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CHEMICAL DISARMAMENT: FROM THE BAN ON USE TO A BAN ON POSSESSION

by Jozef Goldblat

The 40-nation Conference on Disarmament (CD), meeting in Geneva, has discussed for some years a treaty on chemical disarmament. There are still many problems that remain to be solved before a convention effectively prohibiting the possession of chemical weapons can be signed. However, the *number* of controversial political issues relating to the convention has diminished; the outstanding controversies are mostly of a technical nature.

Chemical disarmament is now the most promising item on the agenda of the multilateral arms control negotiations; the treaty is no longer a distant goal, but a real possibility.[1] The CD faces the task of transforming this possibility into reality. The task is urgent, because, in addition to the use of chemical weapons in the Iran/Iraq War, at least two great powers, the USA and France, have started or are about to start the production of new systems of such weapons, in spite of the ongoing negotiations for a total ban.

THE GENEVA PROTOCOL

On 17 June 1925, a protocol was signed in Geneva prohibiting the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, as well as the use of bacteriological methods of warfare.

Origins of the Protocol

In the part dealing with gases, the Protocol ratified a prohibition previously declared in various international documents. These included the 1899 Hague Declaration under which the contracting powers had agreed to abstain from the use of projectiles for the diffusion of asphyxiating or deleterious gases. The 1907 Hague Convention prohibited the use of poison or poisonous weapons. The need to restate the prohibition was prompted by the experience of World War I, during which the extensive use of poisonous gas had resulted in more than one million casualties.

Weakness of the Protocol

The Geneva Protocol is deficient in that it restricts its non-use obligation to the conditions of 'war' — instead of making it applicable to armed conflict in general —and to relations 'as between' the parties, instead of being valid *vis-a-vis* all states. However, according to a widely shared opinion, the Protocol is already part of customary international law. For many years the UN General Assembly has stressed, in a series of unanimous resolutions, the necessity for strict observance of the principles and objectives of the Protocol by *all* states.

Critics of the Geneva Protocol often refer to the fact that the ban on use is conditional: in joining this treaty, over 40 states, among them all the great powers, made a reservation that they would not be bound by its prohibitions towards any state whose armed forces did not respect it.

The absence of a mechanism to verify compliance is an important gap in the Geneva Protocol. But this gap has in essence been filled by the 1982 UN General Assembly resolution empowering the Secretary-General to investigate possible violations of the Geneva Protocol or the relevant rules of customary

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international law, and allowing for on-site collection of evidence.[2] Procedures for such investigations have been elaborated by a group of consultant experts. Its report, submitted in 1983 and supplemented in 1984, specifies criteria for initiating an investigation of alleged breaches, and guidelines for its organization and implementation.[3] The Secretary-General has a list of names of qualified experts who are available at short notice to undertake an investigation, and a list of laboratories which could test for the presence of prohibited chemical agents.

The Imperative of Disarmament

The main weakness of the Protocol is one inherent in all rules of conduct in war: having been agreed to in time of peace, they may not stand up to the strain of actual hostilities. As long as states are allowed to retain weapons, improve their quality and increase their stocks, any ban on their use is likely to yield to military exigencies. The way to ensure that a prohibited weapon is never used is by concluding an international convention prohibiting its very possession, and by having the prohibition universally observed.

A step in this direction was made in 1972 with the signing of the Biological Weapons (BW) Convention, which prohibits the development, production, stockpiling or acquisition by other means, or retention of biological agents and toxins. It also bans weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict. The remarkable feature of this Convention is the requirement to destroy the biological weapons, or to divert them to peaceful purposes. However, because of their uncontrollability and unpredictability, biological weapons have always been considered of little utility.

Chemical weapons are deemed to be militarily more useful and more predictable than biological weapons. They can bring about a great variety of effects on humans, animals and plants; they can be used with different delivery vehicles, such as hand grenades, artillery shells, missiles, aerial bombs or spray tanks, as well as rocket launchers; and they can produce effects over a much larger area than explosive munitions of a comparable weight. For these and other reasons, the parties to the BW Convention recognized that it was only a step towards an agreement prohibiting the possession of chemical weapons as well. Indeed, biological weapons had, from the early 1920s, been considered together with chemical weapons, and were closely associated with them in the public mind. Without the inclusion of a formal commitment in the BW Convention that an analgous treaty should be reached regarding chemical weapons, many countries would probably have refrained from joining the Convention.

NEGOTIATIONS FOR A CHEMICAL WEAPONS CONVENTION

According to Article IX of the BW Convention, a comprehensive ban on chemical weapons was to be reached at an 'early' date, but the bilateral US-Soviet talks, as well as the multilateral negotiations, have so far failed to produce the desired agreement. A series of important obstacles which had stood in the way of a treaty were removed only in the past year or two. In particular, the Soviet Union has accepted the principle of mandatory on-site inspection on challenge, which can be set in motion, on very short notice, upon request by any state party suspecting a violation. It has thus acceded to the view held by the United States since 1984. Moreover, the Soviet Union, which earlier had not even admitted to possessing chemical weapons, followed the US example set 18 years before and announced that it had ceased the production of such weapons. It also declared that it did not have chemical weapons outside its borders, and that it had begun the construction of a special facility for the destruction of chemical weapon stocks. These various statements, coupled with international visits to US and Soviet chemical weapon storage facilities, have helped to build a significant measure of confidence in the seriousness of the superpowers' intent to be rid of chemical weapons. The signing in December 1987 of the US-Soviet Treaty eliminating a whole class of nuclear weapons — the intermediate-range nuclear forces — has created an international climate propitious for the elimination of chemical weapons as well.

AREAS OF AGREEMENT

Scope of the obligations. The aim of the envisaged convention is to bring about general and complete chemical disarmament and thereby to complement the 1925 Geneva Protocol. Consequently, the parties should undertake not to develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer them to anyone, as well as not to assist, encourage or induce others to engage in these activities.

In order to ensure the implementation of these undertakings, all chemical weapons and chemical weapon production facilities would be declared to an international authority and placed under international

control. This would provide for on-site inspections conducted by international inspectors, both systematic and *ad hoc*, as well as continuous monitoring with specialized on-site instruments. The purpose would be to prevent the clandestine removal of chemical weapons from the declared stocks, and to preclude further chemical weapon production. It is noteworthy that, after years of hesitation, the Soviet Union has finally expressed its readiness to describe the precise locations and to declare the detailed inventory of its chemical weapons upon entry into force of the convention.[4] Only France is still opposed to an early and complete disclosure of stocks. France claims, on security grounds, the need for each state to preserve for a number of years a certain amount of chemical weapons at undeclared locations.

Elimination of chemical weapon stocks and production facilities would be carried out under international supervision within a 10-year period, beginning not later than 12 months after the convention became effective. Stocks are to be eliminated by destruction. Production facilities would be either destroyed or dismantled, or converted into facilities for the destruction of chemical weapons.

The parties would have the right to produce, or otherwise acquire and use toxic chemicals for purposes not prohibited by the convention, but these chemicals, as well as the facilities producing them, would be subject to international verification.

Verification of compliance. Since different categories of chemicals would require verification regimes with different degrees of stringency, control lists or 'schedules' have been drawn up for each category.

One such schedule includes chemical compounds which are known as chemical weapons, such as nerve agents, mustard gas, or ingredients of the so-called binary munitions,* and which may be produced only for research or medical purposes and/or protective purposes, and only in very limited quantities and under very strict international control. Another schedule specifies key precursors (that is, chemical substances of importance in the manufacture of chemical weapons), the production, consumption, import and export of which would have to be regularly declared to avoid diversion to prohibited purposes. Each facility producing more than a certain set quantity of key precursors would be subject to routine inspections. Yet another schedule enumerates chemicals which have a weapon potential, but are used on a large scale for legitimate peaceful activities, such as phosgene, chlorine or hydrogen cyanide, and must therefore be subject to some international monitoring. All lists are only preliminary.

The reporting of data, using monitoring equipment and carrying out systematic on-site inspections, would be the common verification measure. Its function would be to confirm that prohibited activities were not taking place and that parties were fulfilling their obligations. Bilateral and multilateral consultation would be envisaged on any matter which might be raised relating to the objectives or the implementation of the convention.

Inspections on challenge would be resorted to only exceptionally: in those cases when allegations had been made that chemical weapons were being clandestinely stored, produced or otherwise acquired, transferred or used, and when these concerns could not be resolved by routine measures. The procedure would have to be a rapid one to allay suspicions; 48 hours has often been mentioned as a desirable time span from the request to the arrival of inspectors at the site to be inspected. It is understood that the burden of proof of innocence would then be on the accused party. In any case, the on-challenge inspection regime is meant to serve primarily as a deterrent against violations rather than as a method of disclosing them.

Finally, there is broad agreement concerning the required international institutional arrangements: a 'consultative committee', or a 'general conference,' the principal organ of the convention, would have the responsibility for overseeing and reviewing its implementation.

AREAS OF MAJOR DISAGREEMENT

Order of destruction. While it is accepted that the destruction of chemical weapon stocks should start simultaneously for all states possessing such stocks, and that the principle of undiminished national security should be observed throughout the destruction process, there are sharp differences of opinion regarding the actual order of destruction. In 1985, China worked out a special formula for a balanced order of destruction of chemical weapon stockpiles to prevent any of the parties possessing chemical weapons from gaining a military advantage, but the formula was found by many to be too complicated and was never thoroughly discussed. The Soviet Union proposed that, in view of

* That is, munitions filled with two chemicals of relatively low toxicity, which mix and react while the munition is being delivered to the target, the reaction product being a supertoxic agent.

possible differences in the composition of chemical weapon stockpiles, and because of technical difficulties in working out a means of comparing various categories of chemicals, the entire elimination period should be divided into nine one-year subperiods. Within each subperiod the parties concerned would have to eliminate no less than one-ninth of their chemical weapon stockpiles in each of the existing categories.[5]

Mexico and Argentina would prefer that the most dangerous chemical weapons be destroyed first, whereas the least lethal ones would be left until the end of the destruction process. Such an order would, in the view of these two countries, help build confidence from the early stages of the convention's implementation.[6]

France has put forward a concept of 'security balance,' which would allow each country — during the first eight years after entry into force of the convention — to keep and maintain a stock of chemical weapons. This so-called security stock, composed of munitions (shells, rockets, bombs, etc.), could contain up to 1000-2000 tons of toxic chemicals, including nerve agents, which is the amount regarded by France as militarily significant. The stock would be declared at the end of the eighth year, and be subject to destruction only during the ninth and tenth years, or even later, if the agreed 10-year period of stock destruction were to be extended and the timetable called into question. To ensure the maintenance of the security stock, as well as its renewal and modernization, the parties would also be allowed — according to the French scheme — to possess technical means for the production of toxic chemicals and chemical munitions. The relevant production facility would be destroyed or withdrawn from service before the end of the ninth year after entry into force of the convention.[7]

The French proposal has met with criticism. It was interpreted by many as an encouragement to those countries which do not possess chemical weapons to acquire them, contrary to the objective of the planned convention. Pakistan said that secret stockpiling of chemical weapons by the parties, even in limited quantities, would deepen suspicion among states and undermine confidence in the concluded agreement.[8] The Soviet Union considered that the French proposal would lead to a legalized proliferation of chemical weapons and, thereby, to 'increased insecurity.'[9]

'Balanced' security on a world-wide scale could be achieved either by building up chemical arsenals in non-chemical weapon countries or by eliminating all existing chemical weapons. The first solution amounts to re-armament. It is the second solution that constitutes the essence of the convention now under consideration. French comparisons between a chemical weapons convention and the 1968 Non-Proliferation Treaty (NPT), made with the purpose of demonstrating the alleged unequal treatment of the parties, seem out of place.[10] The NPT contains only a pledge to pursue negotiations on measures of disarmament, whereas a chemical treaty would provide for actual disarmament to be completed within a specified period of time.

Moreover, the principle of undiminished security in the process of eliminating the chemical weapon potential is applicable exclusively to chemical weapon countries. Those who do not possess chemical weapons cannot claim that they would feel less secure at a time when other states were destroying stocks of these weapons. According to a statement by its foreign minister, France belongs to the category of non-chemical weapon states,[11] as it is only now planning to acquire a deterrent capability in this area.

Institutional arrangements. Since the principal organ of the convention is to be composed of all states parties, it may not be able to intervene rapidly and effectively during a crisis. It has, therefore, been agreed that there should be a subsidiary body of limited membership — an executive council — having the day-to-day responsibility for ensuring compliance. In the performance of its functions it would be assisted by a technical secretariat which would include an international inspectorate. As a central management authority, the executive council would be, in political terms, the most 'powerful' body set up by the convention. Its composition, however, has not yet been agreed upon. Quite naturally, each country defends those formulas which could make its own participation possible.

Even more controversial is the decision-making procedure. The choice is between majority decisions and consensus decisions. The latter would be tantamount to introducing the right of veto, which could paralyze the operation of the convention.

OTHER OUTSTANDING ISSUES

Definitions. The term 'chemical weapon' applies both to toxic chemicals and to munitions or other devices designed to cause harm by the release of toxic chemicals, as well as to any equipment designed for use directly in connection with the employment of such munitions or devices. But it is still not clear whether this formula would be taken as a final definition of the object of the intended ban. The task of agreeing on a definition is all the more complicated, because toxicity alone is not enough to classify a chemical substance as a chemical warfare agent; it is the purpose for which it has been acquired that is decisive. Thus, there is the problem of irritants, such as tear gas, that may be used in warfare, but are also often employed for domestic law enforcement and riot control; therefore, many

countries would not like to see them covered by the definition of chemical weapons.

Similarly, the dual-purpose status of herbicides raises a problem for the planned chemical weapons convention. Apart from their peaceful applications in forestry, agriculture, etc., herbicides were extensively used in the Vietnam War after having been first employed in Malaya during the 1950s. One formula proposed is that the parties should undertake not to use herbicides 'as a method of warfare,' which would not preclude other uses. However, such a non-use obligation may have implications for the scope of the 1925 Geneva Protocol, which is also controversial. Indeed, in 1969 the UN General Assembly adopted a resolution declaring as contrary to the generally recognized rules of international law the use in international armed conflicts of chemical agents of warfare, having a direct toxic effect not only on humans and animals, but also on plants. However, many states abstained, and a few voted against such an extensive definition of chemical weapons.[12]

The need for a precise definition of chemical weapons may become less acute with the establishment of agreed schedules specifying chemicals subject to different verification regimes. However, such schedules cannot be definitive. They would have to be reviewed and, if necessary, amended. The first review could take place when states had declared their arsenals to the international authority, since it may then become apparent that certain toxic chemicals possessed by chemical weapon countries had not been taken into account in the course of negotiations. Subsequently, there might be a need for periodic updating.

A 'chemical weapon production facility' has not as yet been fully defined either. It is understood only that both the means of production of toxic chemicals, as well as the equipment for filling munitions with such chemicals, should be covered by the definition.

Another important term calling for elaboration is 'under jurisdiction and control of a state party.' It is used in connection with the undertaking to eliminate all chemical weapon stockpiles and production facilities, whatever their location. The Soviet Union asked for clarification of the status of the subsidiaries of transnational chemical corporations: which state would be responsible for ensuring that these corporations were observing the provisions of the convention, especially if the manufacturing operations were conducted in a country which was not party to it.[13] In partial response to these apprehensions, the United States said that any corporation incorporated under US law, wherever its activities actually took place, would be prohibited from aiding a non-party in chemical weapon production.[14] None the less, an agreed interpretation of the term in question would be in order. The parties must be assured that no physical or legal person, including any operating outside the territory of a home country, would be in a position to circumvent the obligations undertaken by states.

Systematic inspection. International verification through systematic on-site inspection would apply to the declared stocks of chemical weapons and to the process of their destruction. It would also apply to the closure and elimination of chemical weapon production facilities, as well as to certain facilities of the civilian chemical industry to ensure that chemical weapons were not being produced there.

The number, intensity and duration of routine on-site inspections and detailed inspection procedures, as well as operation and maintenance of the monitoring devices, remain to be established. They would be specified in agreements on subsidiary arrangements which take account of the characteristics of each facility. These arrangements would be concluded by states parties with the international authority on the basis of a generally applicable model agreement. Whereas controls on the civil chemical industry are necessary in order to maintain confidence in the treaty regime, technical and commercial secrets of the industry should not be revealed through inspection. Appropriate procedures would have be developed, drawing perhaps upon the experience of the International Atomic Energy Agency (IAEA) which meets such requirements in the application of nuclear safeguards.

An outline of a step-by-step approach to verifying the elimination of production facilities has been submitted by the United States,[15] but negotiations would be needed to complete it with the necessary details. It is particularly essential to clarify which part of a given facility would be subject to a given elimination measure. International verification of temporary conversion of a chemical weapon production facility into a chemical weapon destruction facility has not yet been elaborated.

On-site inspection on challenge. As a rule, unimpeded access to suspected sites should be given to inspectors in order to enable them to clarify doubts about compliance. However, it is deemed permissible for the requested state to demonstrate compliance through alternative arrangements, as has been proposed by the United Kingdom.[16] The need to resort to such arrangements might arise when, by disclosing sensitive data not connected with chemical weapons, the intrusiveness of on-site inspection could affect legitimate national interests.

The following examples of alternative arrangements were given by the Soviet Union: provision of pertinent information by the challenged party; visual inspection of the suspected facility without entering it; partial

access to the facility in question; and collection and analysis of air and water samples around the facility for traces of relevant chemicals. The Soviet Union expressed the view that if it proved impossible for the challenging and the challenged parties to agree on alternative measures, all facts should be submitted to an international authority which would evaluate the case and decide by a two-thirds majority whether a breach had occurred.[17] The United States, however, voiced doubts as to whether the measures suggested by the Soviet Union could be sufficient to determine the contents of a suspect munition bunker.[18] It insisted that if an alternative to on-site inspection could not be agreed upon, the mandatory right of access to any location, within the shortest possible time, should remain. Denial of entry to a given facility would — in the US opinion — result in an assumption that that facility contained forbidden material.[19] The Netherlands proposed that in such a situation the challenged state might be declared as violating the convention.[20] Thus, the positions are still apart on what would happen if alternative measures proposed by the challenged state did not satisfy the challenger.

Another unresolved problem is how to prevent the abuse of the right to on-site inspection through frivolous challenges. Each request must, of course, specify which clause of the convention is alleged to have been violated, the nature of the presumed violation, and when and where it is suggested to have occurred. But no screening or 'filtering' mechanism is to be set up by the convention to decide whether a particular challenge is justified and thus whether the inspection should be allowed to be carried out. One way of dealing with the danger of abuse could be, as proposed by the Soviet Union, to provide for states' liability for losses suffered by the challenged state as a result of an unjustified on-challenge inspection.[21] Similarly, Egypt suggested that compensation be envisaged for damages resulting from an abuse of inspection.[22] It is worth noting, by way of analogy, that according to the 1967 Treaty of Tlatelolco prohibiting nuclear weapons in Latin America the costs of a special inspection must, as a rule, be borne by the requesting state (Article 16.2).

Non-use of chemical weapons. Since the 1925 Geneva Protocol banning the use of chemical weapons does not provide for verification of compliance, the chemical weapons convention, which is to re-affirm the ban on use, may embody procedures for checking possible allegations. Specific proposals to this end have been made by Norway and Canada.[23] The working papers submitted to the CD by these two countries deal with the identification and survey of the allegedly contaminated area, the collection of samples of soil, sand, water, vegetation and snow, as well as the preparation and transportation of the samples to specially designated laboratories for analysis. These papers supplement the *Handbook for the Investigation of Allegations of the Use of Chemical and Biological Weapons*, presented in the CD by Canada a year earlier.[24] The modalities now available to the UN Secretary-General for the investigation of reports on the alleged use of chemical weapons may have to be reviewed upon entry into force of the chemical weapons convention.

Peaceful uses. The usual proviso, patterned after other arms control treaties, such as the BW Convention or the Non-Proliferation Treaty (NPT), that a ban on military uses of the pertinent items should not hinder civilian production, will most certainly be part of the chemical weapons convention.

There will, no doubt, be a pledge to promote international cooperation and assistance in the peaceful application of chemical science and technology. It is difficult, however, to predict to what extent such a pledge would be considered binding for the parties: commercial deals, in whatever commodity, are subject more to economic rules than to political considerations. Nevertheless, the chances to intensify the development of chemical research and industrial production worldwide are likely to increase upon the conclusion of the chemical weapons convention because the existing restrictions on trade in chemical compounds and on transfer of technology, which had been introduced for security reasons, would be removed for the parties to the convention. On the other hand, states remaining outside the convention might encounter added difficulties in the development of their chemical industry because of the inevitable suspicion that they either possessed chemical weapons or were planning to manufacture them.

Entry into force. The United Kingdom has proposed that the chemical weapons convention should require at least 60 ratifications, including those by states that had declared that they possessed chemical weapons.[25] The Soviet Union would be satisfied with some 30 to 40 ratifications.[26] This would be comparable to the NPT, which entered into force after the deposit of 40 instruments of ratification plus those of the three depositaries — the UK, the USA and the USSR — whereas the BW Convention required only 22 ratifications, including those of the three depositaries. The United States sees the need for a 'global' ban, but has not explained what number of ratifications would satisfy this requirement.[27] In any event, both superpowers consider it necessary that the convention encompass all 'chemical weapons-capable' states.[28]

To be truly effective, arms control agreements must have the widest possible adherence. However, if the requirement for the entry into force of the chemical weapons convention were placed too high, many years

might pass before it could start operating. One cannot expect that a treaty abolishing an entire category of weapon and the industrial base for its production, which has been worked out by a group of 40 CD members, would be automatically accepted by all or most of the remaining nations, as has been the case with some of the less important agreements. In the meantime, the danger of further chemical weapon proliferation might increase. According to US estimates, about 15 countries already possess or are seeking to acquire chemical weapons.[29] British estimates are even higher.[30] Egypt remarked that, as far as the developing countries are concerned, their joining the treaty would depend to a large extent on the provisions for international cooperation in the peaceful uses of chemical industry.[31]

Withdrawal from the convention. The major arms control agreements contain a clause that allows withdrawal from the treaty whenever extraordinary events, related to its subject matter, have jeopardized the supreme interests of the country concerned. If the chemical weapons convention follows this precedent — which is likely — withdrawal could be justified by the retention or acquisition of a chemical weapon capability by a state remaining outside the convention, or by a violation committed by a party.

In order to deter the parties from acting in breach of the obligations they assumed, and also to deter other states from engaging in activities inconsistent with the objectives of the convention, Pakistan proposed the following undertakings: (a) provision of assistance to the state party which feels endangered by a violation of the convention by another party or by the activities of other states posing a threat to the objectives of the convention; and (b) applying collective sanctions against the states guilty of such transgressions.[32]

The envisaged assistance would include measures for the protection against chemical weapons of military forces and the civilian population of the requesting state, and the training of its personnel in the use of protective equipment. These measures could be taken by the executive council as well as by individual parties to the convention. The actions suggested to be taken in case of violation include measures of trade embargo,[33] in addition to possible political pressure put on the violator, and the diplomatic support provided to the affected country.

Preparatory work. To ensure that the convention should be effective from the outset, a preparatory commission would have to be established. Such a commission — as proposed by the the United Kingdom — might come into existence on the day the convention is opened for signature. Composed of the signatories, it would function until the consultative committee, or a general conference, had convened and the executive council met for the first time after entry into force of the convention.[34] The tasks of the preparatory commission could include the working out of recommendations concerning financing, budgeting, recruitment and training of staff, and location of the permanent headquarters of the convention authority.

As regards financing, Venezuela warned that, should the costs of the operation of the verification system be so high that only very few countries would be in a position to meet them, the number of states willing to become parties would be small and the effectiveness of the convention correspondingly limited. It suggested that the example set by the IAEA be followed, where the developing countries bear a lesser burden in financing the safeguards than the developed ones.[35]

CONCLUSION

Success in the present multilateral negotiations regarding chemical weapons depends in the first place on the determination of the superpowers to definitively renounce chemical warfare and to dispose of their chemical arsenals which are the largest in the world. Verification is no longer an insurmountable obstacle. But even with all good will on the part of the main protagonists, as well as of the other negotiators, a long time may be needed to settle the controversies still outstanding and to work out the missing provisions of the chemical weapons convention. Moreover, the 'rolling text' now before the CD must be transposed into proper treaty language; the redundancies must be removed and the terminology streamlined.[36] The inevitably lengthy drafting process could be shortened if the elaboration of certain technical details were left to the organs to be created by the convention rather than attempting to make them final in the body of the convention itself. It is impossible to foresee all eventualities before the convention starts operating. In any event, a periodic review of the operation of the convention will certainly be provided for, as has been the case in several other arms control agreements.

The cause of chemical disarmament would be considerably enhanced if all states clearly stated, even before the convention had been concluded, whether or not they possessed chemical weapons and chemical weapon production facilities, and if those which did possess them ceased the production. Strict export controls, introduced as quickly as possible, over those chemical substances which could be used in making chemical weapons would also be very helpful. Above all, states must become convinced that a world free of chemical weapons will be a safer one. Consequently, a resolute response from the international community is called for whenever there has been a violation of the Geneva Protocol, whatever the identity of the violator.

NOTES

1. Statement of 27 August 1987 by the chairman of the *Ad Hoc* Committee on chemical weapons at the Conference on Disarmament.
2. UN General Assembly Resolution 37/98D.
3. UN document A/39/488.
4. Conference on Disarmament document CD/PV.389.
5. Conference on Disarmament document CD/PV.394.
6. Conference on Disarmament documents CD/PV.421 and CD/PV.428.
7. Conference on Disarmament documents CD/757and CD/PV. 413.
8. Conference on Disarmament document CD/PV.413.
9. Conference on Disarmament document CD/PV.418.
10. Exposé by Jean Desazars de Montgailhard, counsellor for political and military affairs at the Embassy of France in Washington, made at an international conference organized by the Canadian Centre for Arms Control and Disarmament, Ottawa, 8 October 1987.
11. *Le Monde*, 22-23 February 1987.
12. UN documents A/PV.1928 and A/8187.
13. Conference on Disarmament document CD/PV.418.
14. Conference on Disarmament document CD/PV.424.
15. Conference on Disarmament document CD/749.
16. Conference on Disarmament document CD/715.
17. Conference on Disarmament document CD/PV.406.
18. Conference on Disarmament document PV/408.
19. Conference on Disarmament document CD/PV.403.
20. Conference on Disarmament document CD/PV.396.
21. Conference on Disarmament document CD/PV.429.
22. Conference on Disarmament document CD/PV.432.
23. Conference on Disarmament documents CD/761, CD/762 and CD/766.
24. Conference on Disarmament document CD/677.
25. Conference on Disarmament document CD/769.
26. Conference on Disarmament document CD/PV.429.
27. Conference on Disarmament document CD/PV.424.
28. US-Soviet statement on the December 1987 summit talks, *New York Times*, 12 December 1987.
29. Statement by Sherry Stetson Mannix, US Arms Control and Disarmament Agency, made at an international conference organized by the Canadian Centre for Arms Control and Disarmament, Ottawa, 8 October 1987.
30. Conference on Disarmament document CD/PV.370.
31. Conference on Disarmament document CD/PV.389.
32. Conference on Disarmament documents CD/752 and CD/CW/WP.165.
33. *Holmenkollen Report on the Chemical Weapons Convention*, Royal Norwegian Ministry of Foreign Affairs, Oslo, May 1987.
34. Conference on Disarmament documents CD/589 and CD/769.
35. Conference on Disarmament document CD/PV.398.
36. Conference on Disarmament document CD/787.

FURTHER READING

Selected Publications by Jozef Goldblat on Chemical and Biological Weapons

The Problem of Chemical and Biological Warfare: CB Disarmament Negotiations 1920-1970, Stockholm International Peace Research Institute, Almquist & Wiksell, Stockholm, 1971.

"The Biological Disarmament Convention," in *The Dynamics of the Arms Race*, Croom Helm, London, 1975.

"Status of US-Soviet Negotiations for a Chemical Weapons Convention," in *Chemical Weapons: Destruction and Conversion*, Stockholm International Peace Research Institute, Taylor & Francis, London, 1980.

"The Laws of Armed Conflict," *Bulletin of Peace Proposals*, No. 2, 1982.

"Negotiations on Chemical Disarmament" and "US and Soviet Allegations of Breaches of Arms Control Agreements," *The Arms Race and Arms Control 1984*, Stockholm International Peace Research Institute, Taylor & Francis, London and Philadelphia, 1984.

"Chemical Weapons Verification," *Bulletin of the Atomic Scientists*, Vol. 41, No. 5, May 1985.

"Mixed Results at CD in Geneva: Progress on a Chemical Weapons Ban," *Disarmament Times* (New York), Vol. X, No. 1, May 1987.

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