post 11 Dec) [See also Bibliography: Evans]

**16 December** The Federal German Constitutional Court in Karlsruhe issues a decision, with one judge dissenting, that rejects several constitutional complaints [initiated in 1982] against the storage of US chemical weapons on German soil. (Frankfurter Rundschau 19 Dec; Der Spiegel 28 Dec)

**6 December** The US Army begins quantity production of 155mm binary chemical artillery projectiles. (Washington Post 17 Dec) [See 16 Oct]

**21 December** In Bern, the USSR and Switzerland hold consultations on the chemical negotiations, primarily on issues concerning civil industry. (TASS 21 Dec, in FBIS-SU 22 Dec)

**26 December** The following statement is issued in Moscow (subsequently made available to the CD in translation): "The Ministry of Foreign Affairs of the USSR is authorized to state that the Soviet Union's stocks of chemical weapons comprise no more than 50,000 tonnes of chemical warfare agents. That, according to estimates by Soviet experts, roughly corresponds to the stockpiles of chemical weapons held by the United States. In addition, all Soviet chemical weapons are kept within the territory of the USSR." (CD/790 (USSR) of 13 Jan 88; Pravda, Krasnaya Zvezda, TASS 27 Dec, in FBIS-SU 28 Dec) [See further 15 Feb and 26 Apr 88]

**29 December** The US Army announces, in a long-delayed final environmental impact statement, its recommendation for the disposal of stockpiles of unitary chemical agents and munitions required under the 1986 Defense Authorization Act: on-site incineration at the eight US storage locations. The impact statement [see Bibliography], which is limited to CONUS operations, makes no mention of the stockpile in Germany. (Baltimore Sun 31 Dec)

**30 December** The official Iranian news agency IRNA reports the following statement by Prime Minister Mir Hossein Mousavi: "The Islamic Republic is capable of manufacturing chemical weapons and possesses the technology. But we will produce them only when God allows us and when we are compelled to do so." (AP, in Washington Times 31 Dec) This repudiates a statement which the Prime Minister was reported to have made on 27 Dec informing the Iranian Parliament that Iran was actually producing "sophisticated offensive chemical weapons," though not deploying them. (IRNA cited in Philadelphia Inquirer 28 Dec)

## 1988

**4 January** FRG Foreign Minister Genscher, speaking to the press in Bonn, says: "We see, not without worry, voices now growing louder in the West which raise doubts about whether verification is at all possible in the area of chemical weapons, and this could create new obstacles for conclusion of a treaty.... What is really important now is

agreement on controls that are as perfect as possible, and not the question of how one can produce new chemical weapons that are as perfect as possible." (dpa 4 Jan, in FBIS-WE 5 Jan) The Washington Post (9 Jan) would later report his remarks as having suggested that the United States and France bore responsibility for the slowing-down of negotiating progress.

**6 January** President Mitterand, meeting with GDR President Honecker, notes the GDR proposal for a European chemical weapon-free zone, but says a global ban would be better, if it could be achieved. (AFP 8 Jan, in FBIS-WE 11 Jan)

**11 January** "Discriminate Deterrence," a public report to the US Secretary of Defense and the Assistant to the President for National Security Affairs by a panel chaired by former Undersecretary of Defense Fred Iklé and University of Chicago professor Albert Wohlstetter, states: "For the foreseeable future, it will not be realistic to pursue agreements to eliminate ... all chemical weapons. ... A ban on chemical weapons could not be verified." (US Government Printing Office)

**12 January** The inter-sessional session of the CD Ad Hoc Committee begins. It ends on 29 Jan, having held six meetings. (CD/795)

**19 January** FRG Foreign Minister Genscher, in a joint statement with USSR Foreign Minister Shevardnadze (then concluding a 3-day visit to Bonn), calls for an early global ban on chemical weapons. (London Times 20, 21 and 22 Jan)

**23 January** UK Prime Minister Margaret Thatcher, in interviews for American television commending the INF agreement, says that the banning of chemical weapons is vital to the Western alliance. However, she also speaks of the importance of NATO solidarity and of close consultations between the USA and her allies so as to ensure "the right mix of nuclear, chemical and conventional weapons for all circumstances." (London Times and London Independent 23 Jan)

**23-24 January** The 13th Workshop of the Pugwash Chemical Warfare Study Group is held in Geneva. Some 60 experts discuss in private the technical and political aspects of monitoring a chemical weapons treaty. (Pugwash Newsletter Jan 88) [See Bibliography: Lohs]

**25 January** In the CD Ad Hoc Committee, the FRG tables a paper proposing a system of 'ad hoc checks' for use in non-production verification. In effect such checks would be challenge inspections initiated, not by a state party, but by the international authority, which would conduct them as a matter of routine. (CD/791) [See 7 Dec 87]

**25-26 January** Chemical industry experts meet in Zurich to review the status of the CW treaty. According to a subsequent communiqué from the participants belonging to the European group (CEFIC), the Japanese group (JCIA), and the American group (CMA), the meeting identifies areas in which industry could advise the negotiators:

- o protection of confidential business information;
- o protocols for inspections;
- o data reporting methodologies for commercial chemicals of interest to the treaty, including the role of users;
- o technical requirements for an international inspectorate;
- o scope of materials covered by the treaty; and

o monitoring devices and techniques.

Participants agree to draft papers suggesting approaches which would reflect both the technical expertise of the chemical industry and its desire to help bring about the elimination of all chemical weapons. And plans are developed for a technical workshop in Brussels in late spring 1988; participation would be broadened to include additional industry professionals and representatives from national governments. The workshop might be held prior to the proposed Experts Meeting at the CD; it could then refine items for possible inclusion in the Experts Meeting. (text from CMA) [See further 12 Oct and 7 Dec 87]

**27 January** In Geneva there are trilateral talks on CW between Czechoslovakia, the FRG and the GDR represented by their CD delegations. The idea of a central-European CW weapon-free-zone is reportedly discussed once more. (ADN 27 Jan, in FBIS-EE 1 Feb)

**27 January** At a news conference in Geneva, Soviet CD negotiator Nikita Smidovich calls on the United States, and some other NATO countries, to declare the size of their stockpiles. (Tanjug 28 Jan, in FBIS-SU 28 Jan)

**31 January** US Secretary of State George Shultz says in a television interview that the Chemical Weapons Convention is one of the Administrations' three arms control priorities: "And third, we want to work out, if it is at all possible, a worldwide ban on chemical weapons. And we are working hard on that." (Federal News Service 1 Feb)

**1 February** Defense Week, quoting a named US Army official, reports October 1989 as the scheduled start-up date for the recently ordered plant for manufacturing dichlor, which is the commercially unavailable chemical that Pine Bluff Arsenal is using to make the DF fill of the 155mm binary projectile. It is expected, however, that the binary production program will consume all the available stockpile of dichlor by April 1989. (Defense Week 1 Feb)

**2 February** The US Defense Department announces that production of the Bigeye binary chemical bomb has now been certified to be in the national security interests of the United States. [The certification had been by President Reagan in a memorandum to the Defense Secretary on 19 Jan. (Federal Register 53(27):3845)] A stipulation of the 1987 Defense Authorization Act was thus satisfied, thereby releasing appropriations for Bigeye production facilities. Full scale production was planned for 1990 [following low-rate initial production which had the contract scheduled in May 1988 (Dep Asst Sec of Defense Welch before a House Armed Services Subcommittee 9 March)]. (DoD Memorandum for Correspondents 2 Feb)

**2 February** The 1988 session of the CD begins. Ten Foreign Ministers will address it during its first 18 meetings, beginning, today, with Bohuslav Chnoupek of Czechoslovakia. On CW, he proposes that the CD set itself the firm deadline of "finalizing the Convention this year." (CD/PV.436)

**2 February** Ambassador Rolf Ekéus of Sweden, the outgoing Chairman of the CD Ad Hoc Committee on Chemical Weapons, submits to the CD a report (CD/795) on the work done by his committee during 12-29 January, its inter-session session [see 23 Nov 87 and 12 Jan].

The report has three appendices: I, an updated rolling text of the draft Convention; II, the results of work not ready for inclusion in the rolling text; and III, recommendations on standard operating procedures for toxicity determinations [agreed by a CD subsidiary body in 1982, and now pertinent to Article VI negotiations].

Ekéus draws attention to the following advances in the rolling text: (a) a major expansion of Article VIII (The Organization), setting out agreement on several aspects of the new international authority that is to be established for implementation of the treaty; (b) expansion of the Annex to Article IV (Chemical Weapons) as a result of broadened agreement on the details of stockpile-destruction verification; and (c) expansion of Annexes [1] and [2] to Article VI (Activities not prohibited by the Convention) to reflect new agreements reached regarding nonproduction-verification in the civilian chemical industry. Concerning this last topic he says: "With most of the directly military elements of the Convention in place the so-called industrial questions now require particular attention."

Ekéus also draws attention to achievements in Appendix II. He has "good reason to believe" that the new language there on order-of-destruction [which addresses the French desire for 'security stocks,' see 16 Oct 87], though incomplete, may soon facilitate consensus on the issue, which would then mean that "all the major political questions pertaining to existing chemical weapons will be in place." And there was the report in Appendix II on the definition of "production capacity"; the record of progress towards consensus on the issue of challenge-inspection; the model "facility attachments"; and the ground-breaking efforts (Articles X (Assistance) and XI (Economic and Technological Development)). (CD/PV.436) [See Bibliography for press reviews: Dickson, Ember, Flowerree, IISS]

**2 February** US Ambassador Friedersdorf says, in a speech to the CD: "Our delegation acknowledges the pace of negotiations has slowed during the past few months. When the Soviet Union accepted the United States proposal for mandatory challenge inspection, many delegations perceived, for the first time, that a chemical weapons convention was indeed possible. In this light, States that formerly played a less active role in the negotiations are now enunciating national positions and expressing reservations and concerns. We do not have more unresolved issues, we are simply discovering what some of the divergences are. The natural consequence is more discord and less agreed text. But this is a phase of the negotiations that has always been inevitable, and the fact that we have reached that point when we are candidly debating the hard issues is, to our delegation, a sign of progress." (CD/PV.436)

**2 February** Soviet Ambassador Nazarkin responds to another part of the Friedersdorf speech thus: "He asserted that the Soviet Union until recently denied that it possessed any chemical weapons. That is an incorrect assertion. Until last year official Soviet representatives neither asserted nor denied that we have chemical weapons." (CD/PV.436)

**2 February** Concerning President Reagan's 1986 agreement with Chancellor Kohl on removing US chemical weapons from the FRG by 1992, excerpts from a filmed interview with US CD Ambassador Friedersdorf are included in a West German television broadcast: "It is my understanding that it was an oral agreement between the Chancellor and the President which the President considers to be binding. But what the new president will decide, that is quite another thing." (NDR Panorama no 437)

FRG Defense Minister Manfred Woerner says, in a radio interview three days later: "There is absolutely no doubt that the Americans will keep this promise." Binary weapons would not be stationed in the FRG. (Saarland radio cited by dpa 5 Feb, in FBIS-WE 8 Feb) [See further 17-19 Feb]

**4 February** Hungarian Foreign Minister Péter Varkonyi states to the CD that his country "has no stockpile of chemical weapons or industrial establishments manufacturing such weapons. It does not carry out any sort of research on chemical weapons, nor does it intend to possess such weapons in the future. Furthermore, I can reaffirm that no other country stores any kind of chemical weapons or car-



ries out any kind of related activity in the territory of the Hungarian People's Republic." (CD/PV.437)

**4 February** Italian Foreign Minister Giulio Andreotti states to the CD that "for many years, Italy has had no chemical weapons, nor does it station them on its territory." Addressing (implicitly) the French position on 'security stocks,' he proposes a compromise: "We ... believe that all production must completely stop upon the conclusion of the Convention. On this point, a greater negotiating flexibility -- always taking into account the legitimate security requirements of all -- might allow us to overcome the existing obstacles on the basis of solutions envisaging a quicker rate of reduction for the larger arsenals." (CD/PV.437)

**4 February** FRG Foreign Minister Genscher speaks to the CD of the importance of a chemical-weapons ban and of the FRG's proposals in the field of verification. "My Government has the full support of our domestic chemical industry for these proposals." He takes the Andreotti proposal for accommodating the French a step further: "those countries with the largest stocks could first destroy some of their chemical weapons until an agreed level is reached. Only then would linear destruction by all countries possessing chemical weapons be commenced." [Later, on 29 March, the FRG and Italy table a joint working paper on this idea (CD/822).] He questions the military value of chemical weapons: "In reality, they are not weapons, but devices for destroying man and nature.... Chemical weapons are not regarded as a deterrent in the war prevention strategy of the Western Alliance.... NATO relies mainly on conventional and nuclear forces even as a deterrent against the use of chemical weapons by the Warsaw Pact. Only a limited amount of chemical warfare agents is thus kept ready for retaliation in the event of a chemical attack. ...[C]hemical weapons do not therefore perform any function in the North Atlantic Alliance's strategy for the prevention of war." (CD/PV.437)

**5 February** The USA submits a paper to the CD proposing particular quantitative thresholds for the application of nonproduction controls to the different categories of chemical scheduled under Article VI, a matter of crucial importance for the private chemical industry. An effect of the proposal would be to exempt synthesis of laboratory quantities of nerve gases and other Schedule [I] chemicals from international monitoring. (CD/802)

**9 February** The CD finally adopts, after much dispute, a mandate for its Ad Hoc Committee on Chemical Weapons during the 1988 session. (CD/805; CD/PV.438) The mandate does not empower the Committee to proceed with the final drafting of the convention, as all but the Western Group had been urging. To succeed Ambassador Ekéus of Sweden, Ambassador Bogumil Sujka of Poland is appointed Chairman for the year. [Next year's chairman, on past practice, will be from the Western Group.] (CD/PV.436; CD/PV.438)

**11 February** The Western Group at the CD specifies, in a plenary statement by the head of the Italian delegation, particular matters on which it considers the CW negotiations should concentrate "in the upcoming months": (a) further elaboration of the nonproduction-verification régimes, including the 'Schedule [4]' question (Article VI); (b) further elaboration of the implementation machinery, including the powers, functions and interrelationship of the various organs of the international body, and the allocation of its costs (Article VIII); (c) development of a challenge-inspection régime (Article IX); (d) the order of destruction of chemical weapons (Article IV); (e) the potential problem of CW-capable states remaining outside the treaty; (f) multilateral data exchange; and (g) assistance (Article X) and economic and technological development (Article XI). (CD/PV.439)

**11-12 February** The UN Department of Disarmament Affairs holds a forum on "Chemical Arms: Verification of the Future Convention and Institutional Arrangements," in cooperation with the UN Information Service, in Geneva. (SI/03/88 of 1 Feb) The heads of delegations from Brazil, France, FRG, Poland, Sweden, US, and USSR speak. (TASS 12 Feb, in FBIS-SU 16 Feb)

**13 February** A press interview with Gen John Galvin, Supreme Allied Commander Europe, is published. SACEUR reportedly said that chemical weapons "should be stationed with the troops" in Europe. "There are objections against this, [but] stockpiling them in America means we must transport them, which takes longer." If those objections could not be overcome, then stationing in the US must be the alternative. (Süddeutsche Zeitung 13 Feb quoted by dpa 12 Feb, in FBIS-WE 16 Feb)

**15 February** The UK government informs Parliament that the new US binary munitions will not be assigned for use by NATO and will remain solely for the use of US forces. (Hansard (Commons) 15 Feb, written answer)

**15 February** USSR Foreign Minister Shevardnadze says the following to British Foreign Secretary Sir Geoffrey Howe in a luncheon speech during the latter's visit to Moscow: "The US decision on the production of binary weapons looks like a deliberate attempt at provoking the Soviet Union to counter steps in the field of chemical weapons.... We are virtually standing half a step away from agreeing upon a convention on chemical weapons. The binary sabotage, and it cannot be described in any other way, may push us away from the Convention and to a new spiral of the chemical arms race." (Text of speech in Soviet News 17 Feb)

Responding, Howe says: "there is no question of so-called 'binary sabotage' in this respect. We are ready to work hard at the formidable technical difficulties involved [in agreeing on "effective verification" measures] -- are you ready to do the same? We are ready to approach this with the utmost good faith and candor -- are you? We welcome the Soviet government's recent acknowledgement for the first time that you hold 50,000 tonnes of chemical weapons [see 26 Dec 87]. We welcome the willingness of the Soviet Union to put on display at Shikhany chemical weapons of the Forties and Fifties, but these welcome fragments of openness prompt new questions: why so much past denial? Why no evidence of what you have been doing in the last three decades? How can we be confident that 50,000 tonnes is the whole truth?" (Text of speech from UK Central Office of Information; TASS in Pravda 16 Feb, in FBIS-SU 16 Feb)

General Secretary Gorbachev had reportedly told Howe the day before that Britain had grown visibly cool to the signing of the CW Convention. (TASS in Pravda 17 Feb, in FBIS-SU 17 Feb)

**16 February** Romania states to the CD that it "has no chemical weapons and ... there are no stocks of such weapons on its territory." (CD/PV.440)

**17-19 February** FRG Chancellor Kohl visits Washington and, during a meeting with President Reagan, reportedly thanks him for the "clear words" of US Assistant Secretary of State for European Affairs Rozanne Ridgway who, on 18 Feb, had said that Reagan's pledge to remove all US chemical weapons from the Federal Republic by 1992 would remain binding on the next administration. (The Week in Germany 26 Feb) [See 2 Feb]

**18 February** USSR Deputy Foreign Minister Vladimir Petrovsky tells the CD that the verification of the treaty should be so stringent that, as far as stocks of chemical weapons and production facilities are concerned, it "should basically imply international sequestration." He notes with interest the FRG proposal on ad hoc inspections [see 25 Jan].

He introduces a "Memorandum on Multilateral Data Exchange" (CD/808) advocating a two-phased declaration of pertinent information by the negotiating states ahead of the declarations to be required under the treaty itself [see 14 Oct and 10 Nov 87]. And he proposes that "the States participating in the negotiations should agree to designate, on a voluntary basis, one facility each where a specially established international group of experts could test the procedures being worked out at the negotiations for systematic international monitoring of the nonproduction of chemical weapons in commercial industry." [See 14 Apr for Austrian statement] (CD/PV.441)

**18 February** In the USA, the President's Budget for Fiscal Year 1989 is published. The funding which it requests for CW programs is, it later transpires [see 9 March], in the region of \$1100 million. [During the previous year's budget process, an FY89 request of \$1488 million had been anticipated. (Hearings before the Senate Committee on Armed Forces on the Defense Authorization for Appropriations for Fiscal Years 1988 and 1989, Part 4, p 2087) Nearly 90 percent of the difference is due to reductions in the projected Protective Measures programs.]

**22 February** The communiqué from the Shevardnadze-Shultz meeting in Moscow states: "The Ministers discussed questions related to truly global, all-embracing banning of chemical weapons, lending itself to effective verification. They discussed outstanding problems, exchanged views on the ways of confidence-building and enhancing openness and agreed to study the ideas about concrete ways of ensuring progress and intensifying talks to conclude a convention applying to all countries capable of having chemical weapons." (Pravda 23 Feb, in FBIS-SU 23 Feb)

Shultz said afterwards, "We had a thorough discussion, within the working group, at minister level, and with Mr. Gorbachev, of questions of chemical armaments." (TASS in Pravda 24 Feb, in FBIS-SU 24 Feb)

**23 February** In the USA, Army Undersecretary James Ambrose announces the Army's decision to incinerate chemical weapons at each of the eight US locations where they are held instead of, for example, transporting them to one or two centralized incinerators [see 29 Dec 87]. (Federal News Service 23 Feb; AP in New York Times, Washington Post 24 Feb)

**3 March** NATO Heads of State and Government conclude a 2-day meeting in Brussels, issuing a declaration which, in the words of the British government, "confirms that it is the aim of all NATO states to achieve a comprehensive, verifiable and global ban on all chemical weapons." (Hansard (Commons) 17 Mar, written answer)

**8 March** The eighth round of the US-Soviet Chemical Weapons Treaty Talks begins in Geneva. It is due to end on 25 March. (TASS 8 Mar, in FBIS-SU 9 Mar)

**9 March** In Geneva there are further trilateral talks on CW between Czechoslovakia, the FRG and the GDR represented by their CD delegations. The idea of a central-European CW weapon-free-zone is reportedly discussed once more. (CTK 9 Mar, in FBIS-EE 10 Mar)

**9 March** The US Defense Department testifies as follows to the Congress: "The binary chemical warhead [for the Army's Multiple Launch Rocket System, MLRS] continues in advanced development and transition to engineering development is scheduled for this summer.... [It] affords the intermediate capability to provide a high volume of fire to the expected massed targets beyond artillery range." A production decision is expected in the early 1990s. (Statement of Thomas Welch before a House Armed Services subcommittee)

The testimony identifies the following items in the FY89 chemical-warfare budget (in millions of dollars):

#### Retaliatory program

\$ 66.0	-	procurement of the 155mm binary GB artillery shell
99.4	-	procurement of the binary VX Bigeye bomb
37.6	-	MLRS binary warhead R&D
4.4	-	MLRS military construction
16.4	-	MLRS production facility equipment

#### Protective measures

\$636 - chemical defense

The last item, which includes \$418 million for procurement of chemical-defense equipment, is said to represent 58 percent of the total budget, which would therefore be some \$1100 million. No figure was given for the third major programme component, namely chemical-weapons demilitarization [\$174.5 million, according to the House Armed Services Committee Report on the FY89 Defense Authorization Bill].

**10 March** An official Italian delegation led by A Negrotti visits Moscow to discuss the CW Convention with the Soviet government. (TASS 10 Mar, in FBIS-SU 14 Mar)

**15 March** Norwegian Foreign Minister Thorvald Stoltenberg tells the CD: "Norway has no chemical weapons and has stated unequivocally that such weapons shall not be stationed on Norwegian territory." (CD/PV.448)

**15 March** The head of the Soviet delegation tells the CD that the USSR is "prepared to include in the agreement on the order of destruction [of chemical weapons] the principle of levelling out the participants' stocks by the penultimate year of the destruction process." As regards non-production verification, on which he puts forward a number of detailed suggestions, he insists that even laboratory synthesis of Schedule [1] chemicals should be subject to strict international control. (CD/PV.448)

**16 March** The US Defense Department reports to Congress that destruction of the nonbinary US CW stockpile in the manner which the Army had decided upon last month [see 23 Feb] would take until 1997 [rather than October 1994, as the 1986 Defense Authorization Act had stipulated]. "Funding constraints and delays in completing environmental documentation are responsible for extending the completion of the disposal program." The total cost would be \$2.7 billion in 1988 dollars. (UPI, cited in Current News 17 Mar; AP in Journal of Commerce 22 Mar)

**16-17 March** US Defense Secretary Frank Carlucci and USSR Defense Minister Dmitri Yazov meet in Bern, Switzerland, for talks that include the topic of banning chemical weapons. (London Times 17 Mar; Soviet News 23 Mar)

**17 March** CPSU General Secretary Mikhail Gorbachev, in Belgrade addressing the Yugoslav Federal Assembly, says: "We will give all the necessary guarantees should it be decided to create a zone free of nuclear and chemical weapons in the Balkans." (Text of speech in Soviet News 23 Mar)

**17 March** The head of the French delegation comments adversely to the CD on the Soviet multilateral data exchange proposal [see 18 Feb] and conspicuously makes no disclosure of information about French chemical weapons. He continues to insist on the need for the post-treaty 'minimum security stock' to be "supplemented by production unit placed, from the moment of entry into force, under international control." (CD/PV.449)

**18 March** The Iranian government calls upon the UN Secretary General to investigate Iraqi CW attacks which it said had taken place in several parts of Kurdistan over the previous two days, killing at least 4000 people and injuring many more. (UN docs S/19647 and S/19650) Later it says the CW casualties in and around Halabja, in particular, during 16-18 March totalled 12,500 (CD/827 of 12 Apr), including more than 5500 dead (CD/PV.450 of 22 Mar).

**21 March** Iran reiterates its request to the UN for an investigatory mission. (UN doc S/19665) Iranian authorities fly a party of Western journalists 25 miles into Iraq to Halabja, which is a Kurdish town that Iranian forces had seized and occupied the previous week. The journalists film, photograph and report seeing many corpses lying in the streets, including those of young families, apparently dead from quick-acting poison gas. (London Times and London Daily Telegraph 22 Mar; Toronto Globe & Mail and Washington Post 24 Mar)

**21-23 March** A further meeting between US State Secretary Shultz and Soviet Foreign Minister Shevardnadze after which the latter says: "We have had a generally good discussion of the problem of the prohibition of chemical weapons. As recently agreed, we have handed to the U.S. side a draft statement on the prohibition of chemical weapons which our leaders could make at their meeting in Moscow." (TASS in Soviet UN mission press release 24 Mar)

**23 March** In Washington, US State Department spokesman Charles Redman says of the Halabja episode, after condemning what "appears to be a particularly grave violation of the 1925 Geneva Protocol," that "there are indications that Iran may also have used chemical artillery shells in this fighting." He declines to elaborate on this statement. (Washington Post 24 Mar)

**25 March** The UN Secretary-General finally decides to dispatch a mission to investigate the recent reports of Iraqi CW. (UN doc S/19823)

**25 March** In Geneva the eighth round of the US-Soviet Chemical Weapons Treaty Talks [see 8 Mar] ends. Later, on 14 April, the heads of the two delegations tell the CD that, after two years of joint effort, agreement had finally been reached during the round on a common approach to the elimination of chemical weapons production facilities. They had furnished a joint paper on this to the Ad Hoc Committee. (Texts from the US and Soviet Geneva missions) The paper is reproduced in Appendix II of the Ad Hoc Committee's subsequent report to the CD [see 20 Apr].

**29 March** Burma states to the CD that she "does not possess, develop, produce, stockpile or use chemical weapons. Nor will she do so in future." (CD/PV.452)

**31 March** The head of the Chinese delegation reaffirms to the CD his country's chemical-weapons-nonpossessor status. (CD/PV.453)

**5 April** Iraq asks the UN Secretary General to send a mission to Baghdad "in order to examine the wounded and obtain detailed information about the attack." The attack referred to is stated to have been an Iranian artillery and aircraft chemical attack upon Iraqi troops in the Halabja sector during 30-31 March. (INA 4 Apr, in FBIS-NE 5 Apr; UN doc S/19730 cited in S/19823)

The UN Secretary General decides to meet the request. He dispatches the medical specialist who had just finished investigating the Iranian complaints. (UN doc S/19823)

**5 April** The executive committees of the Czechoslovak and East German Communist parties and that of the West German Social-Democratic Party reaffirm, in a joint statement, their 1985 initiative for a CW weapon-free-zone in central Europe. (ADN 5 Apr, in FBIS-EE 5 Apr)

CPSU General Secretary Gorbachev tells one of the architects of this initiative, Egon Bahr of the FRG who was that day visiting Moscow, that he continues to support it, adding that such a zone "could accelerate advance to the ultimate aim -- the total prohibition of chemical weapons." (Soviet News 6 Apr)

**7 April** France tables a proposal in the CD Ad Hoc Committee that would amend Articles I, IV, V and IX of the draft Convention so as to accommodate the French security-stock concept. (CD/CW/WP.199) It attracts no support and much opposition. (CD/831)

**11 April** In a formal submission to the CD, Iran transmits a "list of occasions of use of chemical weapons by the Iraqi régime ... from [13] January 1981 to [22] March 1988." The list records more than 44,000 casualties in 242 episodes. (CD/827)

**11-15 April** Visiting Washington, Baltimore and Boston under US academic auspices, three senior Soviet health officials give presentations and respond to questions about the 1979 outbreak of anthrax in Sverdlovsk. They meet with US and other specialists, governmental and nongovernmental, for detailed discussions. (New York Times 14 Apr; Washington Post 13&14 Apr; Baltimore Sun 15 Apr; New Scientist 21 Apr; Nature 21 Apr; Science 22 Apr; Boston Globe 25 Apr)

**12 April** Iran repeats to the CD: "we have never used chemical weapons and we will not use chemical weapons." (CD/PV.456)

**14 April** Bulgarian Foreign Minister Petar Mladenov states to the CD that Bulgaria "is not developing, does not manufacture, and does not possess chemical weapons. There are no foreign chemical weapons on our territory." (CD/PV.457)

**14 April** Austrian Foreign Minister Alois Mock, addressing the CD, offers Vienna for the seat of the treaty's international organization. He states that some Austrian chemical enterprises have indicated their readiness to cooperate with the CD by serving as a model facility to allow a test of the specific verification machinery and the financial implications [see 18 Feb]. (CD/PV.457)

**14 April** US Ambassador Friedersdorf, in a CD plenary statement, offers a detailed review of progress during the 1988 CD session thus far, enunciating in some detail the US position on particular unresolved issues. These include order of destruction, the complex of issues underlying 'Schedule [4]' and, especially, the intertwined questions of challenge-inspection modalities and Executive-Council composition and functions. (Text from US mission)

**14 April** The FRG submits to the CD a paper (CD/828) setting out a philosophy for multilateral data provision prior to the signing of the Convention. (CD/PV.457) It was submitted on behalf of "a group of Western countries," rather than the Western group as a whole because France had dissented. Speaking in support of the proposal at the next meeting of the CD, the UK says there is no need for actual negotiations about data exchange; each state could provide unilaterally as much data as possible as soon as possible within the categories which the paper identifies as "the minimum data exchange required for drafting purposes." (CD/PV.458)

15 April Date for the USSR [dated 5 April], US [dated June] and other BWC parties to submit to the UN Office of Disarmament Affairs their first annual voluntary reports which exchange information on biological research activities, as called for by the second review conference on the BWC. [See 13&15 Oct 1987 for preliminary reports]

19 April The GDR and Czechoslovakia propose talks to the FRG on creating a CW weapon-free zone in their three countries. Their messages, delivered in Bonn, say that such an initiative is necessary in order to overcome blockages in the Geneva talks. The FRG later rejects the proposal. {CTK 19 Apr, in FBIS-WE 20 Apr; Financial Times 21 Apr}

19 April US Ambassador Friedersdorf speaks at the CD of the "constructive approach" embodied in the Soviet facility-trial proposal [see 18 Feb], but says: "We believe that a test of verification procedures at commercial facilities would be premature at this stage, since the procedures themselves have not been developed in the CD. The first step must be for each country with facilities subject to inspection to do its homework. United States experts are already actively engaged in developing inspection procedures for commercial facilities." {CD/PV.457}

20 April The CD Ad Hoc Committee produces a new 'rolling text.' It is for inclusion in the special report which the CD will be submitting to the UN General Assembly for its imminent Third Special Session on Disarmament. The progress it registers is modest. There is additional language in Article VIII (The Organization), but mostly on the projected Technical Secretariat, not the more difficult Executive Council. What used to be Annex [4] to Article VI (now 'Annex [...]') has been much narrowed in scope, its provisions now applying only to "supertoxic lethal chemicals not listed in Schedule [1]" (instead of "toxic chemicals, not listed in Schedules [1], [2] or [3] that might be relevant to the convention"), and its verification régime now made identical to that of Annex [2]. And the specification of toxicity-determination procedures has been upgraded from its Appendix III status [see 2 Feb for previous review] into the 'rolling text' itself.

The appendix to the rolling text, however, (which is for material on which consensus is still being developed) includes some notable additions: the bilateral US-Soviet text on chemical weapons production facilities [see 25 Mar], still undergoing multilateral scrutiny; a new attempt at defining 'production capacity'; and tentative language for Articles X-XVI. {CD/831}

22 April The joint communiqué issued after two days of talks in Moscow between US Secretary of State Shultz and Soviet Foreign Minister Shevardnadze, during which a working group on chemical weapons was formed, includes this: "The sides reviewed the status of bilateral and multilateral negotiations in Geneva toward a comprehensive and effectively verifiable chemical weapons ban encompassing all chemical-weapon-capable states. The Secretary and the Foreign Minister instructed their delegations to undertake further constructive work, including in such areas as confidence-building, openness, verification, and the security of states parties, to contribute to the elaboration of a multilateral convention banning chemical weapons. They also noted their concern over the growing problem of proliferation and use of chemical weapons." {State Department unclassified cable}

TASS says that the Soviet side offered a number of specific steps which would make it possible to speed up the drafting. {TASS 22 Apr in Soviet Geneva mission press release}

24 April Iranian UN Ambassador Mahallati calls for another UN investigatory mission to be dispatched to Iran, saying that Iraqi CW attacks continued even as the world waited for the report of the mission. {IRNA 24 Apr, in FBIS-ME 25 Apr}

25 April The UN Secretary-General releases the report of his mission of inquiry into the allegations of Iraqi and Iranian chemical warfare. The report had been transmitted to him on 14 April. In contrast to previous missions, the only technical expert on this one had been a medical specialist. In Iraq he had visited a military hospital and, in Iran, sites of alleged CW attack as well as medical establishments. He had not been able to travel to the Halabja area, where all of the patients he examined in Iraq, and some of those he examined in Iran, were said to have been injured. He found that, in most of the cases he examined in both countries, the patients had been exposed to mustard gas. In a few of the cases examined in Iran and, with much less certainty, Iraq, an unidentified anticholinesterase agent was also implicated. The report had nothing to say about which side's weapons had injured the Iraqi soldiers. From his observations in Iran he "inferred that, compared with previous years, there has been an increase in the intensity of the attacks with chemical agents, in terms of both the number of victims and of the severity of injuries sustained. Furthermore, there appeared to be a higher proportion of civilians among those affected than in previous investigations." {UN doc S/19823}

25 April The British government states in Parliament that there are no stockpiled chemical weapons in the United Kingdom nor any production centers for chemical weapons. {Hansard (Commons) 25 Apr, written answer}

26 April The head of the Soviet delegation says this to the CD: "Let me recall our statement that chemical weapons stocks in the USSR do not exceed 50,000 tons in terms of toxic substances [see 26 Dec 87]. Under 'chemical weapons' we understand both chemical munitions and toxic substances in bulk." {Text from Soviet mission}

28 April In an Arms Control Reporter interview with Indian ambassador to the CD Rakesh Sood, he said that India was not opposed to on-site inspection on challenge, but only to its being treated as a bilateral, rather than a multilateral, matter. The official said differences lay in:

- o Who would determine whether the alternative measures offered, instead of access, were adequate. The US wanted the challenging state to do so, while India wanted the inspectors to do so. Perhaps the Executive Council would have time to make a decision.

- o Who would decide whether a violation had occurred. The US wanted only the challenging state to decide, while India wanted the Executive Council to do so. The US argued that the challenging state might have more information than provided by the on-site inspection. India said the private information should be provided, even if not made public. If the challenging state were dissatisfied with the decision of the Executive Council, it could issue another challenge or a separate statement.

The West wanted the Executive Council to meet only if the challenging state decided a violation had occurred. The Executive Council should approve the finding, and condemn the violation.

India argued that the challenging state and the challenged state could privately decide not to recognize the violation. This would not help other states and did not reduce international insecurity.

- o The Executive Council would decide by a two-thirds vote. Appropriate allocation of seats would ensure that no alliance could veto a finding. India suggested 6 seats for the West, 6 for the East, and 12 for non-aligned. To guard against abstentions, the Council should have no quorum.

The official said the Indian position stemmed from two principles: first, once the issue moved from a

bilateral problem to a multilateral problem with the involvement of the Organization, it became the concern of all; second, the multilateral process should not be used to resolve a bilateral problem.

**28 April** The CD ends its Spring session.

**3 May** The US Defense Department, represented by Thomas Welch, testifies to Congress that the number of nations "having or suspected of having" programs in offensive biological warfare had grown from four in 1972 to 10 in 1988, and that, during the same period, the number of nations with offensive chemical programs had grown from seven to 20. (New York Times 5 May)

**3 May** The US House of Representatives, in actions on its 1989 Defense Authorization bill, denies all but \$1.2 million of the \$186 million sought in the President's Budget as additional production funding for binary munitions [see 9 Mar]. (Congressional Record 3 May, H2847-48)

**9 May** UN Security Council resolution "Condemns vigorously the continued use of chemical weapons in the war between Iran and Iraq contrary to the obligations under the Geneva Protocol," "Expects both sides to refrain from the future use of chemical weapons ..." and "Calls upon all States to continue to apply or to establish strict control of the export to the parties to the conflict of chemical products serving for the production of chemical weapons." (S/RES/612)

**12 May** The US Army publishes its Draft Programmatic Environmental Impact Statement on the Defense Department's biological defense research program [see Bibliography]. This is in consequence of a lawsuit brought in 1986 by the Foundation on Economic Trends. (Washington Post 13 May)

**15 May** Iraqi CW attacks are again reported by the official Iranian news agency. (IRNA 15 May, in FBIS-ME 16 May)

**20 May** The US Information Service distributes a briefing paper by the US Arms Control and Disarmament Agency on the CW negotiations which says that, although the USSR has been pressing publicly for rapid conclusion of the projected treaty, "their experts have not followed up in the negotiations with detailed proposals on how to resolve outstanding issues." (Text from the London US Embassy)

**20 May** The US General Accounting Office, in a monitoring report on the Bigeye program, states that "a great deal of work" remains to be done on the weapon, and that "[q]uestions about operational capability remain unanswered." (GAO/PEMD-88-26)

**24-26 May** In the UK, 13 Soviet officials visit the Defence Ministry's Chemical Defence Establishment at Porton Down as part of an Anglo-Soviet exchange of technical visits which the British government had proposed in 1986. The visitors are led by CD Ambassador Nazarkin, and include the commandant of Shikhany and Lt-Gen A Kuntsevich [see 3-4 Oct 87]. The program, which also takes in the former biological-warfare research establishment (now converted to civil use) at Porton and the military training establishment at the nearby Defence NBC Centre, is "designed to maximise the opportunities for the exchange of information and for confidence building between the two sides." Its first day includes a helicopter overflight "to enable our visitors to identify additional points to visit." The British return visit, to Shikhany, is scheduled for [June 30 - July 2]. (Hansard (Commons) 5 May, written answers; Defence Ministry releases, 24 and 26 May)

**1 June** From the Moscow Summit there issues a joint Gorbachev-Reagan communiqué which includes the following: "The leaders reviewed the status of ongoing multilateral negotiations and bilateral Soviet-US consultations toward a comprehensive, effectively verifiable and truly global ban on chemical weapons, encompassing all chemical weapons-capable states. They also expressed concern over the growing problem of chemical weapons proliferation and use.

"The leaders reaffirmed the importance of efforts to address, as a matter of continuing urgency, the unique challenges of a chemical weapons ban and to achieve an effective convention. While noting the progress already achieved in the talks and the difficult problems with regard to effective monitoring of the global prohibition of chemical weapons and the nonuse of dual-capable chemicals for chemical weapons purposes, the leaders underlined the need for concrete solutions to the problems of ensuring effective verification and undiminished security for all convention participants. They gave instructions to their respective delegations to this effect.

"Both sides agreed on the vital importance of greater openness by all states as a way to build confidence and strengthen the foundation for an effective convention. The leaders also emphasized the necessity of close coordination on a multilateral basis in order to ensure the participation of all CW-possessing and CW-capable states in the convention.

"Both sides strongly condemned the dangerous spread of illegal use of chemical weapons in violation of the 1925 Geneva Protocol. They stressed the importance of both technical and political solutions to this problem and confirmed their support for international investigations of suspected violations. Noting the initial efforts being made to control the export of chemicals used in manufacturing chemical weapons, the leaders called on all nations with the capability of producing such chemicals to institute stringent export controls to inhibit the proliferation of chemical weapons." (Federal News Service 1 June)

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## CALENDAR

- o Conference on Disarmament Summer Session, 7 July - 15 September
- o Public Forum on BW EIS, Rosslyn VA, 25 July
- o Working Party on Chemical and Biological Weapons, meeting in London, 15-16 September
- o "Australia Group" meeting, November
- o AAAS annual meeting, sessions on CW and BW treaties, San Francisco, 15-20 January 1989

## BIBLIOGRAPHY

### SOME RECENT PUBLICATIONS

Listed here are noteworthy publications which came to our attention during the period covered by the Chronology. Those marked with an asterisk (\*) contain descriptions of events during that same period which usefully supplement the Chronology.

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- Compagnon, Jean, "L'interdiction de armes chimiques," Defense nationale, March 88, pp 131-147
- Carreon, Rodolfo, "NBC defense in Aviation operations," US Army Aviation Digest, Oct 1987, pp 38-45
- Cole, Leonard A, Clouds of Secrecy: the Army's germ warfare tests over populated areas, Totowa NJ: Rowman & Littlefield, 1988
- , "Cloud cover," Common Cause, 1 Jan 88, 6 pp; also in Current News Special Edition 4 Feb 88
- Thomas A. Connolly, "Warrantless on-site inspections for arms control verification: are they constitutional?" Stanford Journal of International Law, Fall 1987, pp 179-226
- Current News Special Edition: Chemical Weapons, 3 Nov, 17 Dec 87; 4 Feb, 17 March, 28 April 88
- \*Dickson, David, "Hopes recede for early ban on chemical arms," Science, vol 240, pp 22-23 (1 Apr 1988); also in Current News Special Edition 28 Apr 88
- Economist, "Chemical warfare: ban the world's machineguns," 4 June 1988
- \*Ember, Lois, "Fashioning a global chemical weapons treaty," Chemical & Engineering News, 28 March 1988, pp 7-17; also in Current News Special Edition 28 Apr 88
- \*Evans, Rowland, and Novak, Robert, "A chemical warfare surprise," Washington Post, 9 Dec 88, p 21; also in Current News Special Edition 4 Feb 88
- \*Flowerree, Charles C, "Elimination of chemical weapons: is agreement in sight?" Arms Control Today, vol 18 no 3 (Apr 1988), pp 7-10
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- , The Soviet Biochemical Threat to NATO, New York: St. Martin's, 1987
- \*International Institute for Strategic Studies, "Chemical weapons and arms control," in Strategic Survey 1987-1988 (London: IISS, Spring 1988), pp 55-63
- Issraelyan, Victor L, "[Washington and the prohibition of chemical weapons], SShA: Ekonomika, Politika, Ideologiya, Dec 1987, pp 42-51 (in Russian). English translation: FBIS-SU ANNEX 29 Dec 87
- Krause, Joachim, "Stand und Perspektiven der Verhandlungen über die Abrüstung chemischer Waffen." Stiftung Wissenschaft und Politik, Ebenhausen (FRG), report no SWP-AP2557, March 1988
- \*Lohs, Karlheinz, and Robinson, Julian P, "Report on the [13th] Workshop [of the Pugwash Chemical Warfare Study Group]," Pugwash Newsletter, vol 25 no 3 (Jan 1988), pp 120-22
- ; Stock, Thomas; and Kläss, Volker, "Internationale und nationale Methoden der Verifikation regionaler und globaler Vereinbarungen zum Verbot chemischer Waffen," Zeitschrift für Chemie (Leipzig), vol 27 (1987), no 10, pp 349-57
- McFadden, Eric J, "The Second Review Conference of the Biological Weapons Convention: one step forward, many more to go," Stanford Journal of International Law, vol 24 no 1 (Fall 1987), pp 85-109
- \*Marshall, Eliot, "Progress on a chemical arms treaty," Science, vol 238, pp 471-2 (23 Oct 1987)
- Pikalov, Vladimir [Commander of USSR Chemical Troops], "Banning chemical weapons: a proposal from the [Soviet Ministry of Defense on a critical issue," Defensé Science, vol 7 no 4 (Apr 1988), pp 6-10
- Piller, Charles, and Yamamoto, Keith R, Gene Wars: military control over the new genetic technologies, New York: Morrow, 1988
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#### FOR FURTHER BACKGROUND

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 SIPRI, World Armaments and Disarmament: SIPRI Yearbook, London & Philadelphia: Taylor & Francis, 1988 (annual) [chapter on CBW with extensive bibliography]  
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 World Health Organization, Health Aspects of Chemical and Biological Weapons, report of a WHO group of consultants, Geneva: WHO, 1970 [still in print]

#### ADDITIONAL MATERIAL AVAILABLE FROM FAS

- o Draft paper on US and Soviet 1987 declarations under the Biological Weapons Convention
- o Informal papers discussing 1) the "Western" estimate of the Soviet CW stockpile and Western coverage of the Shikhany visit and 2) coverage of CW in the Soviet press
- o Nikita Smidovich [Soviet CD negotiator], "Statement on Challenge Inspection," given at conference in Ottawa, 7-9 Oct 1987
- o FAS Issue Briefs:
  - Bigeye and 155mm artillery shell binary program
  - Soviet statements on CW data exchange
  - Removal of US CW from FRG
  - CW statements at Dec Summit press conferences
  - Soviet CW stockpile declaration (Dec 1987)
  - Soviet statements on their possession of CW
  - Iraqi CW in Gulf War
  - US Demilitarization Program
  - Soviet presentation on Sverdlovsk and press release
  - Soviet statements on AIDS and US BW program
  - Challenges to US BW program

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