

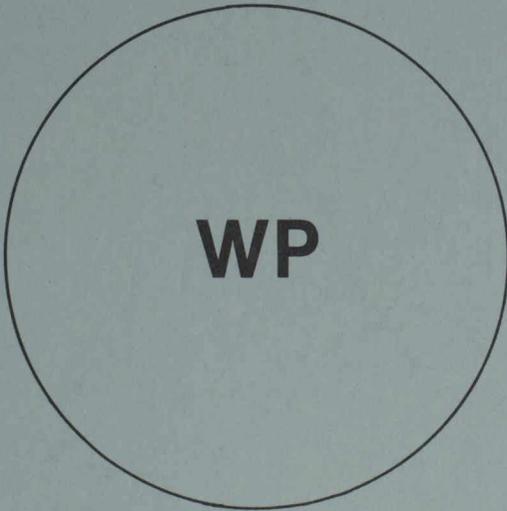
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CONFERENCE ON DISARMAMENT

# CHEMICAL WEAPONS

## WORKING PAPERS

1987 SESSION



**WP**

COMPILED AND EDITED BY:

ARMS CONTROL AND DISARMAMENT DIVISION OF

THE DEPARTMENT OF EXTERNAL AFFAIRS

OTTAWA, CANADA

FEBRUARY 1988



CONFERENCE ON DISARMAMENT

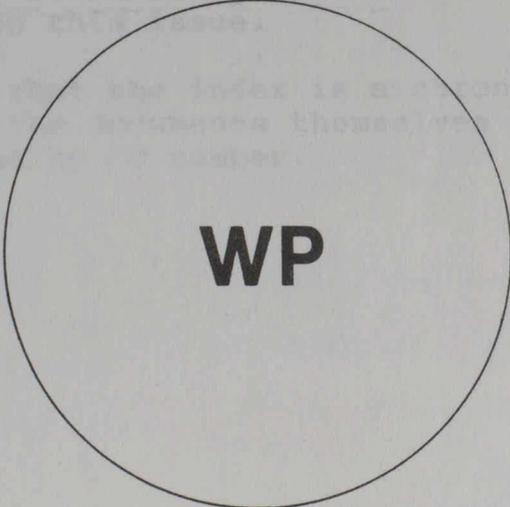
# CHEMICAL WEAPONS

## WORKING PAPERS

1987 SESSION

This volume covers official documents (working papers) relating to Chemical Weapons submitted in plenary to the Conference on Disarmament during its 1987 session. It is compiled to facilitate discussions and research on this issue.

The index is a chronological list of the documents themselves arranged in alphabetical order of their titles.



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COMPILED AND EDITED BY:

ARMS CONTROL AND DISARMAMENT DIVISION OF  
THE DEPARTMENT OF EXTERNAL AFFAIRS

OTTAWA, CANADA

FEBRUARY 1988  
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Min. des Affaires extérieures

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CHEMICAL WEAPONS WORKING PAPERS  
 SUBMITTED TO CD 1987  
 CHRONOLOGICAL INDEX

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			1987	
358	CD/733	UN	<u>PREFACE</u> Report of the Secretary General of the United Nations to the President of the Conference on Disarmament transmitting the <u>WP</u>	19.1.87
			<p style="text-align: center;">This volume covers official documents (working papers) relating to Chemical Weapons submitted in plenary to the Conference on Disarmament during its 1987 session. It is compiled to facilitate discussions and research on this issue.</p>	
			<p style="text-align: center;">Note that the index is a chronological listing while the documents themselves are arranged in numerical order by CD number.</p>	
359	CD/734	UN	Report of the Ad Hoc Committee	22.1.87
360	CD/736	UN	Report of the Ad Hoc Committee	9.2.87
361	CD/737	UN	Report of the Ad Hoc Committee	13.2.87
362	CD/747	France		14.2.87
363	CD/748	USSR		27.3.87
364	CD/749	USA	Verification of Elimination of Production/Finishing Facilities	7.4.87



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SUBMITTED TO CD 1987  
CHRONOLOGICAL INDEX**

Serial	Reference	Country	Description	Date
<u>1987</u>				
358	CD/733	UN Sec. Gen.	Letter Dated 14 January 1987 from the Secretary General of the United Nations to the President of the Conference on Disarmament Transmitting the Resolutions on Disarmament Adopted by the General Assembly at Its Forty-First Session	19.1.87
359	CD/734	AHCCW	Report of the <u>Ad Hoc</u> Committee on Chemical Weapons to the Conference on Disarmament on Its Work During the Period 12-30 January 1987	29.1.87
360	CD/736	CD	Decision on the Re-Establishment of the <u>Ad Hoc</u> Committee on Chemical Weapons	9.2.87
361	CD/740	Iran	Letter Addressed to the Secretary General of the Conference on Disarmament by the Permanent Representative of Iran on 12 February 1987	13.2.87
362	CD/747	France	The Non-Production of Chemical Weapons	23.3.87
363	CD/748	USSR	Letter Dated 26 March 1987 Addressed to the President of the Conference on Disarmament from the Representative of the Union of Soviet Socialist Republics Transmitting the Text of Documents Adopted by the Meeting of the Committee of Ministers of Foreign Affairs of the Warsaw Treaty Member States Held on 24-25 March 1987 in Moscow	27.3.87
364	CD/749	USA	Verification of Elimination of Production/Filling Facilities	7.4.87

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365	CD/750	Mongolia	Letter Dated 8 April 1987 Addressed to the President of the Conference on Disarmament by the Permanent Representative of the Mongolian People's Republic Transmitting a Statement Made by the Representative of the Ministry of Foreign Affairs of the Mongolian People's Republic Dated 4 April 1987	8.4.87
366	CD/751	USSR	Letter Dated 13 April 1987 from the Representative of the Union of Soviet Socialist Republics Addressed to the President of the Conference on Disarmament Transmitting the Text of the Foreign Policy Section of the Statement made by M.S. Gorbachev, Secretary of the CPSU Central Committee, at the Czechoslovak-Soviet Friendship Rally Held in Prague on 10 April 1987	13.4.87
367	CD/752 CD/CW/ WP.165	Pakistan	Proposal on Article X (Assistance) of the Draft Convention on Chemical Weapons	23.4.87
368	CD/755	GDR	Letter Dated 1 June 1987 from the Permanent Representative of the German Democratic Republic Addressed to the President of the Conference on Disarmament Transmitting the Text of the Communique on the Session of the Political Consultative Committee of the States Parties to the Warsaw Treaty Held in Berlin on 28 and 29 May 1987, and the Statement on the Military Doctrine of the States Parties to the Warsaw Treaty Issued at the Session	2.6.87

Serial	Reference	Country	Description	Date
369	CD/757	France	Working Paper on the Maintenance of a Security Balance Among All the Parties to the Convention During the Ten-year Period of the Destruction of Stocks of Chemical Weapons	11.6.87
370	CD/761	Norway	Verification of Alleged Use of Chemical Weapons: Summary of Research Results 1986/87	24.6.87
371	CD/762	Norway	General Procedures for Verification of Alleged Use of Chemical Weapons for Consideration in the Negotiations on the Chemical Weapons Convention	24.6.87
372	CD/764	Finland	Letter Dated 23 June 1987 Addressed to the President of the Conference on Disarmament from the Permanent Representative of Finland Transmitting a Document Entitled "Air Monitoring as a Means for Verification of Chemical Disarmament; c.4 Further Development and Testing of Methods, Part III"	29.6.87
373	CD/765	Finland	Letter Dated 23 June 1987 Addressed to the President of the Conference on Disarmament from the Permanent Representative of Finland Transmitting a Document Entitled "Automatic Monitoring in Verification of Chemical Disarmament"	29.6.87
374	CD/766	Canada/ Norway	The Chemical Weapons Convention: Proposal for an Annex to Article IX Concerning Verification of Alleged Use of Chemical Weapons	2.7.87
375	CD/769	UK	Making the Chemical Weapons Ban Effective	10.7.87

Serial	Reference	Country	Description	Date
376	CD/770	Canada	Letter Dated 10 July 1987 Addressed to the Secretary General of the Conference on Disarmament from the Permanent Representative of Canada Transmitting a Research Report Entitled "Verification: Development of a Portable Trichothecene Sensor Kit for the Detection of T-2 Mycotoxin in Human Blood Samples"	14.7.87
377	CD/771	Canada	Letter Dated 10 July 1987 Addressed to the Secretary General of the Conference on Disarmament from the Permanent Representative of Canada Transmitting Compendia on Chemical Weapons Comprising Plenary Statements and Working Papers from the 1986 Session of the Conference on Disarmament	14.7.87
378	CD/776	Norway	Letter Dated 27 July 1987 Addressed to the President of the Conference on Disarmament from the Permanent Representative of Norway Transmitting a Research Report Entitled "Verification of a Chemical Weapons Convention. Development of Procedures for Verification of Alleged Use of Chemical Weapons Warfare Agents. Part VI"	28.7.87
379	CD/781	Norway	Letter Dated 11 August 1987 Addressed to the President of the Conference on Disarmament from the Charge D'Affaires A.I. of Norway Transmitting a Publication Entitled "The Holmenkollen Report on the Chemical Weapons Convention. Report from the Holmenkollen Symposium on the Chemical Weapons Convention, Oslo, Norway, 26-27 May 1987"	12.8.87
380	CD/782	AHCCW	Report of the <u>Ad Hoc</u> Committee on Chemical Weapons to the Conference on Disarmament	26.8.87

Serial	Reference	Country	Description	Date
381	CD/783	AHCCPD	Report of the <u>Ad Hoc</u> Committee on the Comprehensive Programme of Disarmament	20.8.87
382	CD/785 CD/CW/ WP.181	Finland	Air Monitoring as a Means for the Verification of Chemical Disarmament	25.8.87







UNITED NATIONS

CD/733  
page 2

A

The Conference's attention should be drawn to the fact that the following provisions contained in those resolutions:

LETTER DATED 14 JANUARY 1987 FROM THE SECRETARY-GENERAL OF THE UNITED NATIONS TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING THE RESOLUTIONS AND DECISIONS ON DISARMAMENT ADOPTED BY THE GENERAL ASSEMBLY AT ITS FORTY-FIRST SESSION

I have the honour to transmit herewith the texts of the resolutions and the decision, adopted by the General Assembly at its forty-first session, which entrust specific responsibilities to the Conference on Disarmament in 1987. The relevant provisions of those resolutions and the decision are reproduced in the Annex.

For the information of the Conference, I also have the honour to transmit herewith other resolutions and a decision dealing with or relating to disarmament matters which were adopted by the General Assembly at its forty-first session.

(Signed) Javier Pérez de Cuéllar

The General Assembly

Recalling the resolution 41/58 D of 1986, which requested the Secretary-General to submit a report to the Conference on Disarmament on the progress of the negotiations...

Recalling its resolution 40/59 of 1985, which requested the Secretary-General to submit a report to the Conference on Disarmament on the progress of the negotiations...

Recalling that the States parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, they were also a number of States parties to the Convention...

Noting with satisfaction that, at the time of the Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, they were also a number of States parties to the Convention...

The Conference's attention should be drawn, in particular, to the following provisions contained in those resolutions:

•••

(9) In resolution 41/58 B, operative paragraph 2 urges the Conference on Disarmament to intensify the negotiations in order to submit a draft convention on the complete ban on chemical weapons to the General Assembly at its forty-second session.

(10) In resolution 41/58 C, operative paragraph 3 urges the Conference on Disarmament to pursue vigorously and accelerate its negotiations on a multilateral convention on the complete and effective prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction.

(11) In resolution 41/58 D, operative paragraph 3 urges again the Conference on Disarmament, as a matter of high priority, to intensify, during its 1987 session, the negotiations on a convention on the complete and effective prohibition of the development, production and stockpiling of all chemical weapons and to reinforce further its efforts by, inter alia, increasing the time during the year that it devotes to such negotiations, taking into account all existing proposals and future initiatives, with a view to the final elaboration of a convention at the earliest possible date, and to re-establish its Ad Hoc Committee on Chemical Weapons for this purpose with the 1986 mandate; and operative paragraph 4 requests the Conference on Disarmament to report to the General Assembly at its forty-second session on the results of its negotiations.

(Cont'd)

**General Assembly**Distr.  
GENERALA/RES/41/58  
5 January 1987forty-first session  
Agenda item 59**RESOLUTIONS ADOPTED BY THE GENERAL ASSEMBLY**

[on the report of the First Committee (A/41/839)]

**41/58. Chemical and bacteriological (biological) weapons**

A

Second Review Conference of the Parties to the Convention  
on the Prohibition of the Development, Production and  
Stockpiling of Bacteriological (Biological) and Toxin  
Weapons and on Their Destruction

The General Assembly,

Recalling its resolution 2826 (XXVI) of 16 December 1971, in which it commended the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction and expressed the hope for the widest possible adherence to the Convention,

Recalling its resolution 39/65 D of 12 December 1984, in which it noted that, at the request of a majority of States parties to the Convention, a second Review Conference of the Parties to the Convention would be held in 1986,

Recalling that the States parties to the Convention met at Geneva from 8 to 26 September 1986 to review the operation of the Convention with a view to assuring that the purposes of the preamble and the provisions of the Convention, including the provisions concerning negotiations on chemical weapons, were being realized,

Noting with satisfaction that, at the time of the Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, there were more than a hundred States parties to the Convention, including all the permanent members of the Security Council,

1. Notes with appreciation that on 26 September 1986, the Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction adopted by consensus a Final Declaration; 1/

2. Requests the Secretary-General to render the necessary assistance and to provide such services as may be required for the implementation of relevant parts of the Final Declaration;

3. Calls upon all signatory States that have not ratified or acceded to the Convention to do so without delay, and also calls upon those States that have not yet signed the Convention to join the States parties thereto ~~at~~ an early date, thus contributing to the achievement of universal adherence to the Convention and to international confidence.

94th plenary meeting

3 December 1986

B

Prohibition of chemical and bacteriological weapons

The General Assembly,

Recalling paragraph 75 of the Final Document of the Tenth Special Session of the General Assembly, 2/ which states that the complete and effective prohibition of the development, production and stockpiling of all chemical weapons and their destruction represents one of the most urgent measures of disarmament,

Convinced of the urgency of the earliest conclusion of a convention on the prohibition of the development, production and stockpiling of all chemical weapons and on their destruction, which would significantly contribute to general and complete disarmament under effective international control,

Emphasizing the need for the extension of international co-operation in the field of chemical industries for peaceful purposes,

Bearing in mind that the conclusion of a convention on the prohibition of the development, production and stockpiling of all chemical weapons and on their destruction would contribute to the achievement of this goal,

---

1/ BWC/CONF.II/13/II, part two.

2/ Resolution S-10/2.

Stressing the continuing importance of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, 3/

Determined, for the sake of all mankind, to exclude completely the possibility of the use of chemical weapons, through the earliest conclusion and implementation of a convention on the prohibition of the development, production and stockpiling of all types of chemical weapons and on their destruction, thereby complementing the obligations assumed under the Geneva Protocol of 17 June 1925,

Appreciating the work of the Conference on Disarmament during its 1986 session regarding the prohibition of chemical weapons and the progress achieved in negotiations,

Deeming it desirable for States to refrain from taking any action that could delay or further complicate negotiations and to display a constructive approach to such negotiations and the political will to reach an early agreement on the chemical weapons convention,

Emphasizing the need to stop a further increase of arsenals of chemical weapons and to refrain from the deployment of such weapons on the territories of other countries, as well as the necessity to withdraw chemical weapons deployed abroad to within the national boundaries of States to which they belong,

Expressing profound concern at decisions on the production of new types of chemical weapons, as well as at their intended deployment,

Welcoming the agreement between the Union of Soviet Socialist Republics and the United States of America to accelerate the efforts to conclude an effective and verifiable international convention on the general and complete prohibition of chemical weapons and the destruction of existing stockpiles of such weapons,

Taking note of proposals and initiatives on the creation of chemical-weapon-free zones in various regions aimed at facilitating the complete prohibition of chemical weapons and at contributing to the achievement of stable regional and international security,

Welcoming the Final Declaration of the Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, 1/ which stresses the urgency of a chemical weapons ban,

1. Reaffirms the necessity for the speediest elaboration and conclusion of a convention on the prohibition of the development, production and stockpiling of all chemical weapons and on their destruction;

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3/ League of Nations, Treaty Series, vol. XCIV (1929), No. 2138, p. 65.

2. Urges the Conference on Disarmament to intensify the negotiations in order to submit a draft convention on the complete ban on chemical weapons to the General Assembly at its forty-second session;
3. Reaffirms its call to all States to conduct serious negotiations in good faith and to refrain from any action that could impede negotiations on the prohibition of chemical weapons and specifically from the production of new types of chemical weapons, as well as from deploying chemical weapons on the territory of other States;
4. Appeals to all States to facilitate in every possible way the conclusion of such a convention;
5. Calls upon all States that have not yet done so to become parties to the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare.

94th plenary meeting  
3 December 1986

C

Chemical and bacteriological (biological) weapons

The General Assembly,

Recalling its resolution 40/92 C of 12 December 1985,

Reaffirming the urgent necessity of strict observance by all States of the principles and objectives of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, 3/ and of the adherence by all States to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, signed in London, Moscow and Washington, on 10 April 1972, 4/

Reiterating its concern over reports that chemical weapons have been used and over indications of their emergence in an increasing number of national arsenals, as well as over the growing risk that they may be used again,

Noting international efforts to strengthen relevant international prohibitions, including efforts to develop appropriate fact-finding mechanisms,

Recalling its resolution 40/94 L of 12 December 1985, in which, inter alia, it pointed out the fundamental importance of full implementation and strict observance of agreements on arms limitation and disarmament,

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4/ Resolution 2826 (XXVI), annex.

Reaffirming its dedication to protecting mankind from chemical and biological warfare,

1. Calls for compliance with existing international obligations regarding prohibitions on chemical and biological weapons, and condemns all actions that contravene those obligations;
2. Strongly endorses the ongoing efforts to ensure the most effective prohibitions possible on chemical and biological weapons;
3. Urges the Conference on Disarmament to pursue vigorously and accelerate its negotiations on a multilateral convention on the complete and effective prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction;
4. Calls upon all States, pending the elaboration of such a convention, to co-operate in efforts to prevent the use of chemical weapons and in efforts to establish facts in cases of reports of such use, and to be guided in their national policies by the need to curb the spread of chemical weapons.

94th plenary meeting

3 December 1986

D

#### Chemical and bacteriological (biological) weapons

##### The General Assembly,

Recalling its previous resolutions relating to the complete and effective prohibition of the development, production and stockpiling of all chemical weapons and of their destruction,

Reaffirming the urgent necessity of strict observance by all States of the principles and objectives of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925, 3/ and of the adherence by all States to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, signed in London, Moscow and Washington on 10 April 1972, 4/

Taking note of the Final Document of the Second Review Conference of the Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, adopted by consensus on 26 September 1986, 5/ and in particular of article IX of its Final Declaration,

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5/ BWC/CONF.II/13/II.

Having considered the report of the Conference on Disarmament, 6/ which incorporates, inter alia, the report of its Ad Hoc Committee on Chemical Weapons, 7/ and noting that following the precedents set in 1984 and 1985, consultations are continuing during the inter-sessional period, thus increasing the time devoted to negotiations,

Convinced of the necessity that all efforts be exerted for the continuation and successful conclusion of negotiations on the prohibition of the development, production, stockpiling and use of all chemical weapons and on their destruction,

1. Takes note of the work of the Conference on Disarmament during its 1986 session regarding the prohibition of chemical weapons, and in particular appreciates the work of its Ad Hoc Committee on Chemical Weapons on that question and the progress recorded in its report;

2. Expresses again none the less its regret and concern that notwithstanding the progress made in 1986 a convention on the complete and effective prohibition of the development, production, stockpiling and use of all chemical weapons and on their destruction has not yet been elaborated;

3. Urges again the Conference on Disarmament, as a matter of high priority, to intensify, during its 1987 session, the negotiations on such a convention and to reinforce further its efforts by, inter alia, increasing the time during the year that it devotes to such negotiations, taking into account all existing proposals and future initiatives, with a view to the final elaboration of a convention at the earliest possible date, and to re-establish its Ad Hoc Committee on Chemical Weapons for this purpose with the 1986 mandate;

4. Requests the Conference on Disarmament to report to the General Assembly at its forty-second session on the results of its negotiations.

94th plenary meeting

3 December 1986

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6/ Official Records of the General Assembly, Forty-first Session, Supplement No. 27 (A/41/27).

7/ Ibid., para. 87.





29 January 1987

Original: ENGLISH

Report of the Ad Hoc Committee on Chemical Weapons  
to the Conference on Disarmament on its work during  
the period 12-30 January 1987

## I. INTRODUCTION

1. In accordance with the decision taken by the Conference on Disarmament at its 384th plenary meeting held on 29 August 1986, the Ad Hoc Committee on Chemical Weapons resumed its work on 12 January 1987 under the Chairmanship of Ambassador Ian Cromartie (United Kingdom). Mr. Abdelkader Bensmail, Deputy Chief of the Geneva Branch, Department for Disarmament Affairs, continued to serve as Secretary of the Committee, assisted by Mr. Michael Cassandra, Political Affairs Officer, Department for Disarmament Affairs.

2. The Ad Hoc Committee held four meetings from 12-30 January 1987. In accordance with the recommendations of the Ad Hoc Committee, as contained in its Report to the Conference on Disarmament (CD/727), open-ended consultations of the Ad Hoc Committee were held between 24 November and 17 December 1986 in preparation for the resumed session.

3. The representatives of the following States not members of the Conference participated in the work of the Ad Hoc Committee: Austria, Finland, Greece, New Zealand, Norway, Portugal, and Spain.

## II. SUBSTANTIVE WORK DURING THE RESUMED SESSION

4. In accordance with its mandate, the Ad Hoc Committee continued the consideration of Articles III, IV, V, VI and IX, and parts of Article II relevant to Articles V and VI of the Draft Convention, utilizing the Appendix to the Report on its work in 1986 (CD/727) as well as proposals made by delegations.

5. Working Group A, under the Chairmanship of Mr. Richard Rowe (Australia), continued to deal with Article VI and its corresponding Annexes. There was also discussion on the subject of supertoxic lethal chemicals other than those listed in Schedule [1] and on proposals for guidelines for considering whether a chemical should be included in Schedule [1]. The state of the discussion is reflected in the two papers of the Chairman of Working Group A, contained in Appendix II.

6. Working Group B, under the Chairmanship of Mr. Petar Poptchev (Bulgaria), continued to deal with Articles III, IV and V and their corresponding Annexes.

7. The Chairman of the Committee conducted consultations on Article IX. As a result of his consultations he reported to the Committee that at the present stage it was generally regarded as the most difficult problem to be solved before a Convention could be concluded. He had, however, in his view, detected a convergence of views in the Committee on four points:

- Firstly, that confidence in the Convention should be built up and maintained by routine inspection of declared facilities.

- Secondly, that provisions under Article IX are needed for any party to give voice to its suspicions that another party was not complying with its obligations and to have confidence that these suspicions would be promptly allayed by agreed procedures.

- Thirdly, that such procedures should be regarded as a fundamental source of confidence in the Convention and recourse to them should be a rare event.

- Fourthly, that once these procedures have been invoked a very short time scale for resolution of the issue is essential both for reasons inherent in the nature of chemical weapons as well as for wider political reasons.

### III. CONCLUSIONS AND RECOMMENDATIONS

8. The results of the work undertaken during the resumed session are reflected in the updated version of the Appendix to CD/727, attached hereto. Appendix I to this report reflects the present stage of negotiations on a chemical weapons convention; however, the draft texts contained therein do not bind any delegation.

9. The Ad Hoc Committee recommends to the Conference on Disarmament:

(a) That Appendix I to this Report be used for further negotiation and drafting of the Convention.

(b) That other documents reflecting the state of work of the Ad Hoc Committee, as contained in Appendix II to this Report and in document CD/CW/WP.149, together with other relevant present and future documents of the Conference also be utilized in the further negotiation and elaboration of the Convention.

APPENDIX I

This Appendix is based on the Appendix contained in CD/727, and includes new material produced during the resumed session of the Ad Hoc Committee in respect of Article III and Annex III, Annex IV to Article IV, Annex V to Article V, and Article VI and Annex VI.

- III. Restrictions
- IV. Chemical weapons
- V. Chemical weapons production facilities
- VI. National implementation measures
- VII. National implementation measures
- VIII. Committee
- IX. Economic and technological development
- X. Relation to other international instruments
- XI. Amendments
- XII. Signature, ratification, entry into force
- XIII. Signature, ratification, entry into force
- XIV. Signature, ratification, entry into force
- XV. Signature, ratification, entry into force
- XVI. Signature, ratification, entry into force
- XVII. Signature, ratification, entry into force
- XVIII. Signature, ratification, entry into force
- XIX. Signature, ratification, entry into force
- XX. Signature, ratification, entry into force
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- XXIII. Signature, ratification, entry into force
- XXIV. Signature, ratification, entry into force
- XXV. Signature, ratification, entry into force
- XXVI. Signature, ratification, entry into force
- XXVII. Signature, ratification, entry into force
- XXVIII. Signature, ratification, entry into force
- XXIX. Signature, ratification, entry into force
- XXX. Signature, ratification, entry into force

Discussions are still continuing on these different issues. Verification measures are to be placed under this structure.

Preliminary structure of a Convention on chemical weapons \*/

Preamble

- I. General provisions on scope
  - II. Definitions and Criteria
  - III. Declarations
  - IV. Chemical weapons
  - V. Chemical weapons production facilities
  - VI. Activities not prohibited by the Convention
  - VII. National implementation measures
  - VIII. Consultative Committee
  - IX. Consultations, co-operation and fact finding
  - X. Assistance
  - XI. Economic and technological development
  - XII. Relation to other international agreements
  - XIII. Amendments
  - XIV. Duration, withdrawal
  - XV. Signature, ratification, entry into force
  - XVI. Languages
- Annexes and other documents

---

\*/ Discussions are still continuing on where different issues like verification measures are to be placed under this structure.

Preamble \*/

The States Parties to this Convention

Determined to act with a view to achieving effective progress towards general and complete disarmament under strict and effective international control, including the prohibition and elimination of all types of weapons of mass destruction,

Desiring to contribute to the realization of the purposes and principles of the Charter of the United Nations,

Recalling that the General Assembly of the United Nations Organization has repeatedly condemned all actions contrary to the principles and objectives of the Protocol for Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925,

Recognizing that the Convention reaffirms principles and objectives of and obligations assumed under the Geneva Protocol of 17 June 1925, and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction signed at London, Moscow and Washington on 10 April 1972,

Bearing in mind the objective contained in Article IX of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction,

Determined for the sake of all mankind, to completely exclude the possibility of the use of chemical weapons, through the implementation of the provisions of this Convention, thereby complementing the obligations assumed under the Geneva Protocol of June 1925,

Considering that the achievements in the field of chemistry should be used exclusively for the benefit of mankind,

Convinced that the complete and effective prohibition of the development, production and stockpiling of chemical weapons, and their destruction, represents a necessary step towards the achievement of these common objectives.

Have agreed as follows:

---

\*/ Some delegations consider that the texts contained in the Preamble require further consideration.

I. GENERAL PROVISIONS ON SCOPE

1. Each State Party undertakes not to:

- develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone.

2. Each State Party undertakes not to:

- assist, encourage or induce, in any way, anyone to engage in activities prohibited to Parties under this Convention.

3. Each State Party undertakes not to use chemical weapons. \*/ \*\*/

4. [Each State Party undertakes not to [conduct other activities in preparation for use of chemical weapons] [engage in any military preparations for use of chemical weapons].]

5. Each State Party undertakes to [destroy] [destroy or divert for permitted purposes] chemical weapons which are in its possession or under its [jurisdiction or] control. \*\*\*/

6. Each State Party undertakes to [destroy] [destroy or dismantle] chemical weapons production facilities which are in its possession or under its [jurisdiction or] control. \*\*\*\*/

---

\*/ It is understood that this provision is closely linked to the definition of chemical weapons in another part of the Convention, the final formulation of which is yet to be agreed upon. It is also understood that this provision does not apply to the use of toxic chemicals and their precursors for permitted purposes still to be defined and to be provided for in the Convention. This provision is also closely linked to a provision in the Convention to be agreed upon relating to reservations.

\*\*/ The question of herbicides is subject to ongoing consultations. The Chairman of these open-ended consultations has suggested the following formulation for a provision on herbicides: "Each State Party undertakes not to use herbicides as a method of warfare; such a prohibition should not preclude any other use of herbicides".

\*\*\*/ An alternative formulation and placement of this undertaking is given under "Chemical weapons".

\*\*\*\*/ An alternative formulation and placement of this undertaking is given under "Chemical weapons production facilities".

## II. DEFINITIONS AND CRITERIA

For the purposes of this Convention:

1.\*/ The term "chemical weapons" shall apply to the following, together or separately: \*\*/

- (i) toxic chemicals, including super-toxic lethal chemicals, other lethal chemicals, other harmful chemicals and their precursors, including key precursors [and key components of binary and/or multicomponent chemical systems for chemical weapons], \*\*\*/ except such chemicals intended for permitted purposes as long as the types and quantities involved are consistent with such purposes; \*\*\*\*/
- (ii) munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals, as referred to above, which would be released as a result of the employment of such munitions and devices;

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\*/ The definitions of chemical weapons are presented on the understanding that problems related to irritants used for law enforcement and riot control, and also to chemicals intended to enhance the effect of the use of chemical weapons if their inclusion in the Convention is agreed could be handled outside the definitions of chemical weapons if this will result in a more clear and understandable definition. Preliminary suggestions to solve these problems are given below and consultations on them will be continued.

\*\*/ One delegation expressed its reservation on the present formulation of the definition of chemical weapons and on the terminology used in (i) that failed to reflect the general purpose criterion.

\*\*\*/ Some delegations consider that further deliberation is required in order to clarify at a later stage of the negotiations the implications of this definition for other parts of the Convention. This applies to other relevant parts of the Appendix. Other delegations consider that key component of binary and/or multicomponent chemical system for chemical weapons means: a component which poses a special risk to the objectives of the Convention as it can be an integral part in a chemical weapons munition or device and can form toxic chemicals at the moment of their employment and possesses the following characteristics: (a) reacts (interacts) rapidly with other component(s) of binary and/or multicomponent chemical system during the munition's flight to the target and gives a high yield of final toxic chemical; (b) plays an important role in determining the toxic properties of the final product; (c) may not be used, or be used only in minimal quantities, for permitted purposes; (d) possesses the stability necessary for long-term storage.

\*\*\*\*/ One delegation suggests that the term "permitted purposes" should be substituted, where it occurs throughout the Convention, with the term "purposes not prohibited by the Convention".

(iii) any equipment specifically designed for use directly in connection with the employment of such munitions or devices;

- [The term "chemical weapons" shall not apply to those chemicals which are not super-toxic lethal, or other lethal chemicals and which are approved by the Consultative Committee for use by a Party for domestic law enforcement and domestic riot control purposes.]
- [States Parties agree not to [develop, produce, stockpile or] utilize for chemical weapons chemicals intended to enhance the effect of the use of such weapons.]

[2. "Toxic chemicals" means:

chemicals [however or wherever they are produced], [whether produced in plants, munitions or elsewhere] [regardless of the method and pattern of production] whose toxic properties can be utilized to cause death or temporary or permanent harm, to man or animals involving:]

[2. "Toxic chemicals" means:

any chemical, regardless of its origin or method of production which through its chemical action on life processes can cause death, temporary incapacitation, or permanent harm to man or animals

Toxic chemicals are divided into the following categories:]

(a) "super-toxic lethal chemicals", which have a median lethal dose which is less than or equal to 0.5 mg/kg (subcutaneous administration) or 2,000 mg-min/m<sup>3</sup> (by inhalation) when measured by an agreed method \*/ set forth in ...

(b) "other lethal chemicals", which have a median lethal dose which is greater than 0.5 mg/kg (subcutaneous administration) or 2,000 mg-min/m<sup>3</sup> (by inhalation) and less than or equal to 10 mg/kg (subcutaneous administration) or 20,000 mg-min/m<sup>3</sup> (by inhalation) when measured by an agreed method set forth in ...

[(c) "other harmful chemicals", being any [toxic] chemicals not covered by (a) or (b) above, [including toxic chemicals which normally cause temporary incapacitation rather than death] [at similar doses to those at which super-toxic lethal chemicals cause death].]

[and "other harmful chemicals" has a median lethal dose which is greater than 10 mg/kg (subcutaneous administration) or 20,000 mg-min/m<sup>3</sup> (by inhalation).]

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\*/ It was noted that after such measurements had actually been performed, the figures mentioned in this and the following section might be subject to slight changes in order to cover sulphur mustard gas under the first category.

3. [Permitted purposes] [Purposes not prohibited by the Convention]

[Non-hostile purposes] means:

(a) industrial, agricultural, research, medical or other peaceful purposes, domestic law enforcement purposes; and military purposes not connected with the use of chemical weapons.

(b) protective purposes, namely those purposes directly related to protection against chemical weapons; \*/

4. "Precursor" means:

a chemical reagent which takes part in the production of a toxic chemical.

(a) "Key Precursor" means:

a precursor which poses a significant risk to the objectives of the Convention by virtue of its importance in the production of a toxic chemical.

It may possess [possesses] the following characteristics:

(i) It may play [plays] an important role in determining the toxic properties of a [toxic chemicals prohibited by the Convention] [super-toxic lethal chemical].

(ii) It may be used in one of the chemical reactions at the final stage of formation of the [toxic chemicals prohibited by the Convention] [super-toxic lethal chemical].

[(iii) it may [is] not be used, or [is] used only in minimal quantities, for permitted purposes.] \*\*/

Key precursors are listed in ...

For the purpose of the relevant provisions in a Chemical Weapons Convention key precursors should be listed and subject to revisions according to [characteristics] [guidelines].

Chemicals which are not key precursors but are deemed to pose a [threat] [particular risk] with regard to a Chemical Weapons Convention should be included in a list.

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\*/ The suggestion that such permitted protective purposes should relate only to "an adversary's use of" chemical weapons was removed pending a decision on whether in the Convention the question of prohibiting other military preparations for use of chemical weapons than those mentioned under scope should be dealt with.

\*\*/ One delegation considers that this particular characteristic has primary importance and should be placed first.

[(b) Key component of binary and/or multicomponent chemical systems for chemical weapons means:]

[a key precursor which forms a toxic chemical in the binary or multicomponent weapons munition or device and which has the following additional characteristics (to be elaborated):]

5. "Chemical weapons production facility" means:

- Chemical weapons production facility means [any building or equipment designed, constructed or used [in any degree] for the production of chemical weapons] or for filling chemical weapons.

- Chemical weapons production facility means [any building or any equipment which in any degree was designed, constructed or used since 1 January 1946, for:

(a) the production for chemical weapons of any toxic chemical, except for those listed in (schedule B), or the production for chemical weapons of any key precursors;] or

(b) the filling of chemical weapons.

### III. DECLARATIONS

1. Each State Party shall submit to the Consultative Committee, not later than 30 days after the Convention enters into force for it, the following declarations:

- (a) Chemical Weapons
  - (i) whether it has any chemical weapons under its jurisdiction or control 1/ anywhere;
  - (ii) whether it has on its territory any chemical weapons under the jurisdiction or control of others, including a State not Party to the Convention;
  - (iii) whether it has transferred or received any chemical weapons [and/or relevant technical documentation] and whether it has transferred to or received from anyone the control over such weapons [and/or relevant technical documentation] since ....
- (b) Chemical Weapons Production Facilities
  - (i) whether it has [at the time of entry into force of the Convention for it] any chemical weapons production facilities under its jurisdiction or control anywhere or has had such facilities at any time since [1.1.1946];
  - (ii) whether it has [at the time of entry into force of the Convention for it] any chemical weapons production facilities on its territory under the jurisdiction or control of others, including a State not Party to this Convention, or has had such facilities at any time since [1.1.1946];
  - (iii) whether it has transferred or received any equipment for the production of chemical weapons [and documentation relevant to the production of chemical weapons] since [1.1.1946], and whether it has transferred to, or received from, anyone the control of such equipment [and documentation].
- (c) [Declarations relevant to Article VI]
  - (i) [civil production] facilities
  - (ii) chemicals
  - (iii) single small-scale production facility
  - (iv) other]

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1/ It is agreed that the concept of "jurisdiction or control" requires additional discussion and elaboration.

(d) Other declarations

(i) The precise location, nature and general scope of activities of any facility and establishment 1/ on its territory or under its jurisdiction or under its control anywhere 2/ designed, constructed or used since [1.1.46] for development of chemical weapons, inter alia, laboratories and test and evaluation sites.

(ii)

2. Each State Party making affirmative statements in regard to any of the provisions under 1a, 1b, ..., shall carry out all relevant measures envisaged in any or all of Articles IV, V, ....

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1/ The scope of the phrase "any facility and establishment" is to be clarified and an appropriate formulation found.

2/ It is agreed that the concept of "on its territory or under its jurisdiction or under its control anywhere" requires additional discussion and elaboration.

ANNEX III

I. DECLARATIONS OF CHEMICAL WEAPONS

A. Possession or non-possession

1. Possession of chemical weapons on own territory

Yes .....

No .....

2. Possession, jurisdiction or control over chemical weapons elsewhere

Yes .....

No .....

B. Existence on the territory of any chemical weapons under the jurisdiction or control of anyone else

Yes .....

No .....

C. Past transfers <sup>1/</sup>

Yes .....

No .....

II. DECLARATIONS OF CHEMICAL WEAPONS PRODUCTION FACILITIES

A. Possession or non-possession

1. Possession of chemical weapons production facilities on own territory

Yes .....

No .....

2. Possession, jurisdiction or control over chemical weapons production facilities elsewhere

Yes .....

No .....

<sup>1/</sup> The view was expressed that past transfers should not be included in the Convention.

B. Existence on the territory of any chemical weapons production facilities under the jurisdiction or control of anyone else

Yes .....

No .....

C. Past transfers of equipment [or technical documentation] 1/ 2/

Yes .....

No .....

[III. DECLARATIONS RELEVANT TO ARTICLE VI]

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[IV. OTHER DECLARATIONS]

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1/ The view was expressed that past transfers should not be included in the Convention.

2/ The view was expressed that technical documentation should not be included.

IV. CHEMICAL WEAPONS

1. The provisions of this article shall apply to any and all chemical weapons under the jurisdiction or control of a State Party, regardless of location, including those on the territory of another State.
2. Each State Party, within 30 days after the Convention enters into force for it, shall submit a declaration which:
  - (a) specifies the [precise location,] aggregate quantity and detailed inventory of any chemical weapons under its jurisdiction or control;
  - (b) reports any chemical weapons on its territory under the jurisdiction or control of others, including a State not Party to this Convention; \*/
  - (c) specifies any transfer or receipt by the State Party of any chemical weapons since [...] or any transfer of control by that State Party of such weapons; and
  - (d) provides its general plan for destruction [or diversion] of its chemical weapons.
3. [Each State Party shall, immediately after the declaration under para. 2 of this Article has been submitted, provide access to its chemical weapons for the purpose of systematic international on-site verification of the declaration through on-site inspection. Thereafter, each State Party shall ensure, through access to its chemical weapons for the purpose of systematic international on-site verification and through on-site inspection and continuous monitoring with on-site instruments, that the chemical weapons are not removed except to a destruction facility.]
4. Each State Party shall submit detailed plans for the destruction of chemical weapons not later than ... months before each destruction [diversion] period begins. The detailed plans shall encompass all stocks to be eliminated during the next coming period, and shall include the precise location and the detailed composition of the chemical weapons which are subject to destruction during that period.
5. Each State Party shall:
  - (a) destroy [or divert] all chemical weapons pursuant to the Order specified in Annex IV, beginning not later than ... months and finishing not later than 10 years after the Convention enters into force for it;
  - (b) provide information annually regarding the implementation of its plans for destruction [or diversion] of chemical weapons; and
  - (c) certify, not later than 30 days after the destruction [or diversion] process has been completed, that all chemical weapons have been destroyed [or diverted].

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\*/ A question was raised as to the applicability of this subparagraph.

6. Each State Party shall provide access to any chemical weapons destruction facilities and the facilities' storage for the purpose of systematic international on-site verification of destruction through the continuous \*/ presence of inspectors and continuous monitoring with on-site instruments, in accordance with Annex IV. 1/

7. Any chemical weapons discovered by a State Party after the initial declaration of chemical weapons shall be reported, secured and destroyed, as provided in Annex IV. 2/

8. All locations where chemical weapons are [stored or] destroyed shall be subject to systematic international on-site verification, through on-site inspection and monitoring with on-site instruments in accordance with Annex IV. 1/

9. Any State Party which has on its territory chemical weapons which are under the control of a State that is not a Party to this Convention shall ensure that such weapons are removed from its territory not later than ... months after the date on which the Convention entered into force for it.

10. The declaration, plans and information submitted by each State Party under this article shall be made in accordance with Annex ... and Annex ...

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\*/ The precise wording to express this concept satisfactorily in some of the languages requires further elaboration.

1/ The provisions of Annex IV, which address verification, require further elaboration.

2/ In view of the complex situations these chemical weapons involve, this issue needs to be further discussed and resolved.

ANNEX IV

I. DECLARATIONS OF CHEMICAL WEAPONS

A. Detailed declaration by a State Party on the aggregate quantity and detailed composition of chemical weapons under its jurisdiction or control

1. Chemicals

1.1 Toxic chemicals 1/

In cases involving mixtures of two or more toxic chemicals all such components should be specified as well as the percentage of the mixtures.

Scientific chemical name	Quantity	Structural formula	Toxicity (of pure substance)

Scientific chemical name	Quantity	Structural formula	Toxicity (of pure substance)

1/ In accordance with agreed definitions.

1/ In accordance with agreed definitions.

1.1.1 Super-toxic lethal chemicals 1/

Scientific chemical name/ <u>2/</u> Structural formula <u>3/</u> and Toxicity (of pure substance)	Bulk		Filled in munition Quantity (metric tons)	Total quantity (metric tons)
	Purity <u>4/</u> %	Quantity (metric tons) Number and size of containers		
Chemical A				
Chemical B				

etc.

1.1.2 Other lethal chemicals 1/

Scientific chemical name/ <u>2/</u> Structural formula <u>3/</u> and Toxicity (of pure substance)	Bulk		Filled in munition Quantity (metric tons)	Total quantity (metric tons)
	Purity <u>4/</u> %	Quantity (metric tons) Number and size of containers		

1.1.3 Other harmful chemicals 5/

Scientific chemical name/ <u>2/</u> Structural formula <u>3/</u> and Toxicity (of pure substance) if applicable	Bulk		Filled in munition Quantity (metric tons)	Total quantity (metric tons)
	Purity <u>4/</u> %	Quantity (metric tons) Number and size of containers		

1/ In accordance with agreed definition.

2/ In accordance with the IUPAC (International Union of Pure and Applied Chemistry) Nomenclature.

3/ Different views exist whether it is necessary to state both the scientific chemical name and the structural formula in order for the declarations to be unambiguous.

4/ Three different approaches were taken by delegations: (1) Initial purity; (2) Purity of the compound as stored with an approximation of some 10 per cent; (3) That declaration of purity was not necessary.

5/ In accordance with agreed definition, but pending such a definition it is unclear which chemicals to declare in this table.

1.2 1/

Scientific chemical name/ <u>2/</u> Structural formula <u>3/</u>	Quantity (metric tons)	Number and size of containers
<u>Key precursors for unitary systems</u> <u>4/</u>		

Scientific chemical name/ <u>2/</u> Structural formula <u>3/</u>	Bulk		Filled in munition/ submunition (metric tons)	Total quantity (metric tons)
	Quantity (metric tons)	Number and size of containers		
<u>[Key components] [Key precursors] for multi-component systems</u> <u>4/</u> <u>5/</u> <u>6/</u>				

1/ The view was expressed that these two tables were not necessary and the key precursors and key components could be declared under points 1.1.1, 1.1.2 and 1.1.3 as applicable.

2/ In accordance with the IUPAC (International Union of Pure and Applied Chemistry) Nomenclature.

3/ Different views exist whether it is necessary to state both the scientific chemical name and the structural formula in order for the declarations to be unambiguous.

4/ To be declared separately for super-toxic lethal, other lethal and other harmful chemicals.

5/ Identified in accordance with approaches to be worked out in the context of Article II.

6/ Some delegations suggested that multicomponent chemical weapons should not be declared as a special category in a separate table.



2. Munitions

Type	Calibre (if applicable)	Quantity of unfilled munition/submunition (number of pieces) <sup>1/</sup>	Filled munition/submunition
		Quantity (number of pieces)	Chemical fill (in kg per piece of munition/submunition)
<u>Unitary chemical type</u>			
<u>Examples:</u>			
Shell	155 mm	22 000	2.82 kg of chemical x
Cartridge	120 mm	500 warhead bodies	1.12 kg of chemical y
Rocket warhead		1 500 submunitions	50 kg of chemical z (50 x 1 kg submunitions)
<u>Multicomponent chemical type</u>			
<u>Examples:</u>			
Binary shells for ... (= name of final reactive product)	155 mm	100 shell bodies	3 kg chemical A + B
		200 cannisters A	2 kg chemical A
		300 cannisters B	1 kg chemical C

3. Other devices

Type	Quantity of unfilled devices (number of pieces)	Filled devices
	Quantity (number of pieces)	Chemical fill (in kg/piece)
<u>Example:</u> spraytanks)		

<sup>1/</sup> Some delegations did not consider this column necessary.

4. Equipment specifically designed for use directly in connection with the employment of munitions and other devices under points A:2 and 3. (Example: single purpose rocket launchers).

5. Chemicals specifically designed for use directly in connection with the employment of munitions and other devices under points A:2 and 3. (Example: thickeners). 1/

B. Locations and detailed inventories of chemical weapons stocks to be declared before the commencement of each elimination period 2/

For each stock the following shall be declared:

1. Location

Geographical location expressed by ...

2. Detailed inventory

Composition and quantities of the chemical weapons shall be declared in accordance with paragraph A of this Annex.

[C. Detailed information on any chemical weapons on the territory of a State Party which are under the jurisdiction or control of others (to be developed)]

D. Past transfers and receipts (to be developed) 3/

## II. 4/ PRINCIPLES, METHODS AND ORGANIZATION OF THE ELIMINATION OF CHEMICAL WEAPONS

### A. Destruction of chemical weapons

1. Destruction of chemical weapons means a process by which chemicals are converted in an essentially irreversible way to a form unsuitable for production of chemical weapons, and which in an irreversible manner renders munitions and other devices unusable as such.

---

1/ Different views exist concerning, if or to what extent such chemicals should be declared. Furthermore, it appears that this question will have to be decided in the light of the final definition of chemical weapons.

2/ Some delegations held the view that overall declarations should be made within 30 days after the Convention's entry into force for a State Party.

3/ The view was expressed that past transfers should not be included in the Convention.

4/ For some delegations, the question of the applicability of this section of the Annex to obsolete chemical weapons (ordnances) retrieved from the combat zones of World War I will have to be resolved later.

Elimination through destruction shall apply to all chemical weapons except those which may be diverted (to be elaborated). <sup>1/</sup>

2. Each State party possessing chemical weapons shall determine how they shall be destroyed, except that the following procedures may not be used: dumping in any body of water, land burial or open-pit burning.
3. The destruction of chemical weapons shall take place at a specifically designated and appropriately designed and equipped facility(ies). [The facility(ies) shall be government property.]
4. The chemical weapons destruction facility shall be constructed and operated in a manner to ensure the destruction of the chemical weapons; and that the destruction process can be verified under the provisions of this Convention.

#### B. Diversion of chemical weapons

1. Diversion of chemical weapons means a process by which chemicals are converted in an essentially irreversible way into end-products that may only be used for purposes other than those related to chemical weapons. [Diversion also includes taking super-toxic lethal chemicals from the chemical weapons stocks for use for permitted purposes in quantities up to 1 metric tonne in accordance with Article VI.]

Elimination through diversion may apply to (to be elaborated).

### III. PRINCIPLES AND ORDER OF ELIMINATION

1. The elaboration of the Order of Elimination shall build on the undiminished security for all States during the entire elimination stage; confidence-building in the early part of the elimination stage; gradual acquisition of experience in the course of destroying chemical weapons stocks and applicability irrespective of the actual composition of the stockpiles and the methods chosen for the elimination of the chemical weapons.
2. The elimination of chemical weapons stocks shall start for all States Parties possessing chemical weapons simultaneously. The whole elimination stage shall be divided into nine annual periods.

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<sup>1/</sup> One delegation stated that it was unconvinced that diversion was either a practical or economic method for elimination. It may be prepared, however, to review its position in the event a practical system for diversion can be devised, preserving the requirement for effective verification.

3. Each State Party shall eliminate not less than one ninth of its stockpile [in measure of stockpile equivalent and/or equivalent mustard weight] during each elimination period. 1/ 2/ However, a State Party is not precluded from eliminating its stocks at a faster pace. Each State Party shall determine its detailed plans for each elimination period, as specified in part III of this Annex and shall report annually on the implementation of each elimination period. 3/

4. Order of Elimination (to be elaborated). 4/

#### IV. PLANS FOR ELIMINATION OF CHEMICAL WEAPONS

##### A. General plans for elimination of chemical weapons

##### 1. General plan for destruction of chemical weapons

The general plan for destruction of chemical weapons, submitted pursuant to article ... shall specify:

(a) a general schedule for destruction, giving types and quantities of chemical weapons to be destroyed in each period;

(b) for each existing or planned CW destruction facility:

- ["name" and address];
- [location];
- chemical weapons intended to be destroyed;
- method of destruction;

---

1/ It is considered necessary to elaborate a method for comparing different categories of chemical weapons stocks. The comparison of lethal and harmful chemicals remains unresolved and is subject to further consideration.

2/ Some delegations expressed the view that the question of the regulation of the elimination of stockpiles needs further and full discussion.

3/ It has been recognized that the elimination of chemical weapons stocks and the elimination of relevant production facilities should be considered together.

4/ Some delegations feel that it would be appropriate to introduce the idea of security stockpile levels to meet the security concerns of countries with small stockpiles of chemical weapons.

- capacity;
- expected period of operation;
- [products of the destruction process.]

[2. General plans for diversion of chemical weapons (to be elaborated)]

B. Detailed plans for elimination of chemical weapons

1. Detailed plans for destruction of chemical weapons

These plans shall be submitted to the Consultative Committee in accordance with article ... and shall specify:

- (a) the number of chemical weapons destruction facilities and a detailed schedule for the destruction of chemical weapons at each of these facilities;
- (b) the aggregate quantity of each individual type of chemical weapons plans to be destroyed at each facility;
- (c) data about each facility:
  - name, postal address, geographical location;
  - method of destruction;
  - end-products;
  - layout plan of the facility;
  - technological scheme;
  - operation manuals;
  - method of storage and volume of the facility's storage, estimated by types and quantities of chemical weapons;
  - types and quantities of chemical weapons kept at the storage during each elimination period;
  - the system of verification;
  - safety measures in force at the facility;
  - living and working conditions for the international inspectors.

[2. Detailed plans for diversion of chemical weapons (to be elaborated)]

V. PRINCIPLES AND METHODS FOR THE VERIFICATION OF THE ELIMINATION OF  
CHEMICAL WEAPONS

A. Destruction of chemical weapons

1. The aim of verification of destruction of chemical weapons stocks shall be:
  - to confirm the identity and quantity of the chemical weapons stocks to be destroyed, and
  - to confirm that these stocks for all practical purposes have been destroyed.
2. After a review of the detailed plans provided in Section III above, the Technical Secretariat, if the need arises, will enter into consultation with the State Party concerned in order to ensure the facility is designed to assure destruction, to allow advanced planning on how verification measures may be applied and that the application of verification measures is consistent with proper facility operation, and to ensure that the facility operation allows appropriate verification.
3. Each State Party should execute a detailed agreement with the Technical Secretariat covering detailed inspection procedures for each facility subject to inspection. (This concept remains to be further elaborated.)
4. The inspectors will be granted access to the chemical weapons destruction facility [...] prior to commencement of the active destruction phase, to carry out the engineering review of the facility, to include the facility's construction and layout, the equipment and instruments for measuring and controlling the destruction process, and the checking and testing of the accuracy of the verification equipment.
5. The inspectors will be granted access to conduct their activities at the facility and the facility storage during the entire active phase of destruction. They will conduct their activities in the presence and with the co-operation of representatives of the facility's management and the National Authority if they wish to be present.
6. The inspectors may monitor by either physical observation or devices:
  - (a) the facility storage and the chemical weapons present;
  - (b) the movement of chemical weapons from the storage to the facility;
  - (c) the process of destruction (assuring that no chemical weapons are diverted);
  - (d) the material balance (to be elaborated further); and
  - (e) the accuracy and calibration of the instruments.
7. To the extent consistent with verification needs, verification procedures should make use of information from routine facility operations.

8. If inspectors detect irregularities which may give rise to doubts they will report the irregularities to the representatives of the facility and the National Authority and request that the situation be resolved. Uncorrected irregularities will be reported to the Executive Council.

9. After the completion of each period of destruction the Technical Secretariat shall certify the declaration of the National Authority, reporting the completion of destruction of the designated quantity of chemical weapons.

[B. Diversions of chemical weapons (to be elaborated)]

VI. [VERIFICATION OF DECLARATIONS AND INTERIM MONITORING OF CHEMICAL WEAPONS STOCKPILES] \*/

(a) specifies any chemical weapons production facilities, including a state's share in joint production, (b) specifies any transfer or any change in the status of any production facility for the production of chemical weapons (and documentation relevant to the production of chemical weapons) which is proposed to be established, altered or expanded, (c) specifies actions to be taken to ensure that each chemical weapons production facility is subject to continuous monitoring, (d) outlines the general plan for destruction of chemical weapons (for each chemical weapons production facility, and for relevant categories of chemical weapons), (e) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (f) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (g) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (h) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (i) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (j) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (k) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (l) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (m) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (n) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (o) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (p) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (q) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (r) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (s) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (t) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (u) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (v) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (w) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (x) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (y) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes, (z) outlines the general plan for any necessary conversion of chemical weapons production facilities to peaceful purposes.

\*/ Some delegations believe it is necessary to elaborate principles and methods for verifying chemical weapons declarations and for monitoring chemical weapons stockpiles from the time of their declaration until their elimination.

V. CHEMICAL WEAPONS PRODUCTION FACILITIES

1. The provisions of this article shall apply to any and all chemical weapons production facilities under the jurisdiction or control of a State Party, regardless of location. 1/
2. Each State Party with any chemical weapons production facility shall cease immediately all activity at each chemical weapons production facility except that required for closure.
3. No State Party shall construct any new facility or modify any existing facility for the purpose of chemical weapons production or for any other purpose prohibited by the Convention. 2/
4. Each State Party, within 30 days after the Convention enters into force for it, shall submit a declaration which:
  - (a) specifies any chemical weapons production facilities under its jurisdiction or control, or on its territory under the control of others, 3/ including a State not party to this Convention, at any time since [1 January 1946] [at the time of entry into force of the Convention];
  - (b) specifies any transfer or any receipt by the State Party of any equipment for the production of chemical weapons [and documentation relevant to the production of chemical weapons] since [1.1.1946] or any transfer of control by that Party of such equipment [and documentation];
  - (c) specifies actions to be taken for closure of each chemical weapons production facility;
  - (d) outlines its general plan for destruction [or reconstruction for peaceful purposes] for each chemical weapons production facility, and
  - (e) outlines its general plan for any temporary conversion of any chemical weapons production facility into a facility for destruction of chemical weapons.
5. Each State Party shall, immediately after the declaration, under para. 4, has been submitted, provide access to each chemical weapons production facility for the purpose of [systematic] international on-site verification of the declaration through on-site inspection.

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1/ It is understood that the above provisions also apply to any facility on the territory of another State [regardless of ownership and form of contract, on the basis of which they have been set up and functioned for the purposes of production of chemical weapons].

2/ Some delegations consider this paragraph redundant.

3/ Some delegations expressed doubts as to the applicability of this phrase.

6. Each State Party shall:

(a) close within three months after the Convention enters into force for it, each chemical weapons production facility in a manner that will render each facility inoperable; and

(b) provide access to each chemical weapons production facility, subsequent to closure, for the purpose of systematic international on-site verification through periodic on-site inspection and continuous [monitoring by] [use of] on-site instruments in order to ensure that the facility remains closed and is subsequently [dismantled and] destroyed, or [dismantled] [and reconstructed for peaceful purposes].

7. Each State Party shall submit detailed plans for [destruction] [elimination] of each facility not later than [3 months] before the [destruction] [elimination] [conversion] of the facility begins. 1/

8. Each State Party shall:

(a) [destroy] [eliminate] all chemical weapons production facilities pursuant to [the [order] [schedule] specified in] Annex ..., beginning not later than 12 months, and finishing not later than 10 years, after the Convention enters into force for it; 2/

(b) provide information annually regarding the implementation of its plans for the [destruction] [elimination] of its chemical weapons production facilities, and

(c) certify, not later than 30 days after the destruction process has been completed, that its chemical weapons production facilities have been [destroyed] [eliminated].

9. A chemical weapons production facility may be temporarily converted for destruction of chemical weapons. Such a converted facility must be [destroyed] [eliminated] as soon as it is no longer in use for destruction of chemical weapons and, in any case, not later than 10 years after the Convention enters into force for the State Party.

10. [Each State Party shall submit all chemical weapons production facilities] [All chemical weapons production facilities] shall be subject to systematic international on-site verification through on-site inspection and [monitoring with] [use of] on-site instruments in accordance with Annex ...

11. The declaration, plans and information submitted by each State Party under this article shall be made in accordance with Annex ... and Annex ...

---

1/ One delegation held the view that the detailed plans in question should be submitted by each State Party within twelve months of the entry into force of the Convention for it.

2/ Some delegations expressed the desire to see the elimination of chemical weapons production facilities at the earliest opportunity.

ANNEX V

I. DECLARATIONS AND REPORTS ON CHEMICAL WEAPONS PRODUCTION FACILITIES

A. Declarations of [existing] chemical weapons production facilities

The declaration should contain for each facility:

1. Name and exact location.
2. Ownership, operation, control, who ordered and procured the facility.
3. Designation of each facility:
  - (a) Facility for producing chemicals defined as chemical weapons.
  - (b) Facility for filling chemical weapons.
4. Products of each facility and dates that they were produced:
  - (a) Chemicals produced.
  - (b) Munitions or devices filled, identity of chemical fill.
5. Capacity of the facility, expressed in terms of:
  - (a) The quantity of end product that the facility can produce in (period), assuming the facility operates (schedule).
  - (b) The quantity of chemical that the facility can fill into each type of munition or device in (period), assuming that the facility operates (schedule).
6. Detailed facility description:
  - (a) Layout of the facility.
  - (b) Process flow diagram.
  - (c) Detailed inventory of equipment, buildings and any spare or replacement parts on site.
  - (d) Quantities of any chemicals or munitions on site.

B. Declarations of former chemical weapons production facilities

The declaration should contain for each facility:

1. All information as in paragraph A, above, that pertains to the operation of the facility as a chemical weapons facility.
2. Date chemical weapons production ceased.

3. Current status of special equipment that was used for chemical weapons production.
  4. Dates of conversion from CW use, date of beginning of non-CW use.
  5. Current ownership, operation and control.
  6. Current production, stating types and quantities of product(s).
  7. Current capacity of the facility, expressed in terms of the quantity of end product that can be produced in (period), assuming the facility operates (schedule).
  8. Current detailed facility description:
    - (a) Layout of the facility.
    - (b) Process flow diagram.
    - (c) Location of any CW-specific equipment remaining on-site.
    - (d) Quantities of any chemical weapons remaining on-site.
- C. Declarations of [existing] chemical weapons production facilities under the control of others on the territory of the State Party
- Responsibility for declarations (to be discussed).
  - All elements contained in part IA of this Annex should be declared.
- D. Declarations of former chemical weapons production facilities under the control of others on the territory of the State Party
- Responsibility for declarations (to be discussed).
  - All elements contained in part IB of this Annex should be declared.
- E. Declarations of transfers
1. Chemical weapons production equipment means (to be developed).
  2. The declaration should specify:
    - (a) who received/transferred chemical weapons production equipment [and technical documentation];
    - (b) the identity of the equipment;
    - (c) date of transfer;
    - (d) whether the chemical weapons production equipment [and documentation] were eliminated;
    - (e) current disposition, if known.

F. Declarations of measures to ensure closure of:

1. Facilities under the jurisdiction or control of the State Party (data on national measures and the time-frames).
2. Facilities on the State Party's territory under the control of others (to be developed).

G. Annual Reports

H. Final Certification of Elimination

II. PRINCIPLES AND METHODS OF ELIMINATION OF CHEMICAL WEAPONS PRODUCTION FACILITIES

A. General

Each State Party shall decide on methods to be applied for the elimination of its chemical weapons production facilities, according to the principles laid down in this Annex. The process of elimination might be carried out through destruction, 1/ dismantling, 2/ [or conversion 3/].

responsibility for carrying out measures when more than one State is involved (be be discussed).

B. Closure and methods for closing the facility (to be elaborated)

C. Activities related to elimination

1. Facilities producing Category I chemicals.
2. Facilities producing other categories of chemicals.
3. Filling facilities.

D. Activities related to temporary conversion to destruction facility

E. Activities related to former chemical weapons production facilities

1/ One delegation suggests the following formulation: "Destruction means disassembling of technological equipment, its removal from buildings and constructions where it had been installed with its further irreversible transformation into articles unsuitable for the purposes of production of chemical weapons."

2/ One delegation suggests the following formulation: "Dismantling means disassembling of technological equipment, its removal from buildings and constructions where it had been installed with its further use for permitted purposes."

3/ One delegation suggests the following formulation: "Conversion of facilities means use of facilities after their reconstruction for permitted purposes not connected with chemical weapons."

III. ORDER OF ELIMINATION (to be developed)

IV. PLANS

A. General Plans

1. For each facility the following information should be supplied:

- (a) envisaged time-frame for measures to be taken;
- (b) methods of elimination.

2. In addition, the following information should be supplied for each facility:

[(a) In relation to dismantling:]

[(b) In relation to conversion for peaceful purposes:

(i) description of the facility after conversion

(ii) designation of the facility after conversion and names of products to be manufactured.]

3. In relation to temporary conversion into chemical weapons destruction facility:

(i) envisaged time-frame for conversion into a destruction facility;

(ii) envisaged time for utilizing the facility as a destruction facility;

(iii) description of the new facility;

(iv) method of elimination of special equipment;

(v) time-frame for elimination of the converted facility after it has been utilized to destroy chemical weapons;

(vi) method of elimination of the converted facility.

4. In relation to former chemical weapons production facilities (to be elaborated).

B. Detailed plans

1. The detailed plans for elimination of each facility should contain:

(a) detailed time schedule of elimination process;

(b) layout of the facility;

- (c) process flow diagram;
- (d) detailed inventory of equipment, buildings and other items to be eliminated;
- (e) measures to be applied to each item on the inventory;
- (f) proposed measures for verification;
- (g) security/safety measures to be observed during the destruction of the facility;
- (h) working and living conditions to be provided for international inspectors.

2. In addition, the following information should be included:

[(a) In relation to dismantling:]

[(b) In relation to conversion for peaceful purposes:

(i) projected use of the facility after conversion and products to be manufactured;

(ii) layout of the facility after conversion;

(iii) process flow diagram of the facility after conversion];

3. In relation to the temporary conversion into a chemical weapons destruction facility.

In addition to the information contained in part IV.B.1 of this Annex the following information should be provided:

(i) method of conversion into a destruction facility;

(ii) data on the destruction facility, in accordance with Annex IV, part IV.B.1(c).

4. In relation to elimination of a facility that was temporarily converted for destruction of chemical weapons, information should be provided in accordance with part IV.B.1 of this Annex.

5. In relation to former chemical weapons production facilities (to be elaborated).

## V. VERIFICATION OF ELIMINATION

Specific measures relating to verification of elimination at each facility shall be agreed between a State Party and the Consultative Committee (or its respective subsidiary bodies) in accordance with the following:

1. Verification of initial declarations;
2. Verification of closure;
3. Monitoring closure;
4. Verification of elimination;
5. Verification of temporary conversion into a destruction facility;
6. Verification of converted former chemical weapons production facilities.

VI. ACTIVITIES NOT PROHIBITED BY THE CONVENTION 1/

1. Each State Party:

(a) has the right, subject to the provisions of this Convention, to develop, produce, otherwise acquire, retain, transfer and use toxic chemicals and their precursors for purposes not prohibited by the Convention.

(b) shall ensure that toxic chemicals and their precursors are not developed, produced, otherwise acquired, retained, transferred, or used within its territory or anywhere under its jurisdiction or control for purposes prohibited by the Convention.

2. Toxic Chemicals and their Precursors:

(a) Toxic chemicals and their precursors considered in Annexes VI [1], VI [2] and VI [3], which could be used for purposes prohibited by the Convention, as well as facilities which produce, process or consume these toxic chemicals or precursors, shall be subject to international monitoring as provided in those annexes:

Annex VI [1] Schedule [1]: Super-Toxic Lethal Chemicals and [especially dangerous key precursors] [key components of chemicals weapons systems].

Annex VI [2] Schedule [2]: Key Precursors.

Annex VI [3] Schedule [3]: Chemicals produced in large commercial quantities and which could be used for chemical weapons purposes.

(b) The schedules of chemicals contained in the annexes may be revised (the basis and modalities for revision are to be developed).

3. Within 30 days of the entry into force of it, each State Party shall declare data on relevant chemicals and the facilities which produce them, in accordance with Annexes VI [1], [2] and [3].

4. Each State Party shall make an annual declaration regarding the relevant chemicals in accordance with Annexes VI [1], [2] and [3].

5. Each State Party undertakes to subject the chemicals and [facility] [facilities] under Annex VI [1] to the measures contained in that annex.

6. Each State Party undertakes to subject the chemicals and facilities under Annex VI [2] to monitoring by data reporting and routine systematic international on-site verification, through on-site inspection and use of on-site instruments as long as production and processing are not impaired.

---

1/ One delegation considers that the terminology used in this article and its annexes should be consistent with the final definition of chemical weapons to be agreed upon.

7. Each State Party undertakes to subject the chemicals and facilities under Annex VI [3] to monitoring by data reporting.

8. The provisions of this article shall be implemented in a manner designed in so far as possible to avoid hampering the economic or technological development of parties to the Convention on international co-operation in the field of peaceful chemical activities including the international exchange of scientific and technical information and chemicals and equipment for the production, processing or use of chemicals for peaceful purposes in accordance with the provisions of the Convention. 1/

9. In conducting verification activities, the (Consultative Committee) shall:

(a) avoid undue interference in the State Party's peaceful chemical activities;

(b) take every precaution to protect confidential information coming to its knowledge in the implementation of the Convention; and

(c) require only the minimum amount of information and data necessary for the carrying out of its responsibilities under the Convention.

10. For the purpose of on-site verification, each State Party shall grant to the (Consultative Committee) access to facilities as required in Annexes VI [1], [2] and [3].

1/ The inclusion of this paragraph in this article is to be considered further.

ANNEX VI [1]

1. General provisions

A State Party shall not produce, acquire, retain, transfer or use chemicals in Schedule [1] unless:

- (i) the chemicals are applied to research, medical or protective purposes, 1/, 2/ and
- (ii) the types and quantities of chemicals are strictly limited to those which can be justified for research, medical or protective purposes, and
- (iii) the aggregate amount of such chemicals at any given time for [permitted] [protective] purposes is equal to or less than one metric tonne, and
- (iv) the aggregate amount for [permitted] [protective] purposes acquired by a State Party in any calendar year through production, withdrawal from chemical weapons stocks and transfer is equal to or less than one metric tonne.

2. Single Small Scale Production Facility

- (i) Each State Party which produces chemicals in Schedule [1] for [permitted] [protective] purposes shall carry out the production at a single small-scale facility, the capacity of which shall not exceed [one] metric tonne per year, as measured by the method established in [                      ]. 3/
- (ii) Each State Party which plans to operate such a facility shall provide the Consultative Committee with the location and a detailed technical description of the facility, including an inventory of equipment and detailed diagrams. For existing facilities, this information shall be provided not later than 30 days after the

---

1/ A view was expressed that for consistency in this Annex, "permitted purposes" should be used instead of "research, medical or protective purposes". The view was also expressed that the use of the term "permitted" would broaden considerably the sphere of use of super-toxic lethal chemicals which could be used as chemical weapons and that this was very undesirable.

2/ Some delegations still question the concept of "protective purposes" in relation to the Convention.

3/ The view was expressed that the single small-scale production facility should be State-owned.

Convention enters into force for the State Party. Information on new facilities shall be provided six months before operations are to begin. 1/

3. Other Facilities

- (i) [Facilities which synthesize, acquire or use chemicals in Schedule [1] for research or medical purposes shall be approved by the State Party. Synthesis at each such facility for research and medical purposes shall be limited per annum to a total maximum of [...]g and to [...]g of any one chemical on the Schedule.]

[Facilities which acquire or use chemicals in Schedule [1] for permitted purposes shall be approved by the State Party. Each transfer from the single small-scale production facility to such facilities shall be notified to the Consultative Committee by inclusion in the annual data reporting, with an indication of the chemical or chemicals involved, the amount transferred and the purpose of the transfer.]

- (ii) The location of the approved facilities shall be provided to the Consultative Committee.

4. Transfers

- (i) A State Party may transfer chemicals in Schedule [1] only to another State Party and only for research, medical or protective purposes in accordance with paragraph 1.
- (ii) Thirty days prior to any such transfer, both States Parties shall notify the Consultative Committee.
- (iii) Chemicals transferred shall not be retransferred to a third State.

5. Verification of the Single Small-Scale Production Facility

- (i) The single small-scale production facility referred to in paragraph 2 shall be subject to [systematic] [permanent] international on-site verification, through on-site inspection and continuous monitoring with on-site instruments. 2/

---

1/ It was noted that consideration would need to be given to the compatibility of the requirement in the last sentence with the obligations specified in paragraph 5 (vi).

2/ The view was expressed that continuous monitoring with on-site instruments might not be necessary for very small facilities.

- (ii) The aim of verification activities at the facility shall be to verify that the quantities of Schedule [1] chemicals produced are correctly declared and, in particular, that their aggregate amount does not exceed one metric tonne.
- (iii) [The number, intensity, duration, timing and mode of inspections for a particular facility shall be based on the risk to the objectives of the Convention posed by the relevant chemicals, the characteristics of the facility and the nature of the activities carried out there. The guidelines to be used shall include: (to be developed).]
- (iv) Each State Party possessing a facility shall make a detailed annual declaration regarding the activities of the facility for the previous year and anticipated production for the coming year. The declaration shall include: (to be developed).
- (v) Each facility shall receive an initial visit from international inspectors promptly after the facility is declared. The purpose of the initial visit shall be to verify information provided concerning the facility, including verification that the capacity will not permit the production, on an annual basis, of quantities [significantly] above one metric tonne, and to obtain any additional information needed for planning future verification activities at the facility, including inspection visits and use of on-site instruments.
- (vi) Each State Party possessing or planning to possess a facility shall execute an agreement, based on a model agreement, with the [international authority] before the facility begins operation or is used, covering detailed inspection procedures for the facility. Each agreement shall include: (to be developed). 1/

#### 6. Verification of Other Facilities

Facilities referred to in paragraph 3 shall be monitored through annual data reporting to the Consultative Committee. The following information shall be included: (to be developed).

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1/ The view was expressed that pending conclusion of the agreement between a State Party and the [International Authority] there would be a need for provisional inspection procedures to be formulated.

## ANNEX VI [1]

## SCHEDULE [1]

## PROVISIONAL LIST

## 1. O-Alkyl alkylphosphonofluoridates

e.g. Sarin: O-isopropyl methylphosphonofluoridate  
Soman: O-pinacolyl methylphosphonofluoridate

## 2. O-Alkyl N.N-dialkylphosphoramidocyanidates

e.g. Tabun: O-ethyl N.N-dimethylphosphoramidocyanidate

## 3. O-Alkyl S-2-dialkylaminoethylalkylphosphonothiolates

e.g. VX: O-ethyl S-2-diisopropylaminoethylmethyl-phosphonothiolate

## 4. Sulphur mustards:

e.g. Mustard gas (H): bis (2-chloroethyl) sulphide  
Sesquimustard (Q): 1.2-bis (2-chloroethylthio) ethane  
O-Mustard (T): bis (2-chloroethylthioethyl) ether

## 5. Lewisites

Lewisite 1: 2-chlorovinyl dichloroarsine  
Lewisite 2: bis (2-chlorovinyl) chloroarsine  
Lewisite 3: tris (2-chlorovinyl) arsine

## 6. Nitrogen mustards

HN1: bis (2-chloroethyl) ethylamine  
HN2: bis (2-chloroethyl) methylamine  
HN3: tris (2-chloroethyl) amine

## 7. 3-Quinuclidinyl benzilate (BZ)

## 8. Alkylphosphonyldifluorides

e.g. DF

## 9. Ethyl O-2-diisopropylaminoethyl alkylphosphonites

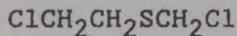
e.g. QL

To be discussed further

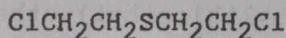
1. Saxitoxin
2. 3.3-Dimethylbutan-2-ol (pinacolyl alcohol)
3. CS
4. CR
5. Chloro Soman and Chloro Sarin
6. Sulphur Mustards: to include compounds listed below.

Sulphur Mustards: to include

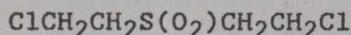
2-Chloroethylchloromethylsulphide



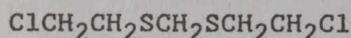
Bis(2-chloroethyl)sulphide (Mustard)



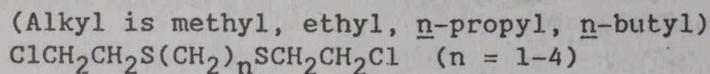
Bis(2-chloroethyl)sulphone



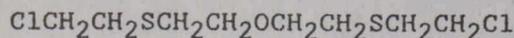
2-Chloroethylthiomethyl-2'-chloroethylsulphide



2-Chloroethylthioalkyl-2'-chloroethylsulphide



Bis(2-Chloroethylthioethyl)ether



ANNEX VI [2]

KEY PRECURSOR CHEMICALS

DECLARATIONS

The Initial and Annual Declarations to be provided by a State Party under paragraphs [3] and [4] of Article VI shall include:

1. For the Initial Declaration

Aggregate national data on the production, processing and consumption of each chemical listed in Schedule [2], on the export and import of the chemicals in the year preceding the date of entry of the Convention into force with an indication of the countries involved.

For the Annual Declaration

Aggregate data on each of the production, consumption, import and export of each chemical listed in Schedule [2].

2. The following information for each facility which produces, processes or consumes more than [ ] tonnes per annum of the chemicals listed in Schedule [2]:

Key Precursor Chemical(s)

- (i) The chemical name, common or trade name used by the facility, structural formula, and Chemical Abstracts Service Registry Number.
- (ii) The total amount produced, consumed, imported and exported in the previous calendar year. 1/

Facility 2/

- (i) The name of the facility and of the owner, company, or enterprise operating the facility.

1/ Whether the total amount is to be expressed as an exact figure or within a range is to be discussed.

2/ One delegation suggested that, in the case of a multi-purpose facility currently producing key precursor chemicals, the following should be specified:

- general description of the products;
- detailed technological plan of the facility;
- list of special equipment included in the technological plan;
- type of waste treatment equipment;
- description of each final product (chemical name, chemical structure and register number);
- unit capacity for each product;
- use of each product.

- (ii) The exact location of the facility (including the address, location of the complex, location of the facility within the complex including the specific building and structure number, if any).
- (iii) Whether the facility is dedicated to producing or processing the listed key precursor or is multipurpose.
- (iv) [The main orientation (purpose) of the facility.] 1/
- (v) The capability and capacity (both to be defined) of the facility.
- (vi) Which of the following activities are performed with regard to the key precursor chemicals:
  - (a) production
  - (b) processing with conversion into another chemical
  - (c) processing without chemical conversion
  - (d) other - specify.
- (vii) Whether listed key precursors are stored on-site in quantities greater than [ ] [tonnes]. 2/

Application of Chemical(s)

- (i) The purpose(s) for which the key precursor chemical(s) are produced, consumed or processed:
  - (a) conversion on-site (specify product type)
  - (b) sale or transfer to other domestic industry (specify final product type)
  - (c) export of a key precursor (specify which country)
  - (d) other.

3. A State Party shall notify the International Authority of the name and location of any facility which intends, in the year following submission of the Annual Declaration, to produce, process or consume more than [ ] tonnes per annum of any of the chemicals listed in Schedule [2].

1/ It was suggested that this aspect could be incorporated in paragraph (vi).

2/ The question of a threshold requires further consideration.

Verification 1/

Aim

4. The aim of the measures stipulated in Article VI, paragraph 6 shall be to verify that:

- (i) facilities declared under this Annex are not used to produce any chemical listed in Schedule [I]. 2/
- (ii) the quantities of chemicals listed in Schedule [2] produced, processed or consumed are consistent with needs for purposes not prohibited by the Chemical Weapons Convention. 3/
- (iii) the chemicals listed in Schedule [2] are not diverted or used for purposes prohibited by the Chemical Weapons Convention.

Obligation and Frequency

5. (i) Each facility notified to the [international authority] under this Annex shall be subject to systematic international on-site inspection on a routine basis.
- (ii) The number, intensity, duration, timing and mode of inspections for a particular facility shall be based on the risk to the objectives of the Convention posed by the relevant chemical, the characteristics of the facility and the nature of the activities carried out there. The guidelines to be used shall include: (to be developed). 4/ 5/

1/ Some of the provisions contained in this section have general application throughout the Convention. It is understood that the retention of these will be reviewed at a later stage in the negotiations.

2/ It was suggested that "or for any other purposes prohibited by the Convention" should be added.

3/ Opinions were expressed on the need to consider the question of the existence in a facility of excessive capacity for the production of chemicals in Schedule [2].

4/ It was noted that a "weighted approach" might be taken in determining the inspection régime for specific chemicals. The importance of establishing a threshold(s) in this context was also noted. It was mentioned that a threshold(s) should relate to "military significant quantities" of the relevant chemical(s).

5/ There was general agreement that the guidelines should stipulate the main elements relevant to the basic features of the facility. A view was expressed that one of the guidelines might provide that inspections will usually be carried out at a time when the facility inspected is operating in the normal way. The view was also expressed that this approach would be inconsistent with the language of paragraph 6.

Selection

6. The particular facility to be inspected shall be chosen by the [international authority] in such a way to preclude the prediction of precisely when the facility is to be inspected.

Notification

7. A State Party shall be notified by the [international authority] of the decision to inspect a facility referred to in paragraph 1 ..... hours prior to the arrival of the inspection team.

Host State Party

8. The host State Party shall have the right to designate personnel to accompany an international inspection team. The exercise of this right shall not affect the right of inspectors to obtain access to the facility, as provided by the Convention, nor shall it delay or otherwise impede the carrying out of the inspection.

Initial Visit

9. Each facility notified to the [international authority] under this Annex shall be liable to receive an initial visit from international inspectors, promptly after the State becomes a Party to the Convention.

10. The purpose of the initial visit shall be to verify information provided concerning the facility to be inspected and to obtain any additional information needed for planning future verification activities at the facility, including inspection visits and use of on-site instruments. 1/

Agreement on Inspection Procedures

11. Each State Party shall execute an agreement, based on a model agreement, 2/ with the [international authority], within ..... months after the Convention enters into force for the State, governing the conduct of the

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1/ Reference was made to the extent to which inspectors should be obliged to follow safety procedures at a particular facility. It was mentioned that this matter might be discussed during the initial visit and/or be covered in the agreement on inspection procedures referred to in paragraph 11.

2/ Several delegations considered that the model agreement should be elaborated by the time the Convention is concluded.

inspections of the facilities declared by the State Party. 1/ The agreement shall provide for the detailed subsidiary arrangements which shall govern inspections at each facility.

12. The detailed subsidiary arrangements shall include, inter alia, the size of the team required for the inspection; the duration of the inspection; the relevant parts of the site to be inspected; and the need for permanent on-site instrumentation.

#### Verification Inspections

13. The areas of a facility to be inspected under subsidiary arrangements may, inter alia, include: 2/

- (i) areas where feed chemicals (reactants) are delivered and/or stored;
- (ii) areas where manipulative processes are performed upon the reactants prior to addition to the reaction vessel;
- (iii) feed lines as appropriate from subparagraph (i) and/or subparagraph (ii) to the reaction vessel, together with any associated valves, flow meters, etc.;
- (iv) the external aspect of the reaction vessel and its ancillary equipment;
- (v) lines from the reaction vessel leading to long- or short-term storage or for further processing of the designated chemical;
- (vi) control equipment associated with any of the items (i) to (v);
- (vii) equipment and areas for waste and effluent handling;
- (viii) equipment and areas for disposition of off-specification chemicals.

14. The inspectors have the right at any stage during the inspection to obtain samples from any of the areas inspected. They also have the right to request that appropriate analyses be performed in their presence, either in-house or in a mobile field laboratory, or if necessary to have samples analysed at a laboratory designated by the [international authority]. They may request clarification of any ambiguities arising from the inspection.

---

1/ It was mentioned that matters to be covered by the agreement might include, inter alia: the requirement for a State Party to provide updated information and data to the inspection team when they arrive at the facility to be inspected and to specify analytical equipment available at the facility or at analytical facilities elsewhere; and the requirement for the [international authority] to advise the State Party of any additional requirements relevant to the conduct of the inspection.

2/ Opinions were expressed on the need to consider the question of the existence in a facility of excessive capacity for the production of chemicals in Schedule [2].

15. The Technical Secretariat may retain at each site a sealed container for photographs, plans and other information that it may wish to refer to in the course of subsequent inspection.

Submission of Inspectors' Report

16. The inspectors shall submit a report to the [international authority] on the activities conducted by them and on their findings. 1/

17. In the event that any ambiguities arise which cannot be resolved in the course of the inspection, the inspectors may in their report recommend appropriate steps for clarification.

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1/ It was suggested that the report of the inspectors should be made available to the State Party subject to the inspection.

ANNEX VI [2]  
SCHEDULE [2]

PROVISIONAL LIST

1. Chemicals containing one P-Methyl, P-Ethyl, or P-Propyl (normal or iso) bond.
2. N,N-Dialkylphosphoramidic Dihalides.
3. Dialkyl N,N-Dialkylphosphoramidates.
4. Arsenic trichloride.
5. 2,2-Diphenyl-2-hydroxyacetic acid.
6. Quinuclidin-3-ol
7. N,N-Diisopropylaminoethyl-2-chloride.
8. N,N-Diisopropylaminoethan-2-ol.
9. N,N-Diisopropylaminoethane-2-thiol.

TO BE DISCUSSED FURTHER

(1) The following compounds:

Bis (2-hydroxyethyl) sulphide (thiodiglycol)

3,3 - Dimethylbutan-2-ol (Pinacolyl alcohol)

(2) Expanded groups for compounds 5, 6, 7, 8 and 9, as follows:

(No. 5): 2-phenyl-2-(phenyl, cyclohexyl, cyclopentyl or cyclobutyl)-2-hydroxyacetic acids and their methyl, ethyl, n-propyl and iso-propyl esters.

(No. 6): 3- or 4-hydroxypiperidine and their [derivatives] and [analogs].

(Nos. 7,8,9): N.N - Disubstituted Aminoethyl-2-Halides  
N.N - Disubstituted Aminoethan-2-ols  
N.N - Disubstituted Aminoethane-2-thiols

ANNEX VI [3]

Chemicals which are produced in large commercial quantities and which  
could be used for chemical weapons purposes

DECLARATIONS

1. The Initial and Annual Declarations to be provided by a State Party under paragraph [4] of Article VI shall include the following information for each of the chemicals listed in Schedule [3]:

- (i) The chemicals name, common or trade name used by the facility, structural formula and chemical Abstracts Service Registry Number.
- (ii) The total amount produced, consumed, imported and exported in the previous calendar year.
- (iii) The final product or end use of the chemical in accordance with the following categories (to be developed),
- (iv) for each facility which produces, processes, consumes or transfers 1/ 2/ one of the chemicals listed in Schedule [3] (on an industrial scale - to be defined).
  - (a) The name of the facility and of the owner, company, or enterprise operating the facility.
  - (b) The location of the facility.
  - (c) The capacity (to be defined) of the facility.
  - (d) The approximate amount of production and consumption of the chemical in the previous year (ranges to be specified).

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1/ These issues need further consideration with regard to the possibility of appropriate information and data reporting.

2/ The relevance of transfers in this connection is to be considered further.

2. A State Party shall notify the (International Authority) of the name and location of any facility which intends, in the year following submission of the Annual Declaration, to produce, process or consume any of the chemicals listed in Schedule [3] (on an industrial scale - to be defined). 1/

VERIFICATION

The verification régime for chemicals listed in Schedule [3] will comprise both the provision of data by a State Party to the [International Authority] and the monitoring of that data by the [International Authority]. 2/

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1/ The requirement contained in this provision is to be considered further.

2/ Some delegations consider that provision should be made for resort to an on-site "spot-check" inspection, if required, to verify information supplied by a State Party.

ANNEX VI [3]  
SCHEDULE [3]

Phosphorus oxychloride	(10025-87-3)
Phosphorus trichloride	(7719-12-2)
Phosgene	(75-44-5)
Cyanogen chloride	(506-77-4)
Hydrogen cyanide	(74-90-8)
Trichloronitromethane (chloropicrin)	(76-06-2)
Di- and Trimethyl/Ethyl Esters of Phosphorus [P III] Acid:	
Trimethyl phosphite	(121-45-9)
Triethyl phosphite	(122-52-1)
Dimethyl phosphite	(868-85-9)
Diethyl phosphite	(762-04-9)
Sulphur monochloride	(19925-67-9)
Sulphur dichloride	(19545-99-0)

## VII. NATIONAL IMPLEMENTATION MEASURES

Each State Party to this Convention shall adopt any measures it considers necessary in accordance with its constitutional processes to implement this Convention and, in particular, to prohibit and prevent anywhere under its jurisdiction or control any activity that a State Party to this Convention is prohibited from conducting by this Convention.

In order to implement these obligations, each State Party shall, according to its needs and specific conditions, designate or establish a national authority. \*/

Each State Party undertakes to inform the Consultative Committee concerning the national authority and other legislative and administrative measures taken to implement the Convention.

Each State Party undertakes to co-operate with the Consultative Committee in the exercise of all its functions and in particular to provide assistance to the Consultative Committee including data reporting, assistance for international on-site inspections, provided for in this Convention, and a response to all its requests for the provision of expertise, information and laboratory support.

National Technical Means \*\*/

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\*/ It was suggested that guidelines for the functioning of the national authority for the implementation of the Convention be elaborated.

\*\*/ It was suggested that no reference to National Technical Means is needed in a future Convention.

VIII. CONSULTATIVE COMMITTEE \*/

A. Establishment of the Consultative Committee

1. There is hereby established the Consultative Committee.
2. The Consultative Committee shall be the principal organ of the Convention.
3. The first session of the Consultative Committee shall be convened by the Depositary at [venue] not later than 30 days after the entry into force of the Convention.

B. Composition, procedure and decision-making

1. The Consultative Committee shall be composed of all the States Parties to this Convention. Each State Party to this Convention shall have one representative in the Consultative Committee, who may be accompanied by alternates and advisers.
2. The Consultative Committee shall meet in regular annual sessions and in such special sessions as may be convened at the request of ... members of the Consultative Committee or of the Executive Council or as provided in Article IX of the Convention.
3. Sessions shall take place at the seat of the Consultative Committee unless it decides otherwise.
4. The Consultative Committee shall adopt its rules of procedure. At the beginning of each regular session, it shall elect its Chairman and such other officers as may be required. They shall hold office until a new Chairman and other officers are elected at the next regular session.
5. A majority of the members of the Consultative Committee shall constitute a quorum.
6. Each member of the Consultative Committee shall have one vote.
- [[7. Decisions on questions of procedure, including decisions to convene special sessions of the Consultative Committee, shall be taken by a simple majority.
8. Decisions on questions of substance shall be taken by [a two-third majority] [consensus]. When the issue arises as to whether a question is one of substance or not, that question shall be treated as one of substance unless otherwise decided by the Consultative Committee by the majority required for decisions on questions of substance.]]

[[7. All decisions shall be taken by a two-third majority.]]

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\*/ Some delegations suggested that the question of how the expenses of the Consultative Committee shall be met needs to be addressed within the Convention at an appropriate time.

C. Powers and functions

1. The Consultative Committee shall [oversee] [review] the implementation of the Convention, consider any questions or matters relevant to the Convention or relating to the powers and functions of any subsidiary organs [established by the Consultative Committee], foster consultation and co-operation among States Parties [for the advancement of chemical industry for peaceful purposes] and promote the verification of compliance with this Convention.
2. In carrying out its functions [referred to in paragraph 1], the Consultative Committee shall inter alia:
  - (a) co-operate with the appropriate national authorities of States Parties;
  - (b) facilitate consultations and co-operation among States Parties at their request;
  - (c) review scientific and technical developments which could affect the operation of this Convention;
  - (d) encourage international scientific and technical co-operation in the chemical field for peaceful purposes, [especially with the objective of promoting the advancement of chemical industry in the developing States as provided in Article XI;]
  - (e) carry out all activities relating to measures of verification; for this purpose, the Consultative Committee shall:
    - (i) specify procedures for systematic international on-site inspection;
    - (ii) oversee [and carry out] systematic international on-site inspection in accordance with Articles ...;
    - [(iii) consider and decide on requests to send a fact-finding mission in accordance with Article ...;]
    - (iv) carry out fact-finding activities in accordance with Article IX;
  - (f) establish and revise as necessary, procedures for exchange of information, for declarations and for technical matters related to the implementation of this Convention;
  - (g) receive, keep [and make available to States Parties] declarations, plans and notifications presented by States Parties in accordance with Articles ...;
  - (h) provide a forum for discussion of any questions raised relating to the objectives or the implementation of the Convention;
  - (i) elect the members of the Executive Council in accordance with Article ...;

[(j) elect ... (the head of the Secretariat) from among the candidates proposed by members of the Consultative Committee;]

[(k) appoint inspectors as the staff of the Inspectorate and the head of the Inspectorate;]

(l) establish, as appropriate, such subsidiary organs as it finds necessary for the exercise of its functions in accordance with this Convention;

(m) adopt the rules of procedure [of the Executive Council including the method of selecting its Chairman];

(n) consider and approve the proposed annual budget of the Consultative Committee and its subsidiary organs submitted by the Council;

(o) consider and approve the reports of the Executive Council;

(p) after the expiry of a period of ... years from the date of entry into force of this Convention, undertake a review of the operation of this Convention in accordance with Article ... \*/

3. The Consultative Committee shall establish an Executive Council [within 45 days after the entry into force of the Convention].

4. While the Consultative Committee is ultimately responsible for the functions provided for in paragraph 2, it shall delegate the actual implementation of those functions to the Executive Council in accordance with the provisions of this Convention.

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\*/ Some delegations were of the view that provisions on review should be more appropriately included in another part of the Convention.

EXECUTIVE COUNCIL \*/

A. Composition, procedure and decision-making

1. The Executive Council shall consist of [15] States Parties to this Convention elected by the Consultative Committee. [In addition, those permanent members of the Security Council of the United Nations which are parties to the Convention should be represented]. Each member of the Executive Council shall have one representative in the Council, who may be accompanied by alternates and advisers.

2. The members of the Executive Council shall be elected on the basis of [an appropriate geographic and political balance.]

3. Election shall take place at regular sessions of the Consultative Committee. Each [elected] member of the Executive Council shall serve for [two] [three] years period, with [five] of the members elected each year.

4. The Executive Council shall function at the seat of the Consultative Committee.

[5. A majority of the members of the Executive Council shall constitute a quorum.]

6. Each member of the Executive Council shall have one vote.

[[7. Decisions on questions of procedure shall be taken by a simple majority.]

8. Decisions on questions of substance shall be taken by [a two-third majority] [consensus]. When the issue arises as to whether a question is one of substance or not, that question shall be treated as one of substance unless otherwise decided by the Council by the majority required for decisions on questions of substance.]]

[[7. All decisions shall be taken by a two-third majority.]]

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\*/ Some delegations believed that the question of placement within the Convention of some of the provisions relating to the functions of the subsidiary organs will have to be considered at a later stage.

B. Functions \*/

1. The Executive Council shall be responsible to the Consultative Committee and shall have delegated authority to discharge the functions of the Consultative Committee as provided in paragraph 1 and paragraph 2 (a) to 2 (h) of Section I Subsection C of this Article.

2. The Executive Council shall particularly:

(a) supervise and co-ordinate the activities of the subsidiary organs of the Consultative Committee in implementing the provisions of the Convention;

(b) ensure the effective implementation of, and compliance with, the Convention;

(c) propose to the Consultative Committee, as appropriate, the establishment of such subsidiary organs as it finds necessary for the exercise of its functions in accordance with this Convention;

(d) present reports to the Consultative Committee particularly about the exercise of the functions delegated to it;

(e) request the ... (head of the Secretariat) when appropriate and necessary, to convene a special meeting of the Consultative Committee;

[(f) propose to the Consultative Committee the establishment of appropriate mechanisms for directing and supervising the Inspectorate;]

[(g) propose to the Consultative Committee the appointment of inspectors as the staff of the Inspectorate and appoint among the inspectors the head of the Inspectorate;]

(h) obtain, keep, and disseminate information submitted by States Parties regarding matters pertaining to the Convention.

(i) receive requests for information and clarification regarding compliance with the Convention from States Parties, including requests for fact-finding.

[(j) decide and oversee specific actions to be taken regarding such requests.]

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\*/ Some delegations considered that the provisions on the functions of the Executive Council will require further specification in the light of such functions as may be conferred upon the Council in other parts of the Convention, particularly with regard to verification.

IX. CONSULTATIONS, CO-OPERATION AND FACT-FINDING

1. State Parties shall consult and co-operate, directly among themselves, or through the Consultative Committee or other appropriate international procedures, including procedures within the framework of the United Nations and in accordance with its Charter, on any matter which may be raised relating to the objectives or the implementation of the provisions of this Convention.

2. States Parties to the Convention shall make every possible effort to clarify and resolve, through exchange of information and consultations among them, any matter which may cause doubt about compliance with this Convention, or which gives rise to concerns about a related matter which may be considered ambiguous. [A Party which receives a request from another Party for clarification of any matter which the requesting Party believes causes such doubts or concerns shall provide the requesting Party, within ... days of the request, with information sufficient to answer the doubts or concerns raised along with an explanation on how the information provided resolves the matter.] Nothing in this Convention affects the right of any two or more States Parties to this Convention to arrange by mutual consent for inspections or any other procedures among themselves to clarify and resolve any matter which may cause doubts about compliance or gives rise to concerns about a related matter which may be considered ambiguous. Such arrangements shall not affect the rights and obligations of any State Party under other provisions of this Convention.

Procedure for requesting clarification

3. A State Party shall have the right to request the Executive Council to assist in clarifying any situation which may be considered ambiguous or which gives rise to doubts about the compliance of another State Party with the Convention. The Executive Council shall provide appropriate information and data in its possession relevant to the situation which can dispel such doubts, whilst [taking every precaution in] protecting commercial and industrial secrets and other confidential information coming to its knowledge in the implementation of the Convention.

4. A State Party shall have the right to request the Executive Council to obtain clarification from another State Party on any situation which may be considered ambiguous or which gives rise to doubts about its compliance with the Convention. In such a case, the following shall apply:

(a) The Executive Council shall forward the request for clarification to the State Party concerned within [24 hours] of its receipt.

(b) The requested State Party shall provide the clarification to the Executive Council within [seven days] of the receipt of the request.

(c) The Executive Council shall forward the clarification to the requesting State Party within [24 hours] of its receipt.

(d) In the event that the requesting State Party deems the clarification to be inadequate, it may request the Executive Council to obtain from the requested State Party further clarification.

(e) For the purpose of obtaining further clarification requested under paragraph 2 (d), the Executive Council may set up a group of experts to examine all available information and data relevant to the situation causing the doubt. The group of experts shall submit a factual report to the Executive Council on its findings.

(f) Should the requesting State Party consider the clarification obtained under paragraphs 2 (d) and 2 (e) to be unsatisfactory, it may request a special meeting of the Executive Council in which States Parties involved not members of the Executive Council shall be entitled to take part in accordance with provisions in Article ... In such a special meeting, the Executive Council shall consider the matter and may recommend any measure it deems appropriate to cope with the situation.

5. A State Party shall have the right to request the Executive Council to clarify any situation which has been considered ambiguous or has given rise to doubts about its compliance with the Convention. The Executive Council shall respond by providing such assistance as appropriate.

6. The Executive Council shall inform the States Parties to this Convention about any request for clarification provided in this Article.

7. [If the doubts or concerns of a State Party about compliance have not been resolved within [two months] after the submission of the request for clarification to the Executive Council, or it believes its doubts warrant urgent consideration, without necessarily exercising its right to the challenge procedure, it may request a special session of the Consultative Committee in accordance with Article ... In such a special session, the Consultative Committee shall consider the matter and may recommend any measure it deems appropriate to cope with the situation.]

Procedure for requesting a fact-finding mission

The further contents of Article IX remain to be elaborated. \*/ \*\*/ \*\*\*/

\*/ The text in Annex III of the Report of Working Group C contained in CD/CW/WP.149 dealing with procedures for challenge inspection in its present form in some instances has narrowed down differences. In the view of many delegations the text reflects the current stage of negotiations. It requires further substantive work. Other material on fact-finding and challenge inspection can be found in documents CD/294, CD/334, CD/416, CD/443, CD/500, CD/539, CD/664, CD/685, CD/715, CD/CW/WP.120 and CD/CW/WP.136.

\*\*/ Many delegations felt that the text contained in Annex III of the Report of Working Group C, which is the product of intensive negotiations and consultations during the 1986 session, should have been duly included in the final report of the Ad Hoc Committee. They deeply regretted, therefore, that lack of consensus prevented the Committee from doing so and were of the view that such text should be the basis for future work on the crucial issue of challenge inspection.

\*\*\*/ In the opinion of other delegations, differences between positions on challenge inspection are still great, and the current state of negotiations on this issue is reflected in the many proposals that have been put forth.

X. ASSISTANCE

XI. ECONOMIC AND TECHNOLOGICAL DEVELOPMENT

XII. RELATION TO OTHER INTERNATIONAL AGREEMENTS \*/

Nothing in this Convention will be interpreted as in any way impairing the obligations assumed under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925 and in the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, signed at London, Moscow and Washington on 10 April 1972.

XIII. AMENDMENTS

XIV. DURATION, WITHDRAWAL \*/

...

The withdrawal of a State Party from this Convention shall not in any way affect the duty of States to continue fulfilling the obligations assumed under any relevant rules of international law, particularly the Geneva Protocol of 17 June 1925.

XV. SIGNATURE, RATIFICATION, ENTRY INTO FORCE

XVI. LANGUAGES

Annexes and other documents

Preparatory Commission

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\*/ Some delegations consider that the texts contained above require further consideration.

APPENDIX II

This Appendix contains papers presented by the Chairman of Working Group A, which were discussed during the resumed session of the Ad Hoc Committee in January 1987. The texts contained therein reflect the state of discussions which are at an early stage.

Working Group A

CHAIRMAN'S DISCUSSION PAPER

SUPER-TOXIC LETHAL CHEMICALS THAT ARE PRODUCED IN  
COMMERCIAL QUANTITIES FOR PERMITTED PURPOSES 1/ 2/

Issues of Substance

(A)

1. The régimes 3/ should be carefully tailored to the objectives of the Convention, i.e. the effective prohibition of chemical weapons. 4/
2. Facilities producing STLCs in commercial quantities for permitted purposes 5/ should be subject to declaration, as well as monitoring through data reporting and systematic international on-site verification. 6/
3. The primary focus of verification should be the facility, the objective should be to verify that the facility is not used for production of any of the chemicals listed in Schedule [1].
4. STLCs produced in commercial quantities for permitted purposes which pose a risk of diversion for chemical weapons purposes should be 7/ carefully monitored. The objective of verification in relation to such STLCs should be to ensure that the chemicals are produced in quantities consistent with permitted purposes and are used for such purposes.

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1/ It was suggested that "purposes not prohibited by the Convention" might be used throughout the paper instead of "permitted purposes".

2/ It was also suggested that the heading of this paper should be "Super-toxic lethal chemicals which do not possess qualities of chemical weapons agents and which are produced for permitted purposes".

3/ It was suggested that "measures" should be substituted for "regimes".

4/ The view was expressed that the paragraph should be preceded by "Some super-toxic lethal chemicals which are produced in commercial quantities may be relevant to a Chemical Weapons Convention". A view was also expressed that all super-toxic lethal chemicals were of relevance in connection with the Convention.

5/ It was suggested that "with a chemical weapons suitability" should be added after "permitted purposes".

6/ It was suggested that the capability of a facility to produce super-toxic lethal chemicals should also be referred to in this paragraph. Reference was also made to multipurpose facilities in this context.

7/ It was proposed that "more" be inserted before "carefully".

5. Modalities of verification are to be worked out, taking into account the monitoring provisions for key precursor chemicals, based on the level of risk posed to the Convention by the particular facility and particular chemical. 8/

(B)

6. Threshold quantity defining commercial production. 9/

(i) Should threshold be defined on a national basis or per facility? Should it be in terms of capacity or actual production?

(ii) The threshold should reflect risk of a chemical to the Convention. What is a military significant quantity?

7. Criteria for determining frequency and intensity of inspection necessary for a specific facility. Should particular features needed for CW production be specified? 10/

8. STLCs which pose a risk of diversion.

(i) Criteria for determining risk of diversion.

(ii) Possible inclusion of "near STLCs" which could have application as chemical weapons.

(iii) Possible exclusion of some STLCs or classes of STLC with no application as chemical weapons.

(iv) Should STLCs which pose a high risk be listed?

9. Régimes for facilities for processing such STLC.

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8/ The view was expressed that different measures might need to be applied to individual facilities and chemicals.

9/ There was general agreement that it would be desirable to have a common initial reporting threshold for all chemicals. The view was expressed that as production levels increase, the stringency of verification measures should increase commensurately.

10/ The view was expressed that only a moderate level of detail was required. Reference was also made, in this connection, to the annex to document CD/698 (CD/CW/WP.140), submitted by Australia. The text of that annex is attached.

ANNEX

LIST B

CHEMICAL EQUIPMENT WHICH MIGHT BE USED TO  
PRODUCE DESIGNATED CHEMICALS

The possession of any of the following items individually is not suggestive of chemical weapons production. However, location of several items at one facility would indicate inspection may be necessary to verify that there are no CW activities at the facility.

1. Chemical process equipment (reactors, piping, distillation columns, etc.) constructed of Hastelloy or another alloy with a high nickel or tantalum content.
2. Chemical process equipment with linings suitable for use in a high corrosive environment (i.e. glass-, teflon-, or plastic-lined equipment).
3. Pumps or valves designed for use with hazardous chemicals (for example: double-seal, magnetic drive, or canned pumps, bellows or diaphragm valves).
4. Activated carbon filter units and scrubber units capable of handling large volumes of air from ventilation systems.
5. Equipment specially designed for fluorine, phosphorus, or sulphur analyses.
6. Inert gas generating units.
7. Double-walled piping.
8. Sensitive toxic detection and alarm systems.
9. Filling equipment for use with hazardous chemicals, including especially large glove boxes used to enclose filling machinery.
10. Incineration or scrubbing equipment for hazardous chemical waste treatment, such as Venturi scrubbers or Brinks mist eliminators.

Working Group A

CHAIRMAN'S NOTE

GUIDELINES FOR SCHEDULE I

The following is a compilation of proposals for guidelines which singly or in combination might be relevant in considering whether a chemical should be included in Schedule I.

1. Super-toxic lethal chemicals which have been stockpiled as chemical weapons.
  2. Super-toxic lethal chemicals which pose a particular risk of potential use as chemical weapons. 11/
  3. Super-toxic lethal chemicals which have little or no use except as chemical weapons.
  4. Super-toxic lethal chemicals which at the contemporary level of development of science and technology can be 12/ produced by any methods available in quantities above ..... metric tonnes per year and which possess physical and chemical properties (such as ..... ) enabling them, when used in munitions and devices to produce concentrations and/or transmit doses which cause mass death or other harm to biological objects.
  5. Super-toxic lethal chemicals with chemical structure related/similar to those super-toxic lethal chemicals already listed in Category I.
- 
6. Any toxic chemical, which causes interference with normal life-functioning and permanent or temporary harm and has a median effective dose which is less than or equal to 0.2 mg/kg (subcutaneous administration) or 1,000 mg-min/m<sup>3</sup> (by inhalation), when measured by the methods set forth in annex ..... to the Convention.
  7. Toxic chemicals which have a median lethal dose greater than 0.5 mg/kg (subcutaneous administration) or 2,000 mg-min/m<sup>3</sup> (by inhalation), which have been stockpiled for use as chemical weapons, and which have little or no use except as chemical weapons. 13/
  8. Toxic chemicals which have a median lethal dose greater than 0.5 mg/kg (subcutaneous administration) or 2,000 mg-min/m<sup>3</sup> (by inhalation), which pose a particular risk of potential use of chemical weapons, and which have little or no use as chemical weapons. 13/

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11/ It was suggested that points two and three should be combined into a single point.

12/ The view was expressed that "can be" was too imprecise.

13/ The view was expressed that the words "which have ..... (by inhalation)" should be deleted.

9. Any toxic chemical which at the contemporary level of development of science and technology can be produced by any methods available in quantities above ..... metric tonnes per year and which possesses physical and chemical properties (such as ..... ) enabling them, when used in munitions and devices to produce concentrations and/or transmit doses which cause mass death or other harm to biological objects.
10. Any toxic chemical with a chemical structure related/similar to those chemicals already listed in Schedule I.
11. Key precursors which participate in one stage chemical process of producing toxic chemicals 14/ in munitions and devices.
12. Key precursors which pose a high risk to the objectives of the Convention by virtue of their high potential for use to produce chemical weapons.
13. Key precursors which may possess the following characteristics:
  - (i) it may react with other chemicals to give, within a short time, a high yield of a toxic chemical defined as a chemical weapon;
  - (ii) the reaction may be carried out in such a manner that the toxic product is readily available for military use; and
  - (iii) key precursors which have little or no use except for chemical weapons purposes.

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14/ The view was expressed that "super-toxic lethal chemicals" should be substituted for "toxic chemicals".





Decision on the re-establishment of the  
Ad Hoc Committee on Chemical Weapons

(Adopted at the 386th plenary meeting on 5 February 1987)

The Conference on Disarmament, keeping in mind that the negotiation of a Convention should proceed with a view to its final elaboration at the earliest possible date, in accordance with United Nations General Assembly resolutions 40/92 B and 41/58 D, and in discharging its responsibility to conduct as a priority task the negotiations on a multilateral convention on the complete and effective prohibition of the development, production and stockpiling of chemical weapons and on their destruction, and to ensure the preparation of the convention, decides to re-establish, in accordance with its rules of procedure, for the duration of its 1987 session, the Ad Hoc Committee to continue the full and complete process of negotiations, developing and working out the convention, except for its final drafting, taking into account all existing proposals and drafts as well as future initiatives with a view to giving the Conference a possibility to achieve an agreement as soon as possible. This agreement, if possible, or a Report on the progress of the negotiations, should be recorded in the report which this Ad Hoc Committee will submit to the Conference at the end of the second part of its 1987 session.

The Conference also decides to appoint Ambassador Rolf Ekeus of Sweden as Chairman of this Ad Hoc Committee.







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LETTER ADDRESSED TO THE SECRETARY-GENERAL OF THE  
CONFERENCE ON DISARMAMENT BY THE PERMANENT REPRESENTATIVE  
OF THE ISLAMIC REPUBLIC OF IRAN ON 12 FEBRUARY 1987

It is with regret that I must bring the following matter to your attention:

Continuing the repeated violation of all humanitarian laws, the Iraqi Régime once again used chemical weapons on a massive scale during January and early February. Such actions show an absolute disregard for the 17 June 1925, Geneva Protocol, the Resolutions of the United Nations General Assembly on the Prohibition of Chemical Weapons, and world opinion.

Despite the statements of the Security Council dated 30 March 1984, 25 April 1985 and 21 March 1986, and the statement of the Secretary-General of the United Nations of February 1987 condemning Iraq's use of chemical weapons, the Iraqi Régime employed such weapons over a very wide area on 7, 9, 13, 14, 16, 18, 20, 24, 28, 29, 30 and 31 January as well as on 6 February 1987, as the result of which large numbers of people were subjected to such brutal inhumane deeds.

The violation of well-established principles by a small country like Iraq is alarming for the community of the whole world, and each government, international organization and other humanitarian community has a responsibility to arrest the continuation of such crimes. If they do not consider it grave enough, or if they do not show a strong reaction, we shall unfortunately have to expect a very dark and tough future for mankind.

The condemnation of the Iraqi Régime's use of chemical weapons against the Iranian forces is not simply to gratify my country, but is to protect all human civilization and the respect of humanitarian law during times of armed conflict.

I would, therefore, earnestly demand that the Conference on Disarmament take some effective steps to stop the Iraqi use of chemical weapons by strongly condemning such inhumane acts.

I wish you every success in your great responsibility, and I should be most grateful if you could arrange to have this letter circulated as a CD document.

(Signed) Nasrollah KAZEMI KAMYAB  
Ambassador  
Permanent Representative

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\*/ Re-issued for technical reasons.







FRANCE

The non-production of chemical weapons

1. The discussions concerning the activities not prohibited by the convention that were conducted within the framework of article VI of the convention during the 1986 sessions of the Ad Hoc Committee on Chemical Weapons revealed the extreme complexity of the problem but also enabled its limits to be determined.

Thus, the problems to be resolved in the particularly sensitive area of compliance by all parties with the convention must take into account not only the existing and declared chemical weapons and the means of production pertaining thereto, but also the potential inherent in an industry that manufactures entirely legally and for altogether lawful needs chemical products that could be diverted for arms purposes: key precursors of supertoxic lethal chemicals, supertoxic lethal chemicals in general use for non-hostile purposes, known toxic substances that have already been used as chemical weapons but are manufactured in very large quantities. Very special attention will have to be given to the new possibilities offered by technologies that, it is clear, are bound to develop in the decades to come.

Suitable verification or monitoring measures will have to be found for each of these spheres.

Such measures cannot be fixed once and for all, but will have to be evolutionary in nature so that they fulfil their aim many years after the entry into force of the convention, without harming the legitimate economic interests of any country.

How can imperatives that, while intimately linked, are so different be reconciled?

One way of approaching this task would be to make an exhaustive analysis of all the problems there may be at the present time, to project that analysis into the future and to propose such solutions as occur to us today. Apart from the fact that the outcome of such work would, in any event, be imperfect and complicated, the elaboration of a convention of that kind would require a considerable amount of time. It seems to us, on the other hand, that, while the convention must be firm and intransigent as regards its purposes and principles, it must be a living institution as regards its application. It must, indeed, be capable of adjustment to all the technological advances that will inevitably occur both in the chemical industry and in the sphere of control.

That is why we consider it advisable to choose a second approach consisting in inventorizing the existing problems, analysing them one after the other in decreasing order of importance, studying what risk, if any, they represent for the sound administration of the convention and, finally, identifying those that constitute acceptable risks in order to concentrate on the delicate cases that it is urgent to resolve. We must abandon the idea of attaining perfection and concentrate on a treaty that would prohibit the rebuilding of chemical arsenals by instituting evolutionary and appropriate surveillance measures such that would-be cheats will find the price to be paid too high.

We are perfectly aware that verification of the veracity of declarations, whether they concern the means of production of chemical weapons or the means of production of chemical products subject to verification, is neither possible nor practicable. We are aware, too, that, whatever their nature, control or verification measures are not perfect. We are prepared to accept the risk this entails, on the assumption that appropriate challenge inspection will play a moderating and dissuasive role.

2. The approach we are proposing is susceptible of application in three spheres:

(a) The lists of substances to be controlled

We are already aware that we shall not be able exhaustively to resolve the question of the inventory of the products that constitute a problem for the convention. After all, the composition of stocks will not be known till after each country's declarations; the latter will be made only at the time of the entry into force of the convention. It is clear, therefore, that the work relating to "non-production" will have to take place in at least three distinct phases: prior to the entry into force of the convention; after the declaration of stocks and of the related means of production; and, finally, during the administration of the convention.

The work to date within the Ad Hoc Committee has enabled the products constituting a risk for the convention to be classified in three categories:

1. Existing chemical weapons
2. Key precursors of supertoxic agents
3. Toxic agents that are or have been part of a chemical arsenal but are manufactured in large quantities for non-hostile purposes.

Definitional criteria have been found. Lists, which are for the moment illustrative, have been compiled. The road is open; it is still long, but the goal is in sight. The toxicity criterion remains a major difficulty, without, however, being an insurmountable obstacle. That criterion does not, indeed, need to be intrinsically precise to be universally acceptable. Its definition will, of necessity, have to encompass the application of the intoxication procedures employed, the characteristics of the animal used (race, weight, sex, etc.), and the measurements to be made.

(b) The supertoxic lethal products that are not chemical weapons

It is true that this question cannot be evaded. In general, however, chemical agents of the kind in question are produced only in very limited quantities and for the perfectly lawful purpose of meeting the needs of pharmacopoeias, of agriculture or of pest control. It can be concluded, therefore, that diversion for hostile purposes is clearly less likely than for the three categories mentioned above, even if it cannot be ruled out entirely.

That is why it does not seem worthwhile at this stage compiling a list of those products but preferable to establish definitional criteria linked to the toxicity criterion mentioned above, to assess the products' potential to become chemical weapons, and to define a production threshold above which manufacture would have to be declared. It would also be necessary to define rules for the verification of production. These supertoxic lethal products could then be included in one of the three categories referred to above.

(c) The monitoring of new production and technologies

This question has not yet been raised in our committee, and yet it is a point of particular importance for the convention.

Obviously, the monitoring of new production and technologies can only be undertaken during the phase of administration of the convention. The body charged with it will therefore be a tool of the very highest importance for the Consultative Committee.

3. It is with this in mind and in order to secure the effective administration, under the best possible conditions, of the convention in the spheres referred to above that France suggests the creation of a scientific authority.

This body would act:

Immediately upon the declaration of stocks, to complete the compilation of the lists of products to be prohibited or monitored;

In the administration of the convention, to draw the attention of the Consultative Committee to new products or technologies warranting monitoring and to propose suitable verification measures and procedures.

In the context of verification, it could, in addition, be consulted by the Consultative Committee with regard to the institution of new, more efficient and less intrusive verification procedures.

This authority, to be called the Scientific Council, would comprise independent personages chosen for their scientific knowledge. It would meet annually or on the express request of the Consultative Committee. It would have only a consultative role and could not under any circumstances have decision-making power.

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Within this new context, the elaboration of the measures to encourage compliance with the "non-production" provisions of the convention might take place as follows:

Phase I - Prior to the declaration of stocks (and, therefore, prior to the entry into force of the convention)

Definition of a universally acceptable toxicity criterion;

Assessment of products' potential to become chemical weapons or finding that they are weapons;

Definition of a critical production threshold above which products must be declared;

Compilation of the list of products known to be chemical weapons;

Inventory of the products that are made solely for military use and establishment of a rule concerning them;

Inventory of the products that are made in small quantities in industry and establishment of a rule for them;

Definition of the key precursors of supertoxic lethal substances;

Establishment of a list based on the list of products known to be chemical weapons;

Establishment of a verification procedure for each product.

Phase II - After the declaration of stocks

After obtaining a proposal and opinion from the Scientific Council, completion of the list of chemical weapons and of their key precursors. It would be advisable for the compilation of those lists to be completed prior to the commencement in practice of the period of stock destruction;

Compilation of the list of supertoxic lethal products that are not chemical weapons but that constitute a threat to the observance of the convention.

Phase III - Administration of the convention

Upon a proposal or after an opinion from the Scientific Council, revision of the lists of products to be monitored, interchanging of procedures or means of verification, proposal of new methods of monitoring.

It would be desirable for the Council to report to the Consultative Committee at least every other year on the advances and new technologies in the sphere of industrial chemistry.





# CONFERENCE ON DISARMAMENT

CD/748

27 March 1987

ENGLISH

Original: RUSSIAN

(Extract)

LETTER DATED 26 MARCH 1987 ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT FROM THE REPRESENTATIVE OF THE UNION OF SOVIET SOCIALIST REPUBLICS TRANSMITTING THE TEXT OF DOCUMENTS ADOPTED BY THE MEETING OF THE COMMITTEE OF MINISTERS OF FOREIGN AFFAIRS OF THE WARSAW TREATY MEMBER STATES HELD ON 24-25 MARCH 1987 IN MOSCOW

I have the honour to transmit the texts of documents adopted by the meeting of the Committee of Ministers of Foreign Affairs of the Warsaw Treaty Member States held on 24 and 25 March 1987 in Moscow. The documents are the Communiqué, the Statement for furthering the CSCE process and bringing the Vienna follow-up meeting to a successful conclusion and the Statement of the Warsaw Treaty Member States on the prohibition of chemical weapons.

I should be obliged if you would make the necessary arrangements to have these texts circulated as an official document of the Conference on Disarmament.

(Signed)

Y. NAZARKIN

Ambassador

Representative of the Union of Soviet Socialist Republics to the Conference on Disarmament

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5. The participants in the meeting consider that the establishment of nuclear- and chemical-weapon-free zones in the Balkans, in Central Europe, in the North and in the other parts of the continent would serve the goals of diminishing military confrontation in Europe and strengthening all-European security. They stated their countries' determination to press for the implementation of the proposals made on that score by the German Democratic Republic, Czechoslovakia, Romania, and Bulgaria.

CD/748

page 4

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11. The participants in the meeting considered the question of a ban on chemical weapons, and adopted an appropriate statement.

CD/748

page 7

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STATEMENT BY THE WARSAW TREATY MEMBER STATES ON THE  
PROHIBITION OF CHEMICAL WEAPONS

Proceeding from the interests of strengthening international peace and general security and of attaining disarmament, the Warsaw Treaty Member States declare themselves resolutely in favour of the banning of chemical weapons and the destruction of existing stocks of such weapons and of the industrial base for their production. The conclusion as rapidly as possible of talks on a full and universal ban on chemical weapons is one of the main objectives of their foreign policy.

The major initiatives advanced by the socialist States with a view to accelerating and stimulating the talks, and the proposals by other countries participating in the Conference on Disarmament have made it possible to eliminate many obstacles to the drawing up of a mutually acceptable agreement. The necessary prerequisites have been created for the conclusion, with due regard for the proposals made by participants in the Geneva Conference on Disarmament for the finding during the current year of solutions to the questions not yet resolved at the talks, of work on an International Convention that would effectively secure a complete and universal ban on the development and production of chemical weapons and the elimination in the near

future of all stocks of such weapons and guarantee that chemical weapons will never be revived again anywhere. The real possibility of eliminating chemical weapons and putting an end for ever to the chemical threat to the whole of humanity must not be missed.

A serious obstacle to the attainment of this goal exists in the form of the plans to produce and deploy in Europe the particularly dangerous binary form of such weapons. Those plans are contrary to the demands of the world community and the United Nations decisions on the need to ban and eliminate chemical weapons.

The allied socialist States will, for their part, continue to do everything in their power to achieve the speediest possible conclusion of a convention. With a view to finding solutions at the talks to the questions that still hinder the conclusion of work on a convention, they have put forward fresh proposals at the Conference on Disarmament concerning the declaration of stocks of chemical weapons, the securing of non-production of such weapons in the civilian chemical industry, and verification, including international on-site verification and check-ups on request.

The allied socialist States are in favour of ridding Europe and the individual regions thereof of chemical weapons. They reaffirm their support for the proposals by the German Democratic Republic and Czechoslovakia and Bulgaria and Romania for the establishment in Central Europe and in the Balkans respectively of chemical-weapon-free zones -- zones where the deployment, testing, manufacture, acquisition and stockpiling of such weapons would be banned -- as major contributions to the efforts to avert the threat of the use of chemical weapons.

Proceeding from their position of principle, the Warsaw Treaty Member States are in favour of the establishment of the most stringent system of verification, including international verification, of States parties' compliance with their obligations under the convention. They reaffirm their willingness to seek on this basis mutually acceptable solutions to the questions connected with the implementation of the convention by all parties and with the strengthening of trust among its signatories.

Guided by their aspiration for the speediest possible conclusion of the elaboration of a convention on the prohibition and elimination of chemical weapons and for the creation of the necessary conditions therefor, the States represented at the meeting call upon all States:

To refrain from all steps that might complicate the achievement of mutually acceptable agreements at, or retard the progress of the talks;

Not to produce any chemical weapons, including binary or multi-component chemical weapons, not to deploy chemical weapons in foreign countries and to withdraw them from those foreign countries where they are already present, and call upon the States in whose territory there are no chemical weapons not to permit their deployment.

In order to achieve decisive progress towards agreement on the elimination of chemical arsenals, it is now particularly necessary for all participants in the talks to demonstrate political will, realism and a high sense of responsibility.

The Warsaw Treaty Member States earnestly appeal to the NATO countries and to all participants in the Conference on Disarmament to join with them in order to overcome, by combined efforts, the remaining obstacles at the talks and to complete the elaboration of a convention on the prohibition of chemical weapons this year, so that the complete and universal elimination of chemical weapons and of the industrial base for their production can be undertaken in the near future.

The States represented at the meeting believe that 1987 can and must be the year of the commencement of complete and general chemical disarmament.





7 April 1987

Original: ENGLISH

## UNITED STATES

## VERIFICATION OF ELIMINATION OF PRODUCTION/FILLING FACILITIES

In its draft treaty (CD/500), the United States proposed that chemical weapons production facilities cease activities immediately, remain closed, and finally be destroyed. To provide international assurance that the required actions were being taken, the United States also proposed a series of verification measures. These measures included various declarations, on-site inspections and monitoring by on-site instruments.

At this stage of the negotiations, it is necessary to examine further how the system of verification would operate. The following outline provides a step-by-step approach for verifying the elimination of production/filling facilities. The outline must be filled out during the course of the negotiations.

Step 1: (immediately) Cessation of production/filling.

Step 2: (30 days) Initial declaration of production/filling facilities.

- Declaration of facilities. This declaration should provide a baseline of data for verification and on-site inspections. The exact content of the declaration will be determined during the course of the negotiations.

- Declaration of actions that will be taken for closure. This declaration would identify those actions to be taken which will render the facility incapable of rapidly resuming operations. During the course of the negotiations, it will be necessary to determine precisely what range of actions will be taken.

- Declaration of general plans for elimination. This declaration should specify when each facility will be eliminated and the general disposition of major subunits (such as major equipment, facilities) and chemicals present at each site.

Step 3: (30-60 days) Initial on-site inspection.

- This inspection should verify that operations have ceased, confirm the initial declaration, and provide initial arrangements for installation of monitoring instruments. The inspection should proceed according to principles decided during the course of the negotiations, as will any measures necessary for interim monitoring pending implementation of measures in steps 4 and 5.

Step 4: (within six months) Closure actions and monitoring agreement.

Each State Party will be required to accomplish the actions for closure, and to complete a detailed agreement with the International Authority for monitoring closure. This agreement should specify precisely what verification measures will be applied at the specific site. The agreement would be in accordance with a detailed "model agreement" negotiated during the course of the negotiations. This agreement, as well as provisions for the following steps, must provide for measures which take into account the differing ease with which different types of chemical plants as well as filling facilities can be reactivated for chemical weapons purposes. During the course of negotiations, it will be necessary to determine precisely what range of actions will be needed.

Step 5: (shortly after six months) Second on-site inspection/visit.

- This step should verify that closure actions have been accomplished.
- During this visit, assuming prior completion of the facilities agreement, monitoring instruments and devices to monitor closure will be installed. Further work is required on defining/describing these devices and their operation. Their purpose will be to signal the International Authority, in the absence of on-site inspectors, if the facility resumes operation.
- If the facilities agreement has not been completed by this time, continuous on-site monitoring by international inspectors should be initiated to ensure shut-down until the agreement is completed, instruments are installed, and the monitoring system activated.

Step 6: Annual Declarations.

- Each State Party should provide information annually during the destruction process regarding the implementation of its plans for destruction of chemical weapons production/filling facilities.

Step 7: Supplementary on-site inspections/visits.

- Regular visits will be required for routine inspection, calibration and maintenance of monitoring devices. The exact frequency of these visits will need to be determined.
- Other visits, if required, should be authorized for non-routine maintenance or replacement of monitoring devices, to adjust monitoring coverage as required, or to investigate reports/indications of unauthorized operation of the facility. The latter investigations particularly, must occur very rapidly after an indication of possible unauthorized operation.
- As appropriate, further principles governing supplementary inspections would be developed in the course of negotiations.

Step 8: (six months before elimination) Declaration of detailed plans for elimination

Declaration should include:

- Detailed inventory of all buildings and equipment on site.
- Detailed plans for disposition of each item on the detailed inventory. The State Party's options for disposition should be specified in general terms in the convention, dictated by the type of item. To the extent consistent with the agreement, each State Party may recommend the option to be used for the elimination of each item. Also, each State Party may recommend the exact method of elimination used, as long as such actions achieve the objectives of elimination. For items to be diverted to other facilities, the location of the receiving facility must be provided.
- A detailed schedule for the elimination process.
- Recommendations concerning verification of elimination. A State Party may suggest an appropriate combination of approved methods for verification of elimination of the items at each facility. The suggestions might include suggestions for phasing out the measures employed for closure monitoring.
- On the basis of the information available to it through the detailed plans and previous inspections, the Technical Secretariat would prepare a plan for verifying the elimination of the facility and consult closely with the State Party concerned. Any differences between the Technical Secretariat and the State Party concerning appropriate measures should be resolved through consultations.

Step 9: (prior to 60 days before elimination) Review and approval of elimination plans by the International Authority.

- This step is designed to determine that planned disposition of each item is consistent with the treaty obligation, and the objective of eliminating the facility. It should also confirm that verification schemes for elimination are consistent with verification objectives, are efficient and are workable.
- The plan for verification of elimination, with an appropriate recommendation from the Technical Secretariat, should be forwarded to the members of the Executive Council for review. Each member would have the opportunity to raise with the Technical Secretariat for resolution any issues regarding the adequacy of any State Party's elimination plan.
- The Executive Council should review the plans with a view to approving them, consistent with verification requirements.
- If there are any difficulties, the Executive Council should enter into consultations with the State Party to reconcile them. If any difficulties remain unresolved, they should be reported to the Consultative Committee. The resolution of any differences over methods of elimination should not delay the execution of other parts of the elimination plan that is acceptable.

- If agreement is not reached on aspects of verification, or if the approved verification scheme is not put into action, elimination/conversion will proceed with the continuous on-site monitoring and presence of inspectors.

- The provision should also be included that if required verification or elimination actions are not taken as scheduled, all States Parties should be so informed.

Step 10: Elimination and verification of elimination.

- Elimination should proceed according to the plan approved by the Executive Council, and verification should not unduly interfere with the elimination process.

- The purpose of verification will be to ensure that the facility is eliminated in accordance with the obligation in the convention. To do this, it follows that the verification system must ensure that each item on the inventory is eliminated in accordance with the approved detailed plan for elimination. Procedures should allow a more stringent action than that originally approved, for example, if a standard item approved for diversion were destroyed instead.

- Diversion. For equipment that may be diverted to permitted purposes, convention obligations should be that the items may not be stockpiled but must be installed in a timely manner in a permitted facility. The identification of the item and the location and identity of the permitted facility must be reported. If questions arise as to whether the removed items were installed as declared, consultation and challenge if necessary should be used for verification.

- Destruction. There could be two methods for the verification of destruction. Which would be employed would depend on the specific situation.

- First, an inspector could be present to witness the destruction of an inventory item, checking it off the inventory as it is destroyed. This method would be required if the identity of the item was lost in the destruction process, e.g., if something combustible were burned.

- Second, if the identity of the item is not lost in the destruction process, an inspector could examine the identifiable residue after destruction, identifying and certifying the destruction of each item. This would be particularly applicable for the destruction of fixed facilities, such as for verifying the levelling of a brick building. It may be applicable in cases such as in cut-up sections of a reactor vessel where the pieces would be identifiable. Provisions would be required, however, to ensure that the pieces from one item were not used to account for destruction of another similar item at a different time or place.

Step 11: (within 30 days after destruction) Certification of destruction.

- At the end of the elimination process, inspectors should certify the declaration by the State Party that all items on the detailed inventory had been appropriately eliminated.

- The State Party will then make the formal declaration that the facility has been eliminated.

Procedures for Conversion to a Chemical Weapons  
Destruction Facility

- If the facility is to be converted to a chemical weapons destruction facility before being destroyed, the State Party should first complete steps 1 through 10 to provide assurance of proper conversion into a destruction facility.

- If the destruction facility does not begin destruction immediately after conversion, appropriate portions of steps 3 through 6 will be implemented to monitor the facility.

- Before commencing destruction of chemical weapons, the State Party should be required to complete a detailed agreement with the International Authority for on-site verification while the facility is being used to destroy chemical weapons, in accordance with procedures to be included in Article/Annex IV (Chemical Weapons) (CD/734). Declarations, reporting and on-site monitoring associated with the chemical weapons destruction process will also be in accordance with procedures provided in Article/Annex IV (CD/734).

- Then at the conclusion of the facility's use for destruction of chemical weapons, the State Party would repeat appropriate portions of steps 3 through 10 to monitor final elimination.







# CONFERENCE ON DISARMAMENT

CD/750  
8 April 1987

ENGLISH  
Original: RUSSIAN

LETTER DATED 8 APRIL 1987 ADDRESSED TO THE PRESIDENT OF THE  
CONFERENCE ON DISARMAMENT BY THE PERMANENT REPRESENTATIVE OF  
THE MONGOLIAN PEOPLE'S REPUBLIC TRANSMITTING A STATEMENT MADE  
BY THE REPRESENTATIVE OF THE MINISTRY OF FOREIGN AFFAIRS OF  
THE MONGOLIAN PEOPLE'S REPUBLIC DATED 4 APRIL 1987

I have the honour to transmit herewith a statement made by the  
representative of the Ministry of Foreign Affairs of the Mongolian People's  
Republic dated 4 April 1987.

I should be grateful if you would circulate the text of this statement as  
an official document of the Conference on Disarmament.

(signed) Luvsandorjiin BAYART  
Ambassador  
Permanent Representative

STATEMENT BY THE REPRESENTATIVE OF THE MINISTRY OF FOREIGN AFFAIRS  
OF THE MONGOLIAN PEOPLE'S REPUBLIC

The Ministry of Foreign Affairs of the Mongolian People's Republic attaches great value to the results of the regular meeting of the Committee of Ministers of Foreign Affairs of the Warsaw Treaty Member States which was held in Moscow on 24-25 March. The important documents produced at the meeting contained constructive and practical proposals aimed at lowering the level of military confrontation, implementing genuine measures for the reduction of armed forces and conventional armaments in Europe, furthering pan-European détente in all areas, and strengthening peace and security in Europe.

This is evidence of the steadfast determination of the Warsaw Treaty Member States to accumulate their pressing efforts in favour of the implementation of the major peace initiatives put forward by the socialist countries, in particular the Soviet proposal of 15 January 1986 and the proposals of the Warsaw Treaty Member States of 11 June 1986 concerning the elimination of nuclear and other types of weapons of mass destruction, the reduction of conventional armaments, the prevention of the militarization of space, the shaping of a comprehensive system of international security, and the creation of a nuclear-free and non-violent world.

In the statement on the prohibition of chemical weapons adopted at the meeting, the Warsaw Treaty Member States once again expressed their readiness without delay to achieve decisive progress in the negotiations on the general and complete prohibition of such weapons at the Geneva Conference on Disarmament.

The Mongolian People's Republic, like the other Warsaw Treaty Member States, views as a major task the stepping up of the negotiations in the Geneva Conference at which considerable progress has been observed in recent years, and the completion, already in 1987, of the drafting of an international convention on the complete and general prohibition of chemical weapons. This objective is fully served by the new proposals by the USSR and other socialist countries participating in the Conference on Disarmament relating to the declaration of stocks of chemical weapons, ensuring the non-production of such weapons by the civilian chemical industry, and verification, including international on-site verification and challenge inspections.

In the interests of strengthening peace and security, halting the arms race in all areas, and developing favourable conditions for conducting business-like talks on the prohibition of chemical weapons, there should be an immediate renunciation of preparations for the deployment in Europe of new kinds of binary and multi-component chemical weapons. In this connection, the Mongolian People's Republic associates itself with the appeal by the Warsaw Treaty Member States to refrain from any steps that are contrary to the goals of the achievement of mutually acceptable agreements in the negotiations, not to produce chemical weapons, including binary or multi-component chemical weapons, and not to deploy chemical weapons in territories where they do not exist at present.

The Mongolian People's Republic is convinced that on the basis of respect for the principles of equality, and of equal respect for the security interests of all States, it is possible by joint efforts successfully to complete the conclusion of a convention on the prevention of chemical weapons very rapidly.

The Mongolian People's Republic considers that the achievement of an agreement on the elimination of chemical weapons would undoubtedly provide a major stimulus to the talks in other areas of disarmament.

Ulan Bator, 4 April 1987.







ENGLISH  
Original: RUSSIAN  
(Extract)

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LETTER DATED 13 APRIL 1987 FROM THE REPRESENTATIVE OF THE UNION OF SOVIET SOCIALIST REPUBLICS ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING THE TEXT OF THE FOREIGN POLICY SECTION OF THE STATEMENT MADE BY M.S. GORBACHEV, GENERAL SECRETARY OF THE CPSU CENTRAL COMMITTEE, AT THE CZECHOSLOVAK-SOVIET FRIENDSHIP RALLY HELD IN PRAGUE ON 10 APRIL 1987

I have the honour to transmit herewith the text of the foreign policy section of the statement made by M.S. Gorbachev, General Secretary of the CPSU Central Committee, at the Czechoslovak-Soviet friendship rally held in Prague on 10 April 1987.

I should be grateful if you would take the necessary steps to circulate this text as an official document of the Conference on Disarmament.

(Signed) Y. Nazarkin  
Ambassador  
Representative of the Union of  
Soviet Socialist Republics to  
the Conference on Disarmament

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To turn to yet another major issue, that of a chemical weapons ban, we have consistently advocated the speediest possible elaboration - the elaboration this year - of an international convention and we are engaged in active negotiations on that matter. I can tell you that the Soviet Union has stopped making chemical weapons. As you know, the other Warsaw Treaty countries have never produced such weapons and never had them on their territory. The USSR has no chemical weapons outside its own borders and, as far as stocks of such weapons are concerned, I should like to inform you we have started building a special plant to destroy them. Its commissioning will enable us rapidly to implement the process of chemical disarmament once an international convention is concluded.





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PAKISTAN

Proposal on Article X (Assistance) of the Draft Convention  
on Chemical Weapons

1. By outlawing an entire category of weapons of mass destruction which have been employed in the past and which today continue to exist in the arsenals of a growing number of States, the conclusion of a convention banning chemical weapons would constitute a major step towards mankind's quest for general and complete disarmament. However, the entry into force of such a convention would not by itself completely banish the CW threat. The goal of a universal adherence, if realized, will only be achieved gradually and over a considerable length of time. As long as countries with a CW capability remain outside the Convention, those which have abjured these weapons would continue to feel threatened and the chemical weapons prohibition régime would remain incomplete, if not fragile. The possibility, moreover, that a State Party may act in violation of the Convention and thereby pose a danger to other States Parties acting in conformity with their obligations must also be taken into account in drafting the convention.

2. A State Party which feels threatened in either of these situations (possession or acquisition of a CW capability by a country remaining outside the Convention or its breach by another State Party), might find itself compelled to acquire a deterrent chemical weapons capability of its own and therefore to withdraw from the Convention. Such an act could trigger a chain reaction leading to the withdrawal of other States Parties and quite possibly to a collapse of the CW prohibition régime.

3: The Pakistan delegation feels that if appropriate provisions are contained in the Convention, the incentives for States to adhere to the Convention could be enhanced and the pressures upon a State Party to withdraw

from it because it feels threatened by the chemical weapons capability of another State could be considerably reduced. Such provisions could be of two kinds: firstly, those providing for assistance to the State Party which feels endangered by a violation of the Convention by another State Party or by the activities of any State of such a nature as to pose a threat to the objectives of the Convention; and secondly, provisions on effective collective sanctions against a State Party which acts in violation of the Convention and against any other State whose activities pose a threat to its objectives. Provisions of these two kinds would also have the further advantage of serving to deter States Parties from acting in breach of the obligations assumed by them and other States from undertaking activities inconsistent with the objectives of the Convention.

4. The purpose of the present paper is to make some proposals concerning assistance to States threatened by the chemical weapons capability of another State.

5. Such assistance, to be effective, should not be limited to political and diplomatic support but include concrete actions and measures designed to strengthen the ability of the threatened State to meet the danger to which it has been exposed. Past instances of the use of chemical weapons demonstrate that these weapons are most likely to be employed against those countries which have little or no capacity to retaliate in kind or to protect themselves effectively against a CW attack. As the chemical weapons ban envisaged by the Convention would prohibit the retention or acquisition of a retaliatory capacity as a means of deterrence, the possession of a protective capability against such weapons, which the Convention would permit, assumes an added importance.

6. The Pakistan delegation therefore feels that the Convention on the prohibition of chemical weapons should also provide for international co-operation and assistance in the development of a protective capability by States whose security might be threatened by the retention or acquisition of a chemical weapons capability by an adversary. The possession of such a protective capability would be in the interest of a wider acceptance of the ban on chemical weapons. The Convention should contain provisions for the widest possible dissemination of scientific and technical knowledge on protective measures and equipment. In addition, States Parties should

undertake to encourage, bilaterally and multilaterally, the transfer of technology, equipment and materials for protection against chemical weapons. At the multilateral level, the central co-ordinating role should be assigned to the Consultative Committee with the Technical Secretariat acting as the implementing agency under the supervision and control of the Consultative Committee.

7. Provisions on assistance of the kind indicated above are eminently suited for a CW Convention because it is relatively easier to protect oneself against chemical weapons than against conventional or nuclear weapons. Adequate protective measures can greatly reduce effectiveness of chemical weapons and therefore the incentives for possessing them or resorting to their use. A wider dissemination of technical knowledge on protective measures and wider use of such measures would not add in any manner to the offensive military capability of any State or even to its defensive capability, except against the use of chemical weapons. Furthermore, it could increase the incentives for States which potentially fear the use of such weapons against them to become parties to the Convention and would thus help in achieving the goal of universality of adherence.

8. Provisions for assistance against chemical weapons, including provisions for assistance in protective measures, could be included in Article X (Assistance) of the Convention while Article XI (Economic and technological development) could deal with international co-operation in the peaceful uses of chemical science and technology.

9. Provisions on assistance are contained in two earlier multilaterally negotiated disarmament agreements, namely the Biological Weapons Convention of 1972 and the ENMOD Convention of 1977.

10. Article VII of the Biological Weapons Convention reads as follows:

"Each State Party to this Convention undertakes to provide or support assistance, in accordance with the United Nations Charter, to any Party to the Convention which so requests, if the Security Council decides that such Party has been exposed to danger as a result of violation of the Convention."

11. The text of the corresponding provisions of the ENMOD Convention (Article V, paragraph 5) is as follows:

"Each State Party to this Convention undertakes to provide or support assistance, in accordance with the provisions of the Charter of the United Nations, to any State Party which so requests, if the Security Council decides that such Party has been harmed or is likely to be harmed as a result of violation of the Convention."

12. Provisions on assistance are also contained in the following drafts of a chemical weapons convention submitted to the CD and its predecessor bodies:

- CCD/361 of 1972 (Bulgaria, Byelorussian Soviet Socialist Republic, Czechoslovakia, Hungary, Mongolia, Poland, Romania, the Ukrainian Soviet Socialist Republic and the Union of Soviet Socialist Republics).
- CCD/420 of 1974 (Japan).
- CD/294 of 1982 (Union of Soviet Socialist Republics).
- CD/500 of 1984 (United States).

13. These drafts provide for assistance to any Party to the Convention if the Security Council decides that such Party has been exposed to a danger as a result of violation of the Convention.

14. The Pakistan delegation feels that the assistance provisions (Article X) of the Chemical Weapons Convention should incorporate the following elements:

(a) Any State Party which feels that its security has been threatened or that it has been exposed to a danger as a result of a violation of the Convention by another State should have the right to submit a request to the Executive Council for assistance in meeting this threat.

(b) A State Party should have the right to request for assistance when it feels threatened not only by a violation of the Convention by another Party but also by a non-Party whose activities pose a threat or impediment to the objectives of the Convention. Such a provision would reduce the incentives for States to remain outside the Convention.

(c) The Executive Council should in the first instance perform an essentially fact-finding role and make a factual determination as to whether the request for assistance is well-founded. For this purpose, the Executive Council should have the power to make the necessary investigation or inquiry, including on-site inspection.

(d) Once the Executive Council has determined that the security of the State making the request for assistance has been threatened or that it has been exposed to a danger as a result of a violation of the Convention by another State or by the activities of a non-Party which pose a threat or impediment to the objectives of the Convention, each State Party should be under the obligation to provide and support assistance, to the extent possible, to the threatened State Party.

(e) It should not be left to individual States alone to provide and support assistance. In addition, the Executive Council should have the responsibility to undertake collective international action for the provision of assistance to the threatened State Party.

(f) The assistance provided to the threatened State should be of such a nature as would enable it to meet effectively the threat which it faces and should be commensurate with the magnitude of the threat. It should include the protection of its military forces and civilian population against chemical weapons.

(g) The Executive Council should have under its control a stockpile of protective equipment which could be placed at the disposal of the threatened State. The Executive Council should also have permanent arrangements for training in the use of this equipment, if so requested by the threatened State. In addition, States in a position to do so should be encouraged to submit undertakings to provide protective equipment when called upon by the Executive Council to do so.

(h) Assistance provided after the Executive Council has determined that a State faces a chemical weapons threat would in many cases be too late to be of any real value in meeting this threat. It is therefore equally important, if not more so, to promote international co-operation in order to develop and strengthen the capability of all States Parties to protect themselves against chemical weapons. For this purpose, the Consultative Committee should be entrusted with the responsibility of implementing assistance programmes for the benefit of interested States Parties.

(i) States Parties should undertake to facilitate, promote and participate in the fullest possible transfer and exchange among themselves of equipment, materials and scientific and technological information on protective measures, on a non-discriminatory basis.

15. In view of the above considerations the Pakistan delegation proposes that provisions set out in the Annex be included in Article X (Assistance) of the Convention. By increasing the effectiveness of the Convention and promoting universality of adherence, these provisions would serve to enhance its authority and viability.

ANNEX

Article X (Assistance)

1. Any State Party to the Convention which feels that it has been or is likely to be exposed to danger or that its security has been or is likely to be threatened as a result of a violation of the Convention by another State Party or of the actions or activities of any State not party to the Convention which pose a threat to the objectives of the Convention or impede the attainment of these objectives may make a request to the Executive Council for assistance in meeting the danger or threat to its security. Such a request should be supported by all relevant information supporting its validity.
2. The Executive Council shall meet immediately to consider the request for assistance made under paragraph 1 and, after such investigation or inquiry, if any, including on-site inspection, as it deems necessary, determine whether the State making the request (referred to hereinafter as the "requesting State"), has been or is likely to be exposed to danger or that its security has been or is likely to be threatened as a result of a violation of the Convention by another State Party or of the actions or activities of any State not party to the Convention which pose a threat to the objectives of the Convention or impede the attainment of these objectives. The provisions of Article IX relating to challenge inspection shall be applicable to inspections initiated by the Executive Council under this paragraph. Each State Party to the Convention undertakes to co-operate in the carrying out of the investigation or inquiry, including on-site inspection, by the Executive Council.
3. In case the Executive Council determines under paragraph 2 that the requesting State has been or is likely to be exposed to danger or that its security has been or is likely to be threatened as a result of a violation of the Convention by another State Party or of the actions or activities of any State not party to the Convention which pose a threat to the objectives of the Convention or impede the attainment of these objectives, the Executive Council shall decide upon measures to assist the requesting State in meeting the danger or threat to its security including, if so requested, measures for the protection of the military forces and civilian population of the requesting State against chemical weapons and for training its personnel in the use of protective equipment. For this purpose, the Executive Council may maintain a permanent stockpile of protective equipment under its control or make use of

such equipment which States Parties may undertake voluntarily to place at the disposal of the Executive Council when needed. Each State Party to the Convention undertakes to support measures decided upon by the Executive Council under this paragraph and to co-operate in their implementation.

4. Decisions of the Executive Council under paragraphs 2 and 3 of this Article shall be taken by a simple majority.

5. Each State Party to the Convention undertakes that it shall, to the extent possible, provide assistance and support the provision of assistance to the requesting State in case the Executive Council determines under paragraph 2 that that State has been or is likely to be exposed to danger or that its security has been or is likely to be threatened as a result of a violation of the Convention by another State Party or of the actions or activities of any State not party to the Convention which pose a threat to the objectives of the Convention or impede the attainment of these objectives.

6. The Consultative Committee shall prepare and be responsible for the implementation of programmes for the promotion of international co-operation and assistance in the development and strengthening of a protective capability against chemical weapons by interested States, including programmes for the dissemination of scientific and technological information on protective measures against chemical weapons and for training in such measures.

7. Each State Party to this Convention, in a position to do so, undertakes, on a non-discriminatory basis, bilaterally and under the auspices of the Consultative Committee, to (a) facilitate, promote and participate to the fullest possible extent in the transfer to and exchange among States Parties of equipment, material and scientific and technological information relating to protection against chemical weapons and (b) to assist other interested States Parties in the development and strengthening of a protective capability against chemical weapons.

8. The provisions of this Article shall not in any way affect the right of States to have recourse to the Security Council or the General Assembly in accordance with the United Nations Charter.

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# CONFERENCE ON DISARMAMENT

CD/755  
2 June 1987

ENGLISH  
Original: ENGLISH/RUSSIAN  
(Extract)

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LETTER DATED 1 JUNE 1987 FROM THE PERMANENT REPRESENTATIVE OF THE GERMAN DEMOCRATIC REPUBLIC ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT TRANSMITTING THE TEXT OF THE COMMUNIQUE ON THE SESSION OF THE POLITICAL CONSULTATIVE COMMITTEE OF THE STATES PARTIES TO THE WARSAW TREATY HELD IN BERLIN ON 28 AND 29 MAY 1987, AND THE STATEMENT ON THE MILITARY DOCTRINE OF THE STATES PARTIES TO THE WARSAW TREATY ISSUED AT THE SESSION

I have the honour to transmit herewith the text of the Communiqué on the Session of the Political Consultative Committee of the States Parties to the Warsaw Treaty, held in Berlin on 28 and 29 May 1987, as well as the Statement on the Military Doctrine of the States Parties to the Warsaw Treaty, issued at that session.

Upon instructions from my Government, acting on behalf of the participants in that session, I hereby request that the above-mentioned Communiqué and Statement be circulated as official documents of the Conference on Disarmament.

(Signed) Harald Rose  
Ambassador  
Permanent Representative

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3. The States participating in the Session favour the earliest possible elimination of chemical weapons. They reiterate their preparedness to complete the preparation of an international convention banning chemical weapons and providing for the destruction of the stockpiles of

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such weapons and the industrial basis for their production by the end of this year. They recall in this regard their Moscow Declaration of 25 March 1987.

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The States parties to the Warsaw Treaty consider it their paramount duty to provide effective security for their peoples. The allied socialist countries do not seek to have a higher degree of security than other countries, but will not settle for a lesser degree. The state of military-strategic parity which currently exists remains a decisive factor for preventing war. Experience has shown, however, that parity at ever increasing levels does not lead to greater security. For this reason they will continue to make efforts in order to maintain the military equilibrium at progressively lower levels. Under these circumstances, the cessation of the arms race and measures geared towards real disarmament are assuming truly historic significance. In this day and age, States have no option but to seek agreements that would radically scale down military confrontation.

The States parties to the Warsaw Treaty are unswervingly committed to these tenets. In full conformity with the defensive nature of their military doctrine, they are vigorously pursuing the following fundamental objectives:

*Second*, prohibition and elimination of chemical and other categories of weapons of mass destruction;

*Fifth*, establishment of nuclear-weapon-free and chemical-weapon-free zones in various areas

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of Europe and in other regions of the world as well as of zones of thinned-out arms concentration and increased mutual trust, introduction of military confidence-building measures on a reciprocal basis in Europe and agreements on such measures in other regions of the world, including seas and oceans. Furthermore, mutual obligations of the States parties to the Warsaw Treaty and the member countries of the North Atlantic alliance to forgo the use of military force and to maintain peaceful relations, the elimination of the military bases established on the territory of other countries; the returning of their armed forces to their national territories, the mutual withdrawal of the most dangerous categories of offensive weapons from the zone of direct contact between the two military alliances, and measures to lower the concentration of armed forces and armaments in this zone to an agreed minimum level;





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FRANCE

Working paper on the maintenance of a security balance among all the parties to the Convention during the ten-year period of the destruction of stocks of chemical weapons

A. The Convention and the maintenance of a security balance among all the parties to the Convention

The negotiation of a general Convention to prohibit chemical weapons, in which the countries participating in the Conference on Disarmament have been engaged since 1979, has as its aim the complete elimination of chemical weapons. France continues to pursue this objective, which must result in the maintenance of a security balance among all the States parties to the Convention from the moment of the declaration of the existing stockpiles to their complete elimination under international supervision.

In the light of the development of the negotiations and of the importance of this question, which has hitherto formed the subject of only partial attention, the time has come to consider very specifically the circumstances in which the elimination will be carried out from the point of view of the security of the States parties. Although it is, of course, important to guarantee the future security of the signatories once the complete destruction of the stockpiles has been achieved, their immediate security during the period provided for such destruction, established at 10 years in the draft Convention, should not be overlooked. This period constitutes a first phase which is, by its nature, transitional but nevertheless essential to the implementation of the Convention. This point seems to require all the more urgent consideration in that:

(1) The application of the provisions agreed upon among -- all -- the parties obviously constitutes a necessary prerequisite for the implementation of the Convention in its second phase, namely that which is designed to prevent any return to the previous situation characterized by the holding of stockpiles and the existence of production facilities. It is clear, therefore, that the solution found for this problem concerns -- all -- the States parties and could not be delegated to the States possessing stocks of chemical weapons at the moment that the Convention comes into force;

(2) In view of the sequential nature of the application of the provisions of the Convention, the possibility that difficulties might arise during the 10-year period of stock destruction which would lead to an extension of that period or even to a calling into question again of the agreed timetable, cannot be entirely ruled out.

For security to exist among the parties at all times, once the Convention has entered into force, a relationship of equal security must be established among all the States concerned in respect of the chemical weapons which are to be eliminated. However, there is a considerable disproportion, though one which is not quantifiable at the moment in the absence of specific information from the countries concerned, between the capabilities of the two most heavily armed countries and those of the other countries. In this respect, the Convention could not organize and sanction such an imbalance during the period of at least 10 years while stockpiles and production facilities are being destroyed. If the viability, and thus the universality, of the Convention is to be assured, with a view to achieving total elimination -- it does not seem possible to make it a disarmament treaty of disarmed countries -- during the first phase of its implementation.

Consequently, from the entry into force of the Convention, it will be necessary to organize the arrangements which are to appear in it on the basis of a -- security balance --.

There are three possible options:

A preliminary Soviet-American agreement prior to the signature of the Convention, which could be concluded and could enter into force immediately, the entry into force of the Convention for the other countries occurring only after a certain lapse of time and in the light of the quantity of stocks actually destroyed under international supervision by the United States and the USSR;

An arrangement of the 10-year period whereby the first period of 5 years is devoted to the destruction of Soviet and American stocks which, in fact, would also lead to an effective implementation postponed by the same number of years for the other countries. However, the disproportion of stockpiles appears to be such that even a minimum balance would not be ensured at the end of the five years in question. Another obstacle arises from the very great difficulty of working out equivalences between stockpiles of different compositions;

The establishment from the entry into force of the Convention of a balance, based on limited and homogeneous security stocks, to be destroyed during the last two years of the 10-year period. This option corresponds more closely than the two previous ones to the objective of maintaining a security balance among the States parties and is thus the one chosen by this paper.

#### B. The ten-year period and security stocks

The destruction of the existing stockpiles and production facilities is a long-term undertaking, and it is not possible to guarantee in advance the continuity and regularity of the process. It is a technically complex operation and also a financially costly one since, according to certain estimates, it represents almost three times the cost of building up the stockpile. It has been agreed, in the course of the negotiations, that it would take place over -- a period of 10 years --. This period will constitute, in fact -- a first phase -- of the implementation of the Convention. Its progress will condition the next phase: it is clear that the definitive régime of the Convention, namely the total elimination of the stockpiles and their non-replenishment, will not be -- politically -- acceptable in the second phase unless the first phase has proved satisfactory.

This first 10-year phase has the purpose of:

Informing the parties to the Convention of the production capabilities and the stockpiles of chemical weapons of all the signatory States and making it possible to verify the data supplied;

Defining the methods and stages of reducing the levels of the chemical-weapon stockpiles during the 10-year period; and

Testing the effectiveness and the conformity with the Convention of the practical steps taken by the signatory States during this period to approach, in accordance with a previously agreed timetable, the objective fixed by the end of the 10 years: the complete elimination of chemical-weapon stocks and production facilities.

As it now appears to be agreed that the Convention will be without prejudice to the rights and duties of each State party to the Geneva Protocol of 1925 under the said Protocol, the use of chemical weapons will still, of course, be prohibited during the 10-year period in the circumstances laid down by international law, including the declarations made and reservations entered by the countries which acceded to the Protocol. For most signatories, therefore, the first use of chemical weapons would still be forbidden but not a response to an attack of the same nature.

Nevertheless, during this period, there will be -- a new situation from the point of view of the security -- of the States parties which must be examined with the greatest attention.

However, the question of the security to be maintained during this period has not yet been subjected to the thorough discussions which are needed to reach the essential consensus on the matter.

In this spirit, France proposes that the balance among security stocks should be defined on the basis of a -- strictly limited -- identical level for all, which will remain unchanged until the last two years of the 10-year period provided for the complete destruction of the stockpiles.

The concept of the security stock does not concern only the States which declare the possession of a stockpile of chemical weapons in the 30 days following the entry into force of the Convention. All countries, whether or not they possess chemical weapons, have an interest in maintaining the balance. If this is not guaranteed -- or is called into question again either gradually (e.g. as a result of delays in the timetable for the destruction of the stockpiles as a result of material difficulties) or suddenly (e.g. the exit from the Convention of one of the States parties or its refusal to continue with the elimination of the remaining stocks) -- the security of all the States parties is inevitably affected, to the extent that they have committed themselves on the basis of a timetable for the destruction of stocks which has been called into question or modified.

### C. Provisions proposed for the security stock

#### 1. Objectives

The 10-year period for the destruction of stocks will play a crucial role in the Convention for the prohibition of chemical weapons.

In fact, this period will cover the establishment of the international verification and monitoring system and the material destruction of a sizeable military arsenal. This operation should guarantee a security balance among all the countries holding chemical weapons during the period of destruction of

the stockpiles. Although the exact composition of the stockpiles is not known at this stage, it is clear that national chemical arsenals differ considerably as regards their volume, their composition and their obsolescence prospects. The French delegation thus proposes the following provisions for insertion in the Convention so as to guarantee, for the benefit of all parties, equal security from the time that the Convention enters into force:

(1) Every country may, if it so desires -- during the first eight years -- after the entry into force of the Convention -- keep and maintain a limited stock of chemical weapons -- for the purpose of deterring any possible violations.

(2) The stock and the production facility relating thereto must be destroyed during the ninth and tenth years after the entry into force of the Convention, the undertaking to carry out such destruction being entered into at the time of signature. In the event of slippage of the timetable for the destruction of the stockpiles, it will have to be adjusted accordingly. The production facility assigned to the security stock (cf. paragraph 4 below) shall be placed under strict international control.

A priori, therefore, such a situation is much more stable and under control from the standpoint of the risks of proliferation of chemical weapons than that where no provisions having been made for the maintenance of security during the period of destruction of the stockpiles, there would be maximum encouragement not to accede to the Convention, at least as long as the major stockpiles continued to exist.

## 2. Composition of the security stock

1. The security stock, composed exclusively of munitions (shells, rockets, bombs etc.), should not exceed a volume which could be fixed by common consent at a figure between 1,000 and 2,000 metric tons of toxic chemicals.

This proposal meets the need to fix a standard with due regard for the concern to keep only a limited chemical warfare capability, while retaining for it a minimum military significance.

That is why:

A. The volume has been fixed with due regard for the assessment of the stock regarded as militarily significant, so that it may retain this characteristic until the last year of the destruction process. In view of the fact that the destruction will take place over two years, the amount proposed is thus at least equal to twice the minimum volume regarded as militarily significant. It is, of course, an order of magnitude and the exact amount can be fixed by common consent among the States parties before the entry into force of the Convention;

B. Rather than trying to find an uncertain equivalence on the quantitative and qualitative levels between capabilities which are not strictly comparable by reason of the heterogeneous nature of the stocks, it seems better to start from the concept of a strictly limited quantity underpinned, if necessary, by a production capability that is itself strictly limited and subject to international control.

2. The toxic chemicals retained could include the family of V-nerve agents or, at any rate, some of the class of supertoxic lethal chemicals.

3. The maintenance of this stock in condition would be assured by a -- single -- production facility consisting of the means required to produce the toxic chemicals, adequate filling shops and maintenance materials.

4. This single facility would be declared (including its location) and placed under international control.

### 3. Declaration of stocks

The constitution of such a stock would obviously have implications for the problems connected with the declarations and with the destruction of the stockpiles and the production facilities.

The declaration of the stockpiles should consist of two parts:

#### A. Declaration of the security stock

This declaration would cover the total volume of the stock and its detailed composition (as a purely illustrative example: total volume of the stock: 700 tons of V-nerve agents -- 155 mm shells, 100 tons; 150 mm rockets, 200 tons; 500 kg bombs, 200 tons; and 1 ton bombs, 200 tons).

The total volume of this stock may not be greater than the fixed limit (between 1,000 and 2,000 tons). It can be held in various places in the territory of the State party, on condition that the number of places is itself declared.

In view of the actual role that this security stock is required to play during the 10-year period, the question of declaring its location prior to the eighth year arises.

There are, in fact, several options which entail different consequences as regards verification. They will be considered under section 8 below.

Any country which would like to get rid of its security stock before the ninth and tenth years after the entry into force of the Convention could do so by declaring its location(s) and supplying an estimated timetable for its destruction.

#### B. Declaration of the other stockpiles

The declarations will be made in the ways proposed in the current draft Convention, including the location at the moment of the declaration.

4. Declaration of the production facilities --

The declaration of the production facilities and their locations will be made in the ways proposed in the current draft Convention. France does not think that retroactivity of these declarations to 1 June 1946 can be made obligatory. This could, however, be done on a voluntary basis as a confidence-building measure.

All production facilities will be placed under international control. Apart from that reserved for the maintenance of the security stock, they will all be sealed from the moment the Convention enters into force and destroyed in accordance with the provisions agreed upon in the Convention.

All the products manufactured in the single facility will be reserved for the maintenance of the security stock and will take place under the international monitoring régime defined by the Convention.

This facility may be different from the small-scale production facility authorized by the Convention for research, medical or protective purposes.

5. Destruction of the stocks --

A. The stockpiles other than the security stock will be destroyed in such a way that, between the first and the eighth years, the minimum destruction per year will affect a quantity equivalent to not less than one eighth of the total stockpiles declared so that, by the end of the eighth year, they should have completely disappeared. Stockpiles other than the security stock mean all chemical weapons which do not form part of the security stock and, in the case of any countries that have decided to give up possession of security stocks, the whole of their chemical arsenals.

B. As regards the security stock, whatever the solution adopted at the moment of entry into force of the Convention, the location(s) of this stock will be declared at the end of the period of eight years of stockpile destruction and the storage facilities will then pass under international control. Half of the stock will be moved to the destruction site(s) and destroyed in each of the ninth and tenth years, according to a detailed plan which will make it possible for the various countries to destroy the same quantity in the same time and simultaneously. This stage of the destruction is, in fact, the most sensitive since it concerns the last stock that still has a military significance.

6. -- Destruction of the production facilities --

Eight years after the entry into force of the Convention, the only facility that should still exist is that reserved for the maintenance of the security stock. As in the case of the stocks, the destruction of this facility should take place concomitantly. It should be destroyed or, at any rate, withdrawn from service before the end of the ninth year after the entry into force of the Convention.

7. -- Updating or renewal of the security stock --

The possibility of updating or renewing a portion of the security stock should be considered. In view of the chances of storage accidents, products which age more rapidly than expected, etc., it would seem necessary to authorize it on condition that the total chemicals held by a State party do not exceed the limit fixed for the security stock and that obsolete or dangerous munitions are destroyed before they are replaced. The destruction of the munitions, like the manufacture of new munitions, will have to be carried out under international supervision, on the following conditions:

1. A detailed declaration of a stock component which is deemed obsolete, and the transfer under national responsibility of that component to a destruction facility. Verification and international monitoring, establishment of the destruction timetable.
2. The manufacture of new munitions, which might be different from the munitions destroyed, would be carried out by a production facility reserved for that purpose under international control and only the same tonnage of toxic chemicals would be authorized.

8. -- Verification --

A. The constitution and maintenance of security stocks could not be used to derogate in any way from the general provisions of the Convention regarding verification and, in particular, from the possibility for a State having reasons to suspect that the authorized limits have been exceeded to request access to the site by the procedure of challenge inspection and thus a right of controlled access, in the conditions defined by the Convention, to the disputed storage area.

B. By its nature, the production unit intended for the constitution and/or the maintenance of the stock will require special monitoring. This will be of the same kind as the monitoring deemed necessary for the production facilities whose destruction is provided for from the entry into force of the Convention, in view of the fact that there are the same dangers of fraudulent

misuse. It is a question, therefore, of a systematic or even continuous verification régime whereby the levels of production or destruction are systematically monitored.

C. According to the formula adopted in the Convention for the declaration on the location of the stock, the verification régime could thus be as follows:

(1.) -- One or more declared places of storage --

The number of places of storage should be limited to a maximum of five sites;

The location is known;

The State reserves the right to maintain its stock and to ensure its security under its sole national control;

Challenge inspections can be launched, if one of the parties believes there are reasons to think that the limits indicated by the Convention for security stocks have been exceeded; and

In the case of the movement of the stock, international monitoring will be applied.

(2.) -- A single non-declared place --

A sealed envelope stating the location, the volume and the composition of the stock will be deposited when the Convention comes into force;

In the event of a formal notice, the procedure of challenge inspection will apply and the corresponding envelope may be opened and, if necessary, an on-site visit carried out;

The State will be entitled to transfer its stock subsequently to another non-declared place. Before this is done, a new sealed envelope will be submitted to the Secretariat.

(3.) -- Several non-declared places of storage (number limited to a maximum of five) and access to the stock --

It will then be necessary to provide for:

One sealed envelope for each place of storage (volume and composition of the stock);

The possibility of a challenge inspection: opening of the corresponding envelope (which shall be identified by the State challenged) and on-site inspection to allay the suspicions.

(4.) -- Several non-declared places of storage, limited in number -- without right of access to the stock:

This formula implies the depositing of sealed envelopes and, at the moment of a request for challenge inspection, a declaration of the volume and composition of the stock discovered and an offer by the challenged State of alternative measures which will furnish adequate replies.





## NORWAY

## VERIFICATION OF ALLEGED USE OF CHEMICAL WEAPONS

SUMMARY OF RESEARCH RESULTS 1986/871 Introduction

The research programme on verification of alleged use of chemical weapons which was initiated in 1981 by the Norwegian Ministry of Foreign Affairs, is carried out by the Division for Environmental Toxicology of the Norwegian Defence Research Establishment at Kjeller. In 1986/87 the research was concentrated on identification of a contaminated area, but included as well testing of the procedures which have been developed for all phases of verification of alleged use. These procedures have been tested on an all year basis. The results of these tests, and the conclusions which can be drawn on that basis, are summarized in this Working Paper.

The development of the Norwegian research programme during the period 1981-1987 is illustrated in an Annex to this document. The research programme will be continued in 1988.

2 Survey of an alleged contaminated area

Identification of a contaminated area after an alleged use of chemical weapons starts with the International Inspectors collecting information from eyewitnesses and carrying out a visual inspection of the area. In addition, it is necessary to perform a field survey. This will not only be useful in identification of an alleged contaminated area, but also in order to give a preliminary identification of what agents may be present. For the purpose of performing such a survey, the International Inspectors have to bring with them suitable equipment.

Through field exercises different procedures for identification of a contaminated area have been tested. These methods include use of the British produced detector Chemical Agent Monitor (CAM) monitoring contamination in air samples, detection paper showing 'colour reaction after contact with liquid agents, and thin layer chromatography (TLC), based on separation of chemical agents extracted from solid or liquid samples. These field methods give useful indication of from where samples should be collected for subsequent laboratory analysis.

CAM detects nerve agents and mustard gas and differentiates between them. The instrument is simple to use, and simulants for nerve agents and for mustard gas were identified both on snow under winter conditions and on grass, soil and sand under summer conditions. CAM was also used to identify sarin and mustard gas on grass, soil and sand under summer conditions.

Detection paper identifies nerve agents and mustard gas. In addition to differentiating between the two classes of chemical agents, the detection paper differentiates between nerve agents of

G-type (sarin, soman, tabun) and V-type (VX). The paper contains different dyes which are selectively dissolved in the different types of agents to give different colour reaction. The detection paper was tested on samples of snow, sand, soil and grass in field exercises with satisfactory results. The detection paper may detect droplets containing as little as 50 micrograms of nerve agents or mustard gas.

The third method is thin layer chromatography (TLC). Use of TLC is more time consuming, but differentiates between the different agents and therefore gives a good first indication of which agents are present. The field exercises showed that TLC was possible to use both under summer and winter conditions, even though some special precautions were required. The detection limit for TLC varies from parts per million (ppm) to parts per billion (ppb) depending on which agents are to be detected.

The three methods were tested during two field exercises carried out during the winter 1986/87 and the summer of 1987 to get the best indication of the difficulties which the International Inspectors will have to face in a real situation.

### 3 Sampling

Under winter conditions snow samples have proved to be valuable for analytical purposes. Procedures for verification of alleged use of chemical weapons under winter conditions have been elaborated during the winters from 1981 to 1987. The procedures are applicable on an all year basis. During the summer of 1987 field experiments were carried out, and samples from sand, soil, grass and water were collected in the same way as snow samples.

The weather conditions will always play an important role in verification. The exercises and earlier studies have shown that temperature and windspeed influence considerably the persistence of a chemical agent. The experiments have further shown that snowfall will conserve the agents by decreasing the rate of evaporation. During summer conditions factors such as temperature and windspeed are even more important and it will be more difficult to verify an alleged use of chemical weapons. In most cases the chemical agents will evaporate within few days. Verification under summer conditions are therefore more dependent on collecting samples as soon as possible after an alleged attack.

The meteorological conditions should be taken into account in sampling in order to increase the possibility of positive verification. Wind direction, wind speed, temperature and precipitation are all important factors for these purposes. It should also be noted that during summer conditions, breakdown products and production impurities, which are persistent, may play a more important role in verification.

The experiments carried out during the year 1986/87 show that about 30% of the applied amount of sarin and mustard gas were recovered after 24 hours on snow at a temperature of -14 degrees C.

During the second field exercise under summer conditions, sarin was recovered after 24 hours in 49% from water, 18% from grass, 27% from sand and 9% from soil. For mustard gas the recoveries varied from 0.7% to 2.6% in water, grass and sand samples, and was 0.3% for soil samples. The recoveries are based on mean values from analysis by gas chromatography with flame ionization detector, gas chromatography with nitrogen phosphorus detector and gas chromatography with multiple ion detector.

Experiments with direct extraction with chloroform in the field showed a lower recovery for sarin, but higher for mustard gas. The recoveries of CS varied a lot, but this is due to low solubility in water. CS was, however, found in all samples.

#### 4 Sample handling

The procedures for handling samples from snow are based on adsorption of chemical agents to a polymer. This adsorption takes place when the melted snow samples are passed through columns filled with a polymer. Aqueous extracts of sand, soil and grass were treated similarly. Both column adsorption and chloroform extraction were tested with good results in field exercises. The experiments showed that C-18 columns should be stored under cooled conditions. Both mustard gas and sarin were difficult to verify after one week when stored at room temperature, while 10% were recovered when stored at 5 degrees C and almost 100% at -20 degrees C.

#### 5 Analysis

A great variety of analytical methods have been developed for qualitative and quantitative measurements of organic compounds. The analytical methods may be based on different principles for identification and at the same time vary in sensitivity and specificity. The selection of analytical methods depends on the samples which should be analysed. Analysis of pure compounds or a mixture of a few compounds may be performed by methods like mass spectrometry (MS), infrared spectrometry (IR) and nuclear magnetic resonance spectroscopy (NMR). Among these methods MS is the most sensitive and specific. In analysis of a more complex mixture, chromatographic methods should be employed to separate the different compounds before detection.

In connection with the testing of the complete procedures for verification, the following analytical methods were used for analysis of the chemical agent sarin (GB), mustard gas (H) and the riot control agent CS.

- Mass spectrometry (MS)
- Gas chromatography with flame ionization detector (GC-FID).
- Gas chromatography with nitrogen phosphorus detector (GC-NPD).
- Gas chromatography with multiple ion detector (GC-MID).
- Thin layer chromatography (TLC).
- Infrared spectrometry (IR).
- Nuclear magnetic resonance spectroscopy (NMR).

The gas chromatographic methods give excellent separation of organic compounds in complex mixtures. GC-FID is the most universal method and FID responds to almost all organic compounds. The NPD is a selective detector responding to nitrogen and phosphorus containing compounds and is especially useful in analysis of nerve agents. The NPD was about ten times more sensitive than FID in the analysis of sarin. The analytical work

carried out in 1986/87, has shown that MID besides being a specific method was also the most sensitive method. MID was about 100 times more sensitive than FID for sarin and about 1000 times more sensitive for mustard gas and CS. The specificity of MS combined with the separating power of GC makes GC-MS the most useful tool in analysis of complex mixtures. IR and NMR are both methods that require larger amounts of sample and are less sensitive than the various GC methods. In particular, NMR can be useful in analysis of more concentrated samples such as residues from munitions and war heads. This method can be more selective and specific when used in fluorine, carbon or phosphorus mode instead of that from protons. NMR can therefore be effective in analysis of nerve agents. NMR may also be suitable for analysis in samples from production and destruction plants. IR is less useful in analysis of chemical agents, but can give information about specific chemical groups rather than the whole compound.

TLC can be used in a preliminary screening to obtain information of what agents, if any, are present in the samples both by application in the laboratory and in the field. The specificity and sensitivity are rather low.

## 6 Complete procedures for verification

In the two field experiments carried out in 1986/87, complete procedures for verification of alleged use of chemical weapons on an all year basis were tested. The exercises were performed by releasing shells filled with simulants for nerve agents and for mustard gas and with the riot control agent CS. At the same time some samples were spiked with sarin, mustard gas and CS. After the release the contaminated area was identified by use of CAM, detection paper and TLC. All methods indicated the presence of a nerve agent and mustard gas and TLC indicated also the presence of CS. After identification samples were collected from a grid put up in the area. During the winter 1986/87 this grid contained 12 areas for sampling and during summer only 4 areas (4 types of samples were tested). After extraction of the different samples with water, the solutions were passed through commercially available Sep-Pak C-18 columns. In analysis of sand and soil samples a pre-filtration was necessary in order to prevent blocking of the columns. The samples were coded and the history of the samples were recorded.

After coding the columns, they were placed in a container with dry ice to be transported to the laboratory. In the laboratory the columns were eluted and prepared for analysis by gas chromatography with both flame-ionization detector, nitrogen-phosphorus detector and multiple ion detector. All these methods are sensitive and used in qualitative and quantitative analysis of chemical warfare agents.

## 7 Conclusions

The experiments carried out during 1986/87, have shown that methods such as detection paper, Chemical Agent Monitor (CAM) and thin layer chromatography (TLC) may be useful in identification of an alleged contaminated area and in giving a first indication of which agents may be present.

Samples of soil, sand, water and vegetation, as well as

snow samples can be used in verification of an alleged use. The system of using columns containing porous polymers showed some practical difficulties with sand and soil owing to blocking of the columns, but no problem with analysis. The problem with the columns was solved by a pre-filtration of the aqueous extracts. The recoveries of agents from soil were lower than recoveries from grass, sand and water. The samples should be stored and transported under appropriate cooled conditions if it takes more than 24 hours to reach the laboratory.

Analysis of samples may be carried out by gas chromatographic methods, where flame ionization is the most universal detector. Increased selectivity and sensitivity are obtained by nitrogen phosphorus and multiple ion detectors. Mass spectrometry is a highly specific analytical method and should be included in a verification procedure. In addition to these methods, nuclear magnetic resonance may be used in analysis of more concentrated and less complex samples.

The complete procedures for verification of alleged use of chemical weapons were tested in two field exercises. These exercises confirmed that the procedures can be used on an all year basis.

Annex

THE NORWEGIAN RESEARCH PROGRAMME  
ON VERIFICATION OF ALLEGED USE  
OF CHEMICAL WEAPONS

1981/82	ANALYTICAL METHODS PERSISTENCE OF AGENTS ON SNOW NERVE AGENTS, MUSTARD
1982/83	ANALYTICAL METHODS PERSISTENCE OF AGENTS ON SNOW IRRITATING AGENTS, NERVE GAS PRECURSORS
1983/84	FIELD LABORATORY DECOMPOSITION PRODUCTS PRODUCTION IMPURITIES
1984/85	SAMPLING SAMPLE HANDLING LEWISITE
1985/86	SAMPLE HANDLING ALL YEAR PROCEDURES
1986/87	SURVEY OF AN ALLEGED CONTAMINATED AREA FIELD ANALYSIS TESTING OF ALL YEAR PROCEDURES
1987/88	PROCEDURES FOR VERIFICATION OF ALLEGED USE OF CHEMICAL WEAPONS





## NORWAY

GENERAL PROCEDURES FOR VERIFICATION OF ALLEGED USE OF CHEMICAL WEAPONS FOR CONSIDERATION IN THE NEGOTIATIONS ON THE CHEMICAL WEAPONS CONVENTION

## I BACKGROUND

As a contribution to the negotiations in the Conference of Disarmament on The Chemical Weapons Convention, the Norwegian Ministry of Foreign Affairs initiated a research programme of verification of alleged use in 1981. The programme is carried out by the Division for Environmental Toxicology, Norwegian Defence Research Establishment at Kjeller. The research programme is based on field experiments in order to provide realistic data to evaluate suitable procedures for verification of chemical warfare agents. Based on these field experiments, the research undertaken during the period 1981-87 and documents so far submitted to the Conference on Disarmament (ref. CD/311, CD/396, CD/397, CD/508, CD/509, CD/598, CD/600, CD/601, CD/702, CD/703, CD/704 and CD/761), procedures have been developed for verification of alleged use on an all year basis.

These procedures cover the tasks of surveying an alleged contaminated area, sampling procedures, field analysis, preparation of samples for transport to laboratories and analytical procedures, in addition to establishment of an inspection team and the elaboration of its report.

The general procedures for verification of alleged use should be outlined in an Annex to Article IX concerning consultations, co-operation and fact-finding. In particular, the provisions concerning international verification by means of challenge procedure have relevance to verification of alleged use of chemical weapons.

Against this background, this document describes the procedures, which have been elaborated in Norway, based on the present technological development. The results of other countries' research in this area have to some degree been incorporated in this document. The work undertaken in Norway during 1986/87 shows that some aspects of the procedures for verification of alleged use of chemical weapons need to be further elaborated. Norway will continue her research programme with this in mind.

The procedures which so far have been developed, are submitted to the Conference on Disarmament in connection with its further consideration of this issue.

## II GENERAL PROCEDURES FOR VERIFICATION OF ALLEGED USE OF CHEMICAL WEAPONS

### 1. The task of the inspection team

The team should comprise up to 7 International Inspectors with the necessary qualifications, experience and training, in particular in collecting samples and in handling chemical warfare agents and casualties from chemical agents. The International Inspectors should be assisted by the necessary interpreters. The State Party (or States Parties) where the International Inspectors are undertaking their mission should be entitled to be represented by an observer.

The State Party (or States Parties) concerned shall facilitate the tasks of the International Inspectors and shall take all possible measures to ensure that the Inspectors have safe conduct throughout their mission. The International Inspectors may have to operate in war zones.

Regulations on standard equipment for the International Inspectors should be elaborated and approved by the Executive Council. There should be no restrictions on the International Inspectors in bringing with them the necessary equipment, such as personal protective equipment, position finding equipment, mobile laboratory to perform field analysis and to collect samples for further investigation, as well as means for transport of the samples, using regulations agreed upon in connection with routine inspections. This equipment should correspond to the purpose of the verification.

The International Inspectors shall conduct their mission in the least intrusive manner necessary to accomplish their task. A positive verification of use of chemical weapons will depend on how fast the International Inspectors can inspect the area. The inspection of an alleged use should take place within 48 hours after a request to investigate has been received by the Technical Secretariat.

The International Inspectors shall present their findings in a report to the Technical Secretariat within 10 days after their on-site investigation. The International Inspectors should inter alia make use of questionnaires.

### 2. Survey of the alleged contaminated area

Immediately upon arrival the International Inspectors shall have unimpeded access to the area of the alleged attack. They shall without delay carry out a visual inspection of the area and identify any damage to terrain, vegetation and animals. The International Inspectors shall be granted possibility to interview persons who have eyewitnessed the alleged attack of chemical weapons and persons who have been affected by the alleged attack. The team should also be permitted to conduct medical examinations of persons and animals which have been affected by the alleged attack.

The International Inspectors shall carry out a field

survey in order to identify the alleged contaminated area, and also to give a preliminary indication of what agents may be present in the area. This survey can be carried out by use of different detectors, such as the British produced Chemical Agent Monitor (CAM), which measures contamination in air samples, detection paper giving colour reactions as a result of contact with liquid agents, or other available detection kits. The above mentioned field methods may give a useful identification of the area from where samples should be collected for subsequent laboratory analysis.

### 3. Collection of samples

The International Inspectors shall collect enough samples from the alleged contaminated area, as identified by the field survey to give a reliable answer to the allegation of use of chemical weapons. The Inspectors shall collect meteorological information of importance, such as wind direction, precipitation and temperature. Under winter conditions snow samples have proved to be an excellent material for verification of chemical agents, while under summer conditions samples of sand, soil, vegetation, water, animals and carcasses of animals may be used.

In addition to the contaminated environmental samples, biomedical and autopsy specimens, munition fragments or duds, and items or portions of items, which may be contaminated, should be collected.

Certain materials such as leather and polymers are good adsorbents for chemicals and may contain high concentrations and thus be of particular use in analysis.

The International Inspectors shall collect control samples to assure that the background does not interfere with the analysis of chemical agents.

The International Inspectors should be permitted to collect biomedical samples from attack victims who have been evacuated to areas outside the contaminated area. The Inspectors should also be permitted to accept other appropriate samples alleged to come from the site of the attack from eyewitnesses or other investigators. In such cases, however, they should take care to assure themselves of the authenticity of the samples. Such samples should be marked appropriately. During collection, the International Inspectors should also preserve the samples to stabilize their chemical content until the samples reach the laboratory for analysis. This is especially important for biomedical samples where metabolic processes or degradation of the agent may continue during transport. The International Inspectors should also perform render-safe operations on any intact munition or explosive.

In order to minimize the size of the samples the International Inspectors may carry out a clean-up procedure in the field. This can be performed by using either the method based on adsorption of chemical warfare agents to columns containing porous polymers or the method of organic solvent extraction (ref. document CD/703).

Depending on the circumstances in the area of an alleged attack the International Inspectors should, if possible, perform a preliminary field analysis by making use of appropriate and

available analytical methods. Such methods include Chemical Agent Monitor (CAM), detection paper, and thin layer chromatography (TLC) which can provide some indication of the type of chemical agents used in the alleged attack. Other investigative techniques, which the International Inspectors may make use of, include medical examinations and autopsies of attack victims, interviews of eyewitnesses and corroboration with information provided by other State Parties.

The International Inspectors shall code and document each sample and establish a strict chain of custody of the samples, as well as elaborate a sample accounting system. This record of the samples shall be updated until it is analysed. The record of the International Inspectors shall be available for the analytical laboratory, but the coding of the samples should be kept separately.

#### 4 Transport

The samples should be carefully packed and sealed in a tamperresistant manner. Since most chemical agents are volatile and hydrolyse rather easily the samples should be transported rapidly under cooled conditions, preferably in an insulated box with dry ice. Certain samples may require chilling rather than freezing, in which case another procedure might be chosen. The transport should take place in accordance with international regulations. The State Party concerned should grant the International Inspectors the possibilities to store and transport all sealed samples collected, using regulations, as appropriate, agreed upon in connection with routine inspection.

#### 5 Analysis in laboratories

The samples shall be analysed at laboratories which are especially designated and certified by the International Authority, using the list to be drawn up in connection with routine inspections. The Executive Council should approve the list of certified laboratories.

These laboratories must be in possession of standardized equipment for such analysis. At any rate, the standard equipment for a laboratory involved in verification of alleged use of chemical weapons, should include gas chromatographic and mass spectrometric methods. Increased selectivity of gas chromatography can be achieved by use of nitrogen-phosphorus and flame photometric detector for selective detection of phosphorus or sulphur containing compounds and with an electron capture detector for selective detection of flourine and chlorine containing compounds. In analysis of samples containing a high concentration of the alleged compound, e.g. a sample from a warhead, nuclear magnetic resonance spectroscopy may also be useful even if this instrument has low sensitivity. Heavily contaminated samples, may, after extraction and preconcentration, also yield proper sample for NMR analysis. In addition to these instruments, high performance liquid chromatography should be available for analysis of chemical agents with low volatility and decomposition products. More attention should be given to this technique in the future owing to the rapid technological developments.

The requirements for sample analysis need to be further elaborated. Such requirements include inter alia: a) incorporation of blind samples where the analysts do not know the source or history of the sample in question, b) analysis redundancy and duplication, i.e. each sample should be separated into two or more aliquots and analyzed at separate laboratories.

Procedures and responsibilities for interpretation and analysis of results within the Technical Secretariat will need to be elaborated eventually. The report from the laboratories should in addition to the analytical results, describe in detail the methodology used in analyzing the samples. Such information is important in drawing conclusions as to the significance of analytical findings.

The samples should be sent to the laboratories within 24 hours after their arrival at the Technical Secretariat. The results of the analysis of the laboratories should be submitted to the Technical Secretariat, if possible, within 72 hours in order to be taken into account in the evaluation of the final report of the International Inspectors.

#### 6 Report of the Inspection Team

The International Inspectors shall present their findings in a report to the Technical Secretariat within 10 days after the accomplishment of their on-site inspection. The report should be distributed to the State Party (or States Parties) that requested the inspection, the State Party (or States Parties) upon whose territory the inspection took place, the State Party, if any, that has allegedly used chemical weapons, and the members of the Executive Council.







# CONFERENCE ON DISARMAMENT

CD/765 1/  
29 June 1987

Original: ENGLISH

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LETTER DATED 23 JUNE 1987 ADDRESSED TO THE PRESIDENT OF THE  
CONFERENCE ON DISARMAMENT FROM THE PERMANENT REPRESENTATIVE  
OF FINLAND TRANSMITTING A DOCUMENT ENTITLED "AUTOMATIC  
MONITORING IN VERIFICATION OF CHEMICAL DISARMAMENT"

I have the honour to transmit to you a document entitled "Automatic Monitoring in Verification of Chemical Disarmament". This document contains the proceedings of a workshop in Helsinki (12-14 February 1987) organized by the Finnish Project on Verification of Chemical Disarmament.

I would appreciate it if the document were to be circulated as an official document of the Conference on Disarmament.

(Signed) Olli Mennander  
Ambassador  
Permanent Representative of Finland

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1/ A limited distribution of this document in English only has been made to the members of the Conference on Disarmament. Additional copies are available from the Permanent Mission of Finland at Geneva.







# CONFERENCE ON DISARMAMENT

CD/764 1/  
29 June 1987

Original: ENGLISH

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LETTER DATED 23 JUNE 1987 ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT FROM THE PERMANENT REPRESENTATIVE OF FINLAND TRANSMITTING A DOCUMENT ENTITLED "AIR MONITORING AS A MEANS FOR VERIFICATION OF CHEMICAL DISARMAMENT; C.4 FURTHER DEVELOPMENT AND TESTING OF METHODS, PART III"

I have the honour to transmit to you a document entitled "Air Monitoring as a Means for Verification of Chemical Disarmament; C.4 Further Development and Testing of Methods, Part. III". This report represents a further contribution by Finland to the work of the Conference on Disarmament in the field of chemical weapons.

I would appreciate it if the report were to be circulated as an official document of the Conference on Disarmament.

(Signed): Olli Mennander  
Ambassador  
Permanent Representative of Finland

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## CANADA AND NORWAY

## THE CHEMICAL WEAPONS CONVENTION

PROPOSAL FOR AN ANNEX TO ARTICLE IX CONCERNING VERIFICATION  
OF ALLEGED USE OF CHEMICAL WEAPONS

The on-site inspection after an alleged attack would in general take place on the invitation from the State Party which has allegedly been attacked. Nevertheless, the provisions in Article IX concerning consultations, co-operation and fact-finding have relevance to verification of alleged use of chemical weapons. In particular, the provisions concerning international verification by means of challenge procedure should apply equally to complaints concerning use of chemical weapons in violation of the Convention. The procedures applicable for verifying such an event should be included in an Annex to Article IX. The appendix of this document contains a proposal for such procedures.

Canada and Norway have jointly elaborated this proposal on the basis of the extensive research which these two countries have undertaken in this field for a number of years.

Since 1981, Canada has been concerned with procedures for the verification of allegations of the use of chemical weapons. Since that time, Canada has made a number of submissions on this subject to the United Nations. On the basis of Canadian experience and earlier submissions, in December 1985 Canada conveyed to the Secretary-General of the United Nations an extensive study entitled Handbook for the Investigation of Allegations of the Use of Chemical and Biological Weapons. This handbook was also tabled in the Conference on Disarmament on 12 March 1986 under cover of a letter CD/677. Canada shall soon table in this forum a report entitled Verification: Development of a Portable Tricothecene Sensor Kit for the Detection of T-2 Mycotoxin in Human Blood Samples, which was conveyed in May 1987 to the Secretary-General of the United Nations. It should also be of interest to a Technical Secretariat which will likely be established in the context of a future Chemical Weapons Convention. It highlights some of the difficulties that would accompany efforts to confirm or refute an allegation of the use of a "novel" agent.

In 1981, Norway initiated a research programme on verification of alleged use of chemical weapons. The research programme is based on field experiments in order to provide realistic data to evaluate suitable procedures for verification of chemical warfare agents. The programme is carried out by the Norwegian Defence Research Establishments. Based on this research the following documents have been submitted to the Conference on Disarmament: CD/311, CD/396, CD/397, CD/508, CD/509, CD/598, CD/600, CD/601, CD/702, CD/703, CD/704, CD/761 and CD/762. As a result of six years of research procedures have been developed for verification of alleged use on an all year basis. These procedures, which are described in document CD/762, cover the tasks of surveying an alleged contaminated area, sampling procedures, field analysis, preparation of samples for transport to laboratories and analytical procedures, in addition to establishment of an inspection team and the elaboration of its report.

The attached "Proposed Annex to Article IX" is submitted to the Conference on Disarmament as a basis for negotiation on a text for an Annex to Article IX on procedures for verification of alleged use of chemical weapons.

## PROPOSED ANNEX TO ARTICLE IX

GENERAL PROCEDURES FOR VERIFICATION OF ALLEGED USE OF  
CHEMICAL WEAPONS1. Inspector for alleged use of chemical weapons

(a) Upon receipt of a request from a State Party for an inspection with respect to an allegation of the use of chemical weapons, the International Authority immediately shall notify the appropriate State Party (or States Parties) of the requirement to conduct an on-site inspection within 48 hours. The International Authority shall indicate the arrangements for the arrival of the inspection team in the territory of the appropriate State Party (or States Parties).

(b) The State Party (or States Parties) so notified shall make any necessary preparations for the arrival of the International Inspectors; and individually or jointly, as appropriate, shall ensure the safe conduct within the prescribed timeframe of the International Inspectors, their supporting staff and their accompanying equipment and supplies from their point of arrival to the site(s) of the alleged use of chemical weapons, and return.

(c) The State Party (or States Parties), if requested, shall provide to the International Inspectors a secure base camp facility or area from which to operate in the conduct of the inspection.

(d) The State Party (or States Parties) shall co-operate with the International Authority with a view to facilitating the activities of the International Inspectors, including such related inspection activities as discussed in paragraph 5 below.

(e) The International Inspectors shall conduct their inspection in the least intrusive manner that they consider necessary to the accomplishment of their task.

(f) The privileges and immunities, as elaborated elsewhere in the Convention, shall apply to the International Inspectors and other members of the inspection team as designated by the International Authority.

2. Inspection team

(a) The inspection team appointed by the International Authority through its designated subsidiary body, the Technical

Secretariat, should comprise a number of International Inspectors with the necessary qualifications, experience and training; as well as any designated supporting staff with special skills or training who may be required to assist the International Inspectors.

(b) International Inspectors shall be designated from among the full-time inspectors of the Technical Secretariat. In the event certain required skills are not available from within the Technical Secretariat, International Inspectors may be designated from a list agreed in advance by the Consultative Committee. No national of a State Party (or States Parties) requesting or receiving an inspection shall be a member of the inspection team appointed by the International Authority to conduct that inspection.

(c) The State Party receiving the inspection shall have the right to nominate an observer to accompany the International Inspectors during the period it is receiving the inspection, provided the International Inspectors are not thereby delayed or otherwise hindered in the exercise of their functions.

### 3. Equipment and supplies

(a) The International Inspectors shall be permitted to take with them or to receive equipment and supplies necessary for protection from toxic chemicals, sample collection and handling, and sample analysis.

(b) The International Inspectors shall be permitted to take with them or to receive equipment for the purpose of recording and documenting the inspection.

(c) The International Inspectors shall be permitted to take with them or to receive communication equipment, as well as equipment for the purpose of determining their exact geographical position.

(d) The State Party receiving the inspection shall endeavour to satisfy any reasonable request from the International Inspectors for general supplies related to the execution of their task or to their sustenance, for which the International Authority shall reimburse the State Party.

### 4. Survey of the alleged contaminated area

(a) The International Inspectors shall have unimpeded access to the site(s) of the alleged use of chemical weapons.

(b) The International Inspectors shall be free to carry out a field survey in order to obtain a preliminary indication of the nature and geographical extent of any hazard.

## 5. Collection and handling of samples

(a) The International Inspectors shall collect samples of types and in quantities they consider necessary so that a reliable conclusion may be reached as to the allegation of the use of chemical weapons.

(b) These samples may include, inter alia, fragments of munitions, contents and/or casings of de-fused munitions, vegetation, soil, water, snow, contaminated material, human body fluids, and pathological specimens from autopsies of humans and/or animals.

(c) The State Party receiving the inspection, if requested, shall permit and co-operate in the collection by the International Inspectors of appropriate control samples from areas neighbouring the site of the alleged attack and from other areas, as agreed by the inspection team and the State Party.

(d) The State Party receiving the inspection, if requested, shall assist the International Inspectors in the safe storage, preservation and transportation of samples until the samples depart the territory of the State Party.

(e) As they consider appropriate, the International Inspectors may decide to conduct a preliminary analysis and/or to divide samples in a secure base camp facility or area.

(f) Depending on the inspection team's decision concerning the division of samples, the samples may be escorted to a designated laboratory for division and onward transmission, as appropriate; or if already divided in a secure base camp facility or area, the samples may be delivered directly to the designated laboratories. Every effort will be made to expedite delivery of the samples to the designated laboratories.

(g) The inspection team shall be responsible for the security and preservation of the samples, and for the maintenance of a detailed history chronicling the chain of custody of the samples, until such time as the samples or divisions thereof are delivered to the selected designated analytical laboratories, at which time responsibility will pass to the Technical Secretariat.

## 6. Interviewing

(a) The State Party receiving the inspection, upon request, will afford the opportunity to the International Inspectors to interview and examine persons who may have been affected by the alleged use of chemical weapons; and to interview eyewitnesses to the alleged use of chemical weapons, and medical personnel and/or other persons who treated or came into contact with the people who may have been affected by the alleged use of chemical weapons. The International Inspectors shall be permitted access to the medical histories, if available, of the people who may have been affected by the alleged use of chemical weapons.

(b) General interview questionnaires shall be prepared by the Technical Secretariat and used, as appropriate, by the inspection team.

(c) The State Party receiving the inspection, if requested, shall provide an appropriately qualified translator (or translators) to assist the International Inspectors with the interviewing.

7. Certification and selection of designated analytical laboratories

Under the supervision of the Executive Council, the Technical Secretariat shall:

(a) certify the designated laboratories to perform different types of analyses in relation to the verification of allegations of the use of chemical weapons. A State Party may propose, through the Executive Council, a laboratory (or laboratories) for consideration as a designated laboratory;

(b) oversee the standardization of equipment and procedures at these designated laboratories, and shall monitor quality control and overall standards in relation to the certification of these laboratories. A State Party may propose, through the Executive Council, a revision (or revisions) to the standardized equipment and procedures in use at designated laboratories in relation to the verification of allegations of the use of chemical weapons;

(c) select from among the designated laboratories those which shall perform analytical or other functions in relation to a specific investigation.

8. Analysis of samples in laboratories

(a) The samples shall be analysed in at least two designated laboratories. These laboratories must be in possession of standardized equipment for the type(s) of analysis to be conducted.

(b) The Technical Secretariat shall ensure that every effort will be made to expedite analysis of the samples.

(c) Any unused samples or portions thereof should be appropriately stored until they can be returned to the Technical Secretariat.

9. Report of the inspection team

(a) The International Inspectors shall submit to the Technical Secretariat, within 10 days of completion of an on-site inspection, a report on the activities conducted by them and on their findings. The report shall be factual in nature. It shall

only contain facts relevant to compliance with the Convention, as provided for under the inspection mandate. The report shall also provide information as to the manner in which the State Party (or States Parties) receiving the inspection co-operated with the inspection team. Each International Inspector shall have the right to have his own views included in the report.

(b) The Technical Secretariat shall provide a copy of the report to the State Party that requested the inspection, to each State Party that received the inspection, to the State Party alleged to have used chemical weapons, and to the members of the Executive Council.

10. Report of the analysis of samples in designated laboratories

(a) As soon as possible, the Technical Secretariat shall compile the results of the laboratory analyses of samples so that these results may be taken into account with the report of the inspection team. The report shall also provide detailed information concerning the equipment and methodology (or methodologies) employed by the designated laboratories.

(b) The Technical Secretariat shall provide a copy of the report of the analyses of samples to the State Party that requested the inspection, to each State Party that received the inspection, to the State Party alleged to have used chemical weapons, and to members of the Executive Council.

11. Elaboration and revision of inspection procedures

(a) Under the supervision of the Executive Council, the Technical Secretariat shall elaborate, and revise as necessary, technical procedures and interview questionnaires for the guidance of International Inspectors in the conduct of an on-site inspection. The technical procedures shall be flexible enough to take into account relevant scientific developments.

(b) A State Party may propose, through the Executive Council, a revision (or revisions) to the technical procedures and interview questionnaires elaborated by the Technical Secretariat for the guidance of International Inspectors in the conduct of an on-site inspection.







## UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

## MAKING THE CHEMICAL WEAPONS BAN EFFECTIVE

## INTRODUCTION

1. The United Kingdom paper CD/589 set out a number of detailed proposals on the organs and constitution of an Organization with the responsibility for implementing all aspects of the Convention. That paper also proposed that a Preparatory Commission should be established immediately the Convention was opened for signature. The Commission would be charged with making all necessary arrangements to enable the Organization to be brought into existence, and would continue in operation until the Convention had entered into force and the Consultative Committee and Executive Council had met for the first time.

2. Since that paper was tabled, there has been useful further elaboration of Article VIII. In addition, work on Articles III, IV, V, VI and IX has succeeded in developing further consensus on the verification arrangements that will be necessary if the Convention is to command confidence.

3. Having in mind these developments, the United Kingdom considers that it will be important to ensure that once the Convention enters into force its implementation is immediately effective. Were this not to be the case, there could be no confidence from the beginning that verification would take place in an appropriate way. It is apparent, for example, that a number of obligations under the Convention will arise rapidly; notably the requirement to make initial declarations covering (for example) chemical weapons; chemical weapons production facilities; and facilities declared for the non-production verification régime. The Organization will need to be able to monitor and verify these activities almost immediately.

4. The United Kingdom believes that a substantial part of the Organization will need to be in place at an early stage if this objective is to be met. This paper considers the extent to which permanent staff may need to be recruited and trained before the entry into force of the Convention; and considers how long this process might take. It also considers some of the practical details that remain to be resolved, including the question of costs and funding; and makes proposals for what additional work should be done now within the Ad Hoc Committee, and what may be left to the Preparatory Commission.

### Entry into force

5. Article XV, entry into force of the Convention, has yet to be agreed. However, what is agreed under this Article will be clearly relevant to the effective operation of the Convention.

6. Number of States party. There are a number of potentially relevant precedents. For example, the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) entered into force after deposit of 40 instruments of ratification, plus those of the three depositaries; whilst the 1972 Biological Weapons Convention (BWC) and the 1977 Environmental Modification Convention (ENMOD) required 22 and 20 respectively. The 1984 Convention on the Law of the Sea required 60.

7. The United Kingdom proposed in CD/589 that the Chemical Weapon Convention should enter into force on the thirtieth ratification. However, it is arguable that such a figure may be too low. The objective of the negotiations is not only to produce a ban on chemical weapons that is both comprehensive in scope and verifiable in operation, but also one that is global in effect. It will be necessary therefore for as many States as possible to become parties to the Convention. Were this not to be the case, those States which were parties could not be confident that their own relinquishment of the right to possess chemical weapons would be reciprocated by others, some of whom might be considered potential adversaries. Against that prospect, they might be inhibited from ratifying the Convention in the first place.

8. In the light of these considerations the United Kingdom believes it may be appropriate for a substantial proportion of eligible States to have ratified before the Convention enters into force. The NPT, for example required 43 instruments of ratification and was opened for signature at a time when there were fewer independent countries than there are now. The United Kingdom believes that the Chemical Weapons Convention should require at least 60 ratifications; in other words, around one-third of those States which may be eligible to join. It is possible that other criteria may also need to be considered under Article XV. One further precondition for entry into force might be, for example, the need to include those States which had declared publicly that they possessed chemical weapons.

9. Timescale. There must inevitably be some uncertainty in determining how long it will take after the Convention has been opened for signature before the relevant number of ratifications will have been deposited. Taking the precedents in paragraph 6 above, the NPT Treaty and ENMOD entered into force after about a year and a half; whilst the BWC required nearly three years to acquire the relevant ratifications. Given the complexity of the Chemical Weapons Convention, it would be prudent not to expect entry into force in the immediate months after its opening for signature. Subsequent sections in this paper consider in more detail the work that will be necessary to bring the Convention into force as an effective instrument.

### PRACTICAL IMPLEMENTATION

10. The practical steps to be taken before the Convention enters into force are dependent on five factors. It will be necessary to:

- (a) Assess the size and structure of the permanent staff of the Technical Secretariat, and in particular the numbers in the Inspectorate to be responsible for initial verification activity;
- (b) Agree the location for a headquarters for the new organizations and prepare appropriate accommodation;
- (c) Recruit and train sufficient inspectors to undertake at least the initial inspections of declared facilities;
- (d) Define and procure the equipment necessary to undertake initial verification activities; and
- (e) Agree arrangements for costs and funding.

#### Size and structure of the Technical Secretariat

11. The practical implementation of the Convention will have to rely heavily upon its permanent staff, in particular the Technical Inspectorate. A crucial element therefore in making the Convention effectively will be that the permanent staff are available and trained in sufficient numbers from the beginning. It is necessary to consider staffing levels in more detail.

12. A valuable analysis of the likely overall size and structure of a chemical disarmament inspectorate was contained in the Netherlands paper CD/445. This estimated that about 50 inspectors and 90 support staff would be needed permanently, with an additional 75 to 115 inspectors, and about 100 supporting staff needed during the first 10 years. Since then, there has been considerable progress in agreeing detail in the various verification régimes. The conclusions that this paper reached on the functions of the Inspectorate appear to remain broadly valid.

13. On the other hand, it must also be noted that very little additional information that will be relevant to the Inspectorate's size has been made available to the Conference on Disarmament. Only one delegation has revealed details of its stockpiles and production facilities; and only 11 delegations have given preliminary details of their manufacture of civil key precursor chemicals.

14. The United Kingdom believes it is important to place the Netherlands analysis on a firmer footing and therefore requests all delegations to inform the Secretariat in as much detail as they feel able of activities within their jurisdiction or control which may be relevant to the obligations they would assume under the Convention.

15. On entry into force, the Inspectorate will have the following main functions:

- (a) Receive initial declarations from 60 or more States parties, and promulgate them to the Consultative Committee;

- (b) Undertake initial inspections of declared facilities (including chemical weapons stockpiles, chemical weapons production facilities, single small-scale production facilities; and certain declared civil production facilities);

(c) Verify initial declarations of stockpiles and, where appropriate, place them under immediate international control;

(d) Provide, as appropriate, advice to States parties wishing to construct destruction facilities;

(e) Conduct challenge inspections in the event that any State party requires reassurance about the initial declarations of others.

16. This is a potentially sizeable task, especially so if it is assumed that all possessing chemical weapons States and the major chemical producing States are among the first countries to ratify the Convention. Two factors in particular may, however, mitigate the numbers of inspectors needed at the very outset:

(a) there is unlikely to be a requirement for monitoring stockpile destruction until at least the second year after the Convention has come into force; and

(b) the requirement to monitor civil industry may increase gradually over the 10-year period both as more countries ratify the Convention, and hence become subject to the non-production verification régime; and, perhaps, as more chemicals are added to the schedules to Article VI.

17. A particular task in the initial phase that is not likely to recur subsequently, is the need to carry out initial inspections of stockpiles and production facilities, and to put in place appropriate seals and monitoring devices. Another task that is likely to require a large number of inspectors is the requirement to carry out routine inspections of the civil industry. It is for consideration whether there might not be a gradual build up of such inspections of civil industry at the start of the Convention, in order to facilitate a smooth build up of staff resources.

18. We have already acknowledged the contribution made in CD/445. We have also noted that we are not in a position to bring the analysis in that paper fully up to date. However it is possible that the requirement for staff for the Organization may be higher than that estimate. Although not all staff need necessarily be in place at the very start of the Convention, a proportion will have to be. A tentative United Kingdom estimate of the personnel required for the tasks in paragraph 15 suggests that the Technical Secretariat may need to comprise at least 60 inspectors and perhaps 120 support staff to get the Convention off to an effective start. These figures are more likely to under-estimate than over-estimate the requirement. It is evident that bringing into existence an Organization of this size requires some preparation. Much of the detail may be left to the Preparatory Commission, but there will need to be some decisions and analysis conducted now by the Ad Hoc Committee, if the Commission is itself to meet its remit fully. It will also be necessary to have an agreed statute for the Organization as a whole.

#### Headquarters Arrangements

19. Location. One of the prime requirements for the location of the Organization will be excellent transport and communications. Members of the Technical Secretariat will need to be able to move rapidly to a wide range of

locations throughout the world. The requirement for rapid transportation will be especially important for the effective conduct of challenge inspection. The Organization will also need to have good access to, and information on, chemical technology. The Technical Secretariat must be able to stay fully abreast of relevant developments in the civil chemical field.

20. The decision on location will be important, until a site for headquarters has been identified, many other practical steps, notably recruitment of the necessary staff, cannot be taken. It would be possible for a decision on location to be taken within the Convention itself, by the Preparatory Commission or, subsequently, by a specified organ of the Organization. In some cases in the past, however, agreement on a location for new international organizations has proved contentious and time-consuming. The United Kingdom would therefore favour agreement as early as possible on a location. It believes it would be desirable if this could be specified within the Convention itself.

21. Other Preparation. Thereafter, the Preparatory Commission will need to arrange a number of other steps each potentially time-consuming:

(a) Negotiate a host nation agreement with the host country to cover local taxation arrangements, etc;

(b) Identify accommodation requirements for the new Organization, and thereafter negotiate an appropriate lease for the accommodation;

(c) Arrange appropriate office services and general administrative support;

(d) Recruit the necessary support staff.

#### Recruitment and Training of Inspectors

22. The United Kingdom has argued in CD/589 that the staff of the Secretariat should comprise qualified and widely experienced personnel with the highest standards of efficiency, technical competence and integrity. Given that many technical personnel may need to be recruited from civil industry, they may not necessarily possess the specialized skills directly relevant to monitoring weapons aspects of the Convention. It will be necessary therefore to devise a training programme to cover, inter alia, familiarity with chemical weapons; verification technology; the characteristics of chemical agents; and the operation and characteristics of chemical weapon production facilities in comparison with civil chemical concerns. A technical staff in the Preparatory Commission will need to define such a programme in detail. But if the training is to be effective it will be essential to have the co-operation of the chemical weapons possessor States.

23. Before staff can be trained, however, terms and conditions of service (probably based as far as possible on existing United Nations practice) will need to be defined. Support staff will also be required for administration, finance, legal and other technical functions.

24. Necessarily, the detailed work would be best left to the Preparatory Commission. None the less we believe it would be useful if the Ad hoc

Committee could consider now, in general terms, the type of training that might be required for the Inspectorate, how long it might take, and the likely availability of suitable candidates.

#### Definition and Procurement of Equipment

25. Various papers and technical workshops have indicated the range of verification technology that is already available and might become available. Experience gained during successive United Nations missions which have investigated allegations of chemical weapons use has given further insight into the equipment that will be needed by the Inspectorate.

26. It is clear that a significant proportion of this equipment will need to be in place from the beginning of the Convention. In particular, there will need to be seals, or other identifying marks, for a potentially large number of munitions which may be identified in initial declarations. Remote sensors may be needed: volume C4 of the Finnish research project for CW verification ("Blue Books") of June 1987 addresses their utility in this context, and provides a useful basis for further study.

27. International procurement can be a lengthy procedure in itself. Moreover, some of this equipment may need to be produced solely for the purposes of the Convention. It will be essential to define now precisely what is available and what equipment will need to be ordered. Equipment must be available in good time to ensure that inspectors are fully familiar with it.

28. Verification technology is a potentially difficult area. It would not be appropriate to leave everything to the Preparatory Commission. A small subgroup of experts should be convened to draw up an assessment of what equipment may be available now, what is under development, and what would need to be developed. It should in addition assess the likely costs and procurement timescales, in order to place the detailed work to be undertaken by the Preparatory Commission on a firmer footing.

#### Costs and Funding

29. Preparatory Commission. The permanent staff of the IAEA Preparatory Commission comprised a total of 27 professional and support grades. It lasted a year and cost some \$624,000 (at 1957 prices). Implementation of the Chemical Weapons Convention is likely to be more complex and require more staff. It would be prudent to consider this question further but a planning total of some 40 staff may not be inappropriate. Assuming current United Nations salary scales and conditions of service, and taking account of administrative expenses (accommodation, heating, lighting, travel etc.) the Commission might require annual funding of several million dollars.

30. To this expenditure must be added, in the months before the Convention enters into force, the cost of the embryonic Technical Secretariat, including finance for procurement of new equipment. Further work is necessary to provide firm figures.

31. The finance for the IAEA Preparatory Commission came in the form of loans from the United Nations. No contributions from Governments were required. However, given the current financial constraints facing the United Nations,

and the possible extent of pre-funding required for the Convention Preparatory Commission it will be necessary to give further consideration to this question.

32. Organization. The IAEA safeguards budget amounted to just over \$33 million in 1986 (an element of the general services budget would also be attributable to safeguards activity). Some 500 staff were engaged in this activity. It is clearly unwise to extrapolate from other international organizations (especially those with very different functions) but if annual costs for the Convention were assumed to be of the same rough order, it would be unwise to expect expenditure below about \$30-40 million. A lower figure may be possible, however, after the end of the 10-year initial period. Further elaboration of these costs, and recommendations on contributions from States parties, should - as in the case of the IAEA - be left to the Preparatory Commission.

#### PREPARATORY COMMISSION

33. It is apparent from the above considerations that the Preparatory Commission will have to take on substantial responsibilities in order to ensure that the Convention will be effective from the start. Such a burden is not unprecedented. Similar functions have been carried out in the past by the Preparatory Commission of the United Nations itself, and that for the International Seabed Authority and the International Tribunal for the Law of the Sea.

34. CD/589 proposed that the Convention Preparatory Commission would come into existence on the first day the Convention was opened for signature. It would be composed of those States parties which had signed the Convention, and would remain in existence until the Convention had entered into force and, thereafter, until the Consultative Committee had convened and the Executive Council met for the first time.

35. It also proposed that the functions of the Preparatory Commission could be similar to those of the IAEA Preparatory Commission. It would be required to make studies, reports and recommendations covering:

- (a) the financing of the Organization;
- (b) the programmes and budget for the first year of the Organization;
- (c) technical problems relevant to advance planning;
- (d) the establishment of permanent staff; and
- (e) the location of the permanent headquarters.

36. It is apparent, however, that the workload is likely to be more extensive than this list implies. In particular, the Commission may be required to:

- (a) negotiate appropriate headquarters agreements and arrange accommodation and other administrative support;
- (b) recruit and train a proportion of the permanent staff in advance of the Convention;

(c) produce detailed specifications for the procurement of new monitoring equipment and set the necessary action in hand; and

(d) arrange any necessary loans and pre-financing for this activity.

37. These additional responsibilities will need to be clearly set out in an appropriate Agreement which might (on the IAEA precedent) be included as an Annex to the Convention.

38. The Agreement will have to set out clearly arrangements for decision-making. It will also have to define clearly the role of an Executive Secretary to the Preparatory Commission. It will be evident that a heavy responsibility will fall on this individual to ensure that all preparations are made in good time. There will need to be financial and personnel authority commensurate with the responsibility.

#### FURTHER WORK FOR THE AD HOC COMMITTEE

39. It would be wrong to try to pass to the Commission matters of principle which must properly be resolved as part of the main negotiations. A number of such issues have been identified in the above paragraphs. On the other hand, the United Kingdom attaches importance to early and effective implementation of a global ban. It will therefore be important to pass as many functions as possible to be resolved by the Preparatory Commission.

40. The United Kingdom suggests that the following areas of work should be completed by the current negotiations in the CD:

(a) Further consideration should be given to the likely size of the Technical Secretariat. To enable this to be soundly based, delegations should provide the Ad hoc Committee with as much information as possible on the activities with their jurisdiction and control which will fall within the ambit of the Convention;

(b) An Annex to the Convention, setting out an agreed Statute for the Organization, will need to be negotiated. This might include objectives, functions, broad composition, funding and privileges and immunities. The United Kingdom believes much of this material could be based upon agreements already reached within the IAEA;

(c) There should be further work on timescale for recruitment and training of personnel, in particular for the Technical Secretariat;

(d) There will need to be a broad analysis of the equipment that will be needed for verification activities. The United Kingdom believes that a small subgroup of experts should be convened to try to draw up an assessment of what is available now, what is under development, and what would need to be developed. It would in addition need to assess likely costs and procurement timescales to assist the work of the Preparatory Commission;

(e) In the light of this work, the Ad Hoc Committee should further consider the likely expenses to be incurred by the Preparatory Commission, and make proposals on financing;

(f) More generally, it will need to produce an agreed charter for the Preparatory Commission. The United Kingdom is pleased to note that useful work in this area has already commenced.

#### Conclusion

41. The proposals contained above represent in the view of the United Kingdom a practical way of ensuring that the Chemical Weapon Convention will be effective immediately upon its entry into force. It will only be if the Organization is fully operational from the beginning that all States parties can have the necessary confidence in the capacity of the Convention to safeguard their security in this important arms control field.







LETTER DATED 10 JULY 1987 ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE ON DISARMAMENT FROM THE PERMANENT REPRESENTATIVE OF CANADA TRANSMITTING A RESEARCH REPORT ENTITLED "VERIFICATION: DEVELOPMENT OF A PORTABLE TRICHOHECENE SENSOR KIT FOR THE DETECTION OF T-2 MYCOTOXIN IN HUMAN BLOOD SAMPLES"

In my Plenary statement on 9 July before the Conference on Disarmament, I announced that a Canadian research report is being made available to delegations. The report, entitled Verification: Development of a Portable Trichothecene Sensor Kit for the Detection of T-2 Mycotoxin in Human Blood Samples, documents a case study undertaken to develop a better understanding of the technical problems associated with the provision of appropriate sensors to an investigating team.

I would be grateful if the necessary arrangements could be made for the distribution of the report to the members of the Conference on Disarmament.

(Signed)

J. Alan Beesley,  
Ambassador and  
Permanent Representative

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1/ A limited distribution of this report in English only has been made to the members of the Conference on Disarmament. Additional copies are available from the Permanent Mission of Canada at Geneva.







LETTER DATED 10 JULY 1987 ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE ON DISARMAMENT FROM THE PERMANENT REPRESENTATIVE OF CANADA TRANSMITTING COMPENDIA ON CHEMICAL WEAPONS COMPRISING PLENARY STATEMENTS AND WORKING PAPERS FROM THE 1986 SESSION OF THE CONFERENCE ON DISARMAMENT

In my Plenary statement on 9 July before the Conference on Disarmament, I announced that my delegation would be making available to delegations the next in our series of compendia on chemical weapons comprising plenary statements and working papers from the especially busy 1986 Conference on Disarmament session. As you know, similar documents were distributed in 1983 and 1986 and, with the recent additions, these compendia bring together documentation covering the period 1969-1986 inclusive.

I should be grateful if the necessary arrangements could be made for the distribution of the compendia to the members of the Conference on Disarmament.

(Signed): J. Alan Beesley,  
Ambassador and  
Permanent Representative

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1/ A limited distribution of these compendia in English only has been made to the members of the Conference on Disarmament. Additional copies are available from the Permanent Mission of Canada at Geneva.







LETTER DATED 27 JULY 1987 ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT FROM THE PERMANENT REPRESENTATIVE OF NORWAY TRANSMITTING A RESEARCH REPORT ENTITLED "VERIFICATION OF A CHEMICAL WEAPONS CONVENTION. DEVELOPMENT OF PROCEDURES FOR VERIFICATION OF ALLEGED USE OF CHEMICAL WARFARE AGENTS. PART VI" 1/

I have the honour to transmit to you a research report entitled "Verification of a Chemical Weapons Convention. Development of Procedures for Verification of Alleged Use of Chemical Warfare Agents. Part VI". This research report represents a further contribution of Norway to the negotiations in the Conference on Disarmament on a Chemical Weapons Convention.

I would appreciate if the report would be circulated as an official CD document.

(Signed): Martin Huslid  
Ambassador  
Permanent Representative of Norway

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1/ A limited distribution of the document in English only has been made to the members of the Conference on Disarmament. Additional copies are available from the Permanent Mission of Norway at Geneva.







LETTER DATED 11 AUGUST 1987 ADDRESSED TO THE PRESIDENT OF THE CONFERENCE ON DISARMAMENT FROM THE CHARGE D'AFFAIRES A.I. OF NORWAY TRANSMITTING A PUBLICATION ENTITLED "THE HOLMENKOLLEN REPORT ON THE CHEMICAL WEAPONS CONVENTION. REPORT FROM THE HOLMENKOLLEN SYMPOSIUM ON THE CHEMICAL WEAPONS CONVENTION, OSLO, NORWAY, 26-27 MAY 1987" 1/

I have the honour to transmit to you a publication entitled "The Holmenkollen Report on the Chemical Weapons Convention. Report from the Holmenkollen Symposium on the Chemical Weapons Convention, Oslo, Norway, 26-27 May 1987".

I would appreciate if the publication would be circulated as an official CD document.

(Signed): Sten Lundbo  
Chargé d'Affaires a.i.

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1/ A limited distribution of the document in English only has been made to the members of the Conference on Disarmament. Additional copies are available from the Permanent Mission of Norway at Geneva.







## Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament

### I. INTRODUCTION

1. At its 386th plenary meeting on 5 February 1987, the Conference on Disarmament adopted the following decision on the re-establishment of the Ad Hoc Committee on Chemical Weapons (CD/736):

"The Conference on Disarmament, keeping in mind that the negotiation of a Convention should proceed with a view to its final elaboration at the earliest possible date, in accordance with United Nations General Assembly resolutions 40/92 B and 41/58 D, and in discharging its responsibility to conduct as a priority task the negotiations on a multilateral convention on the complete and effective prohibition of the development, production and stockpiling of chemical weapons and on their destruction, and to ensure the preparation of the convention, decides to re-establish, in accordance with its rules of procedure, for the duration of its 1987 session, the Ad Hoc Committee to continue the full and complete process of negotiations, developing and working out the convention, except for its final drafting, taking into account all existing proposals and drafts as well as future initiatives with a view to giving the Conference a possibility to achieve an agreement as soon as possible. This agreement, if possible, or a Report on the progress of the negotiations, should be recorded in the report which this Ad Hoc Committee will submit to the Conference at the end of the second part of its 1987 session."

### II. ORGANIZATION OF WORK AND DOCUMENTATION

2. In accordance with the decision mentioned above (CD/736), Ambassador Rolf Ekéus of Sweden was appointed Chairman of the Ad Hoc Committee. Mr. Abdelkader Bensmail, Senior Political Affairs Officer, Department for Disarmament Affairs, continued to serve as Secretary of the Committee, assisted by Mr. Michael Cassandra, Political Affairs Officer, Department for Disarmament Affairs.
3. The Ad Hoc Committee held 29 meetings from 9 February to 26 August 1987. The Ad Hoc Committee benefited from the inclusion in delegations of national experts. In addition, the Chairman held a number of informal consultations with delegations.

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4. At their request, the Conference on Disarmament decided to invite the representatives of the following States not members of the Conference to participate in the work of the Ad Hoc Committee: Austria, Denmark, Finland, Greece, New Zealand, Norway, Portugal, Senegal, Spain, Switzerland, Turkey and Zimbabwe.

5. During the 1987 session, the following official documents dealing with chemical weapons were presented to the Conference on Disarmament:

- Document CD/734, dated 29 January 1987, entitled "Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament on its work during the period 12-30 January 1987".

- Document CD/736, dated 9 February 1987, entitled "Decision on the Re-establishment of the Ad Hoc Committee on Chemical Weapons".

- Document CD/740, dated 13 February 1987, submitted by the delegation of the Islamic Republic of Iran, entitled "Letter addressed to the Secretary-General of the Conference on Disarmament by the Permanent Representative of the Islamic Republic of Iran on 12 February 1987".

- Document CD/747, dated 23 March 1987, submitted by the delegation of France, entitled "The Non-production of Chemical Weapons".

- Document CD/749, dated 7 April 1987, submitted by the delegation of the United States of America, entitled "Verification of Elimination of Production/Filling Facilities".

- Document CD/752, dated 23 April 1987, submitted by the delegation of Pakistan, entitled "Proposal on Article X (Assistance) of the Draft Convention on Chemical Weapons" (also issued as document CD/CW/WP.165)..

- Document CD/757, dated 11 June 1987, submitted by the delegation of France, entitled "Working Paper on the Maintenance of a Security Balance Among All the Parties to the Convention During the Ten-year Period of the Destruction of Stocks of Chemical Weapons".

- Document CD/761, dated 24 June 1987, submitted by the delegation of Norway, entitled "Verification of Alleged Use of Chemical Weapons: Summary of Research Results 1986/1987".

- Document CD/762, dated 24 June 1987, submitted by the delegation of Norway, entitled "General Procedures for Verification of Alleged Use of Chemical Weapons for Consideration in the Negotiations on the Chemical Weapons Convention".

- Document CD/764, dated 29 June 1987, submitted by the delegation of Finland, entitled "Letter dated 23 June 1987 addressed to the President of the Conference on Disarmament from the Permanent Representative of Finland transmitting a document entitled 'Air Monitoring as a means for Verification of Chemical Disarmament; C.4 Further Development and Testing of Methods, Part III'".

- Document CD/765, dated 29 June 1987, submitted by the delegation of Finland, entitled "Letter dated 23 June 1987 addressed to the President of the Conference on Disarmament from the Permanent Representative of Finland transmitting a document entitled, 'Automatic Monitoring in Verification of Chemical Disarmament'".

- Document CD/766, dated 2 July 1987, submitted by the delegations of Canada and Norway, entitled "The Chemical Weapons Convention: Proposal for an Annex to Article IX concerning Verification of Alleged Use of Chemical Weapons".

- Document CD/769, dated 10 July 1987, submitted by the delegation of the United Kingdom, entitled "Making the Chemical Weapons Ban Effective".

- Document CD/770, dated 14 July 1987, submitted by the delegation of Canada, entitled "Letter dated 10 July 1987 addressed to the Secretary-General of the Conference on Disarmament from the Permanent Representative of Canada transmitting a Research Report entitled 'Verification: Development of a Portable Trichothecene Sensor Kit for the Detection of T-2 Mycotoxin in Human Blood Samples'".

- Document CD/771, dated 14 July 1987, submitted by the delegation of Canada, entitled "Letter dated 10 July 1987 addressed to the Secretary-General of the Conference on Disarmament from the Permanent Representative of Canada transmitting Compendia on Chemical Weapons Comprising Plenary Statements and Working Papers from the 1986 Session of the Conference on Disarmament".

- Document CD/776, dated 28 July 1987, submitted by the delegation of Norway, entitled "Letter dated 27 July 1987 addressed to the President of the Conference on Disarmament from the Permanent Representative of Norway transmitting a Research Report entitled 'Verification of a Chemical Weapons Convention. Development of Procedures for Verification of Alleged Use of Chemical Warfare Agents: Part VI'".

- Document CD/781, dated 12 August 1987, submitted by the delegation of Norway, entitled "Letter dated 11 August 1987 addressed to the President of the Conference on Disarmament from the Chargé d'Affaires a.i. of Norway transmitting a publication entitled 'The Holmenkollen Report on the Chemical Weapons Convention. Report from the Holmenkollen Symposium on the Chemical Weapons Convention, Oslo, Norway, 26-27 May 1987'".

- Document CD/785, dated 25 August 1987, submitted by the delegation of Finland, entitled "Air Monitoring as a Means for the Verification of Chemical Disarmament" (also issued as document CD/CW/WP.181).

6. In addition, the following Working Papers were presented to the Ad Hoc Committee:

- CD/CW/WP.153, dated 22 January 1987, entitled "Draft Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament on its Work during the Period 12-30 January 1987".

- CD/CW/WP.154, dated 9 February 1987, presented by the Chairman of the Ad Hoc Committee, entitled "Outline for the Organization and Programme of Work of the Ad Hoc Committee on Chemical Weapons".

- CD/CW/WP.155, dated 9 February 1987, presented by the delegation of Australia, entitled "Regimes for Monitoring Super-toxic Lethal Chemicals made for Pharmaceutical Purposes".
- CD/CW/WP.156, dated 18 February 1987, presented by the Chairman of the Ad Hoc Committee, entitled "Issues Pertaining to Chemical Weapons Stocks - Cluster I: Suggestions by the Chairman of the Ad Hoc Committee".
- CD/CW/WP.157, dated 26 February 1987, presented by the delegation of Peru, entitled "Some comments on Articles X, XI and XII of the Draft Convention on Chemical weapons (CD/734)".
- CD/CW/WP.158, dated 4 March 1987, entitled "Interim Report of the Co-ordinator on Issues Pertaining to Chemical Weapons Stocks (Cluster I)".
- CD/CW/WP.159, dated 19 March 1987, presented by the delegation of the Federal Republic of Germany, entitled "Chemical Weapons Convention: Collection and Forwarding of Data and Other Information to Verify the Non-production of Chemical Weapons".
- CD/CW/WP.160, dated 20 March 1987, entitled "Cluster I: Issues Pertaining to Chemical Weapons Stocks. Revised Attachment (E) to CD/CW/WP.158. Proposed New Section VI of Annex IV".
- CD/CW/WP.161, dated 30 March 1987, entitled "Interim Report of the Co-ordinator on Issues Pertaining to Non-Production of Chemical Weapons (Cluster III)".
- CD/CW/WP.162, dated 6 April 1987, submitted by the delegation of Mongolia, entitled "Working Paper: Order of Elimination of Chemical Weapons Stocks".
- CD/CW/WP.163, dated 13 April 1987, entitled "Cluster III: Proposal by the Item Co-ordinator".
- CD/CW/WP.164, dated 22 April 1987, entitled "Interim Report of the Co-ordinator on Issues Pertaining to the Organisation and Functions of the Consultative Committee and its Organs (Cluster IV)".
- CD/CW/WP.165, dated 23 April 1987, submitted by the delegation of Pakistan, entitled "Proposal on Article X (Assistance) of the Draft Convention on Chemical Weapons" (also issued as document CD/752).
- CD/CW/WP.166, dated 24 April 1987, submitted by the delegatio of the German Democratic Republic, entitled "Working Paper: Definition of Thresholds".
- CD/CW/WP.167, dated 27 April 1987, entitled "Current stage of the negotiations on a Chemical Weapons Convention".
- CD/CW/WP.168, dated 27 April 1987, entitled "Interim Report of the Co-ordinator on Issues Pertaining to Chemical Weapons Production Facilities (Cluster II).

- CD/CW/WP.169, dated 15 June 1987, submitted by the delegation of Spain, entitled "Elimination of Super-toxic Lethal Chemicals (Annex IV)".

- CD/CW/WP.170, dated 2 July 1987, submitted by the delegation of Bulgaria, entitled "Possible Approach to Determine the Frequency of Inspections of Facilities Handling Schedule [2] Chemicals".

- CD/CW/WP.171, dated 13 July 1987, submitted by the delegation of the United States of America, entitled "Declaration of Chemical Production Capacity".

- CD/CW/WP.172, dated 20 July 1987, entitled "Interim Report of the Co-ordinator on Issues Pertaining to Non-Production of Chemical Weapons (Cluster III)".

- CD/CW/WP.173, dated 24 July 1987, submitted by the delegations of Canada and Norway, entitled "Explanation of the Origins of the Proposed Annex to Article IX (CD/766) in Relation to the Rolling Text (CD/CW/WP.167)".

- CD/CW/WP.174, dated 30 July 1987, submitted by the delegation of Japan, entitled "Verification of Non-Production under the Chemical Weapons Convention".

- CD/CW/WP.175, dated 31 July 1987, entitled "Report of the Co-ordinator on Issues Pertaining to the Organisation and Functions of the Consultative Committee and its Organs (Cluster IV)".

- CD/CW/WP.176, dated 6 August 1987, submitted by the delegation of Brazil, entitled "Convention on Chemical Weapons: Aspects Related to Economic and Technological Development".

- CD/CW/WP.177 dated 7 August 1987, and CD/CW/WP.177/Rev.1 dated 12 August 1987, entitled "Report of the Co-ordinator on Issues Pertaining to Chemical Weapons Stocks (Cluster I)".

- CD/CW/WP.178, dated 7 August 1987, submitted by the delegation of Canada, entitled "Identification of Chemical Substances".

- CD/CW/WP.179, dated 14 August 1987, entitled "Draft Report of the Ad Hoc Committee on Chemical Weapons to the Conference on Disarmament".

- CD/CW/WP.180, dated 19 August 1987, submitted by the delegation of Japan, entitled "Comments on the 'Guidelines for Schedule [1]' (CD/CW/WP.179, Appendix II)".

- CD/CW/WP.181, dated 25 August 1987, submitted by the delegation of Finland, entitled "Air Monitoring as a Means for the Verification of Chemical Disarmament" (also issued as document CD/785).

## III. SUBSTANTIVE WORK DURING THE 1987 SESSION

7. In accordance with its mandate, the Ad Hoc Committee continued the negotiation and further elaboration of the Convention, utilising Appendices I and II of CD/734 (Report of the Ad Hoc Committee on Chemical Weapons on its work during the period 12-30 January 1987), as well as other new proposals presented by the Chairman of the Committee and by delegations.

8. To this effect it accepted the Chairman's proposal as contained in the outline for the organisation and programme of work for the Committee (CD/CW/WP.154) to group issues covering the subject matter contained in Articles I-IX of the draft convention, as follows:

Cluster I: Issues pertaining to chemical weapons stocks  
(Co-ordinator: Mr. Philippe Nieuwenhuys, Belgium)

Cluster II: Issues pertaining to chemical weapons production facilities  
(Co-ordinator: Mr. Philippe Nieuwenhuys, Belgium)

Cluster III: Issues pertaining to non-production of chemical weapons  
(Co-ordinator: Mr. Pablo Macedo, Mexico)

Cluster IV: Issues pertaining to the organisation and functions of the Consultative Committee and its organs, as well as issues pertaining to consultation, co-operation and fact-finding, including challenge inspection.  
(Co-ordinator: Dr. Walter Krutzsch, German Democratic Republic)

9. In addition, the Chairman of the Committee undertook intensive consultations on the issue of "Challenge Inspection" in preparation for its consideration by the Committee.

10. The Committee also accepted the Chairman's proposal to utilise ad hoc assistance from delegations on the following issues: "Jurisdiction and Control"; "Assistance" (Article X of the draft convention); "Definitions of "Industrial Scale"; and, "Schedule [2]".

11. On the basis of the results achieved in the negotiations, Appendix I of CD/734 has been revised to reflect the present stage of the negotiations of the draft Convention.

## IV. CONCLUSIONS AND RECOMMENDATIONS

12. Appendix I to this Report reflects the present stage of negotiations on a Chemical Weapons Convention; however, the draft texts contained therein do not bind any delegation.

13. The Ad Hoc Committee recommends to the Conference on Disarmament:

(a) that Appendix I to this Report be used for further negotiation and drafting of the Convention;

(b) that other documents reflecting the results of the work of the Ad Hoc Committee as contained in Appendix II to this report, together with other relevant present and future documents of the Conference, also be utilised in the further negotiation and elaboration of the Convention;

(c) that work on the Convention, under the Chairmanship of Ambassador Rolf Ekéus of Sweden, be resumed as follows:

- (i) that, in preparation for the resumed session, private consultations be undertaken in Geneva by the Chairman during the period 23-27 November 1987 with delegations present;
- (ii) that for that purpose, open-ended consultations of the Ad Hoc Committee be held between 30 November and 16 December 1987 including, when necessary, meetings with full services;
- (iii) that the Ad Hoc Committee hold a session of limited duration during the period 12-29 January 1988.

(d) that the Ad Hoc Committee be re-established at the outset of the 1988 session and that the decision on Chairmanship and mandate of the Ad Hoc Committee will be taken at the beginning of the reconvening of the Conference in 1988.



Final Act of the Convention on Chemical Weapons

The States Parties to this Convention

I. General Provisions

II. Prohibition of Development, Production, Acquisition, Stockpiling, Retention, Transfer, Use and Threat of Use of Chemical Weapons and Assistance in the Development, Production, Acquisition, Stockpiling, Retention, Transfer, Use and Threat of Use of Chemical Weapons

III. Declaration

IV. Chemical Weapons

V. Verification

VI. Cooperation and Assistance

VII. Final Provisions

VIII. Final Provisions

IX. Final Provisions

X. Final Provisions

**APPENDIX I**

XI. Final Provisions

XII. Final Provisions

XIII. Final Provisions

XIV. Final Provisions

XV. Final Provisions

XVI. Final Provisions

Have agreed as follows:

XVII. Final Provisions

XVIII. Final Provisions

Preliminary structure of a Convention on chemical weapons <sup>1/</sup>

Preamble

- I. General provisions on scope
  - II. Definitions and Criteria
  - III. Declarations
  - IV. Chemical weapons
  - V. Chemical weapons production facilities
  - VI. Activities not prohibited by the Convention
  - VII. National implementation measures
  - VIII. Consultative Committee
  - IX. Consultations, co-operation and fact finding
  - X. Assistance
  - XI. Economic and technological development
  - XII. Relation to other international agreements
  - XIII. Amendments
  - XIV. Duration, withdrawal
  - XV. Signature, ratification, entry into force
  - XVI. Languages
- Annexes and other documents

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<sup>1/</sup> Discussions are still continuing on where different issues like verification measures are to be placed under this structure.

Preamble 1/

The States Parties to this Convention

Determined to act with a view to achieving effective progress towards general and complete disarmament under strict and effective international control, including the prohibition and elimination of all types of weapons of mass destruction,

Desiring to contribute to the realization of the purposes and principles of the Charter of the United Nations,

Recalling that the General Assembly of the United Nations Organization has repeatedly condemned all actions contrary to the principles and objectives of the Protocol for Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925,

Recognizing that the Convention reaffirms principles and objectives of and obligations assumed under the Geneva Protocol of 17 June 1925, and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction signed at London, Moscow and Washington on 10 April 1972,

Bearing in mind the objective contained in Article IX of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction,

Determined for the sake of all mankind, to completely exclude the possibility of the use of chemical weapons, through the implementation of the provisions of this Convention, thereby complementing the obligations assumed under the Geneva Protocol of June 1925,

Considering that the achievements in the field of chemistry should be used exclusively for the benefit of mankind,

Convinced that the complete and effective prohibition of the development, production and stockpiling of chemical weapons, and their destruction, represents a necessary step towards the achievement of these common objectives.

Have agreed as follows:

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1/ Some delegations consider that the texts contained in the Preamble require further consideration.

I. GENERAL PROVISIONS ON SCOPE

1. Each State Party undertakes not to:
  - develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone.
2. Each State Party undertakes not to:
  - assist, encourage or induce, in any way, anyone to engage in activities prohibited to Parties under this Convention.
3. Each State Party undertakes not to use chemical weapons. 1/ 2/
4. [Each State Party undertakes not to [conduct other activities in preparation for use of chemical weapons] [engage in any military preparations for use of chemical weapons].]
5. Each State Party undertakes to destroy chemical weapons which are in its possession or under its [jurisdiction or] control. 3/
6. Each State Party undertakes to [destroy] [destroy or dismantle] chemical weapons production facilities which are in its possession or under its [jurisdiction or] control.

---

1/ It is understood that this provision is closely linked to the definition of chemical weapons in another part of the Convention, the final formulation of which is yet to be agreed upon. It is also understood that this provision does not apply to the use of toxic chemicals and their precursors for permitted purposes still to be defined and to be provided for in the Convention. This provision is also closely linked to a provision in the Convention to be agreed upon relating to reservations.

2/ The question of herbicides is subject to ongoing consultations. The 1986 Chairman of these open-ended consultations has suggested the following formulation for a provision on herbicides: "Each State Party undertakes not to use herbicides as a method of warfare; such a prohibition should not preclude any other use of herbicides".

3/ The view was expressed that the application of this provision to the destruction of discovered old chemical weapons needs to be further discussed. Another view was expressed that the application of this provision does not allow for any exceptions.

## II. DEFINITIONS AND CRITERIA

For the purposes of this Convention:

1.1/ The term "chemical weapons" shall apply to the following, together or separately: 2/

- (i) toxic chemicals, including super-toxic lethal chemicals, other lethal chemicals, other harmful chemicals and their precursors, including key precursors [and key components of binary and/or multicomponent chemical systems for chemical weapons], 3/ except such chemicals intended for purposes not prohibited by the Convention as long as the types and quantities involved are consistent with such purposes;
- (ii) munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals, as referred to above, which would be released as a result of the employment of such munitions and devices;

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1/ The definitions of chemical weapons are presented on the understanding that problems related to irritants used for law enforcement and riot control, and also to chemicals intended to enhance the effect of the use of chemical weapons if their inclusion in the Convention is agreed could be handled outside the definitions of chemical weapons if this will result in a more clear and understandable definition. Preliminary suggestions to solve these problems are given below and consultations on them will be continued.

2/ One delegation expressed its reservation on the present formulation of the definition of chemical weapons and on the terminology used in (i) that failed to reflect the general purpose criterion.

3/ Some delegations consider that further deliberation is required in order to clarify at a later stage of the negotiations the implications of this definition for other parts of the Convention. This applies to other relevant parts of the Appendix. Other delegations consider that key component of binary and/or multicomponent chemical system for chemical weapons means: a component which poses a special risk to the objectives of the Convention as it can be an integral part in a chemical weapons munition or device and can form toxic chemicals at the moment of their employment and possesses the following characteristics: (a) reacts (interacts) rapidly with other component(s) of binary and/or multicomponent chemical system during the munition's flight to the target and gives a high yield of final toxic chemical; (b) plays an important role in determining the toxic properties of the final product; (c) may not be used, or be used only in minimal quantities, for permitted purposes; (d) possesses the stability necessary for long-term storage.

(iii) any equipment specifically designed for use directly in connection with the employment of such munitions or devices;

- [The term "chemical weapons" shall not apply to those chemicals which are not super-toxic lethal, or other lethal chemicals and which are approved by the Consultative Committee for use by a Party for domestic law enforcement and domestic riot control purposes.]
- [States Parties agree not to [develop, produce, stockpile or] utilize for chemical weapons chemicals intended to enhance the effect of the use of such weapons.]

[2. "Toxic chemicals" means:

chemicals [however or wherever they are produced], [whether produced in plants, munitions or elsewhere] [regardless of the method and pattern of production] whose toxic properties can be utilized to cause death or temporary or permanent harm, to man or animals involving:]

[2. "Toxic chemicals" means:

any chemical, regardless of its origin or method of production which through its chemical action on life processes can cause death, temporary incapacitation, or permanent harm to man or animals

Toxic chemicals are divided into the following categories:]

(a) "super-toxic lethal chemicals", which have a median lethal dose which is less than or equal to 0.5 mg/kg (subcutaneous administration) or 2,000 mg-min/m<sup>3</sup> (by inhalation) when measured by an agreed method 1/ set forth in ...

(b) "other lethal chemicals", which have a median lethal dose which is greater than 0.5 mg/kg (subcutaneous administration) or 2,000 mg-min/m<sup>3</sup> (by inhalation) and less than or equal to 10 mg/kg (subcutaneous administration) or 20,000 mg-min/m<sup>3</sup> (by inhalation) when measured by an agreed method set forth in ...

[(c) "other harmful chemicals", being any [toxic] chemicals not covered by (a) or (b) above, [including toxic chemicals which normally cause temporary incapacitation rather than death] [at similar doses to those at which super-toxic lethal chemicals cause death].]

[and "other harmful chemicals" has a median lethal dose which is greater than 10 mg/kg (subcutaneous administration) or 20,000 mg-min/m<sup>3</sup> (by inhalation).]

---

1/ It was noted that after such measurements had actually been performed, the figures mentioned in this and the following section might be subject to slight changes in order to cover sulphur mustard gas under the first category.

3. Purposes not prohibited by the Convention means:

(a) industrial, agricultural, research, medical or other peaceful purposes, domestic law enforcement purposes; and military purposes not connected with the use of chemical weapons.

(b) protective purposes, namely those purposes directly related to protection against chemical weapons; 1/

4. "Precursor" means:

a chemical reagent which takes part in the production of a toxic chemical.

(a) "Key Precursor" means:

a precursor which poses a significant risk to the objectives of the Convention by virtue of its importance in the production of a toxic chemical.

It may possess [possesses] the following characteristics:

(i) It may play [plays] an important role in determining the toxic properties of a [toxic chemicals prohibited by the Convention] [super-toxic lethal chemical].

(ii) It may be used in one of the chemical reactions at the final stage of formation of the [toxic chemicals prohibited by the Convention] [super-toxic lethal chemical].

[(iii) it may [is] not be used, or [is] used only in minimal quantities, for permitted purposes.] 2/

Key precursors are listed in ...

For the purpose of the relevant provisions in a Chemical Weapons Convention key precursors should be listed and subject to revisions according to [characteristics] [guidelines].

Chemicals which are not key precursors but are deemed to pose a [threat] [particular risk] with regard to a Chemical Weapons Convention should be included in a list.

---

1/ The suggestion that such permitted protective purposes should relate only to "an adversary's use of" chemical weapons was removed pending a decision on whether in the Convention the question of prohibiting other military preparations for use of chemical weapons than those mentioned under scope should be dealt with.

2/ The position of this paragraph should be decided in relation to how some chemicals, for instance, isopropylalcohol, are dealt with in the Convention.

[(b) Key component of binary and/or multicomponent chemical systems for chemical weapons means:]

[a key precursor which forms a toxic chemical in the binary or multicomponent weapons munition or device and which has the following additional characteristics (to be elaborated):]

5. "Chemical weapons production facility" means:

- Chemical weapons production facility means [any building or equipment designed, constructed or used [in any degree] for the production of chemical weapons] or for filling chemical weapons.

- Chemical weapons production facility means [any building or any equipment which in any degree was designed, constructed or used since 1 January 1946, for:

(a) the production for chemical weapons of any toxic chemical, except for those listed in Schedule [3], or the production for chemical weapons of any precursors;] or

(b) the filling of chemical weapons.

### III. DECLARATIONS 1/

1. Each State Party shall submit to the Consultative Committee, not later than 30 days after the Convention enters into force for it, the following declarations:

(a) Chemical Weapons

- (i) whether it has any chemical weapons under its jurisdiction or control 2/ anywhere;
- (ii) whether it has on its territory any chemical weapons under the jurisdiction or control of others, including a State not Party to the Convention;
- (iii) whether it has transferred or received any chemical weapons and whether it has transferred to or received from anyone the control over such weapons since [1 January 1946] [26 March 1975].

(b) Chemical Weapons Production Facilities

- (i) whether it has [at the time of entry into force of the Convention for it] any chemical weapons production facilities under its jurisdiction or control anywhere or has had such facilities at any time since [1.1.1946];
- (ii) whether it has [at the time of entry into force of the Convention for it] any chemical weapons production facilities on its territory under the jurisdiction or control of others, including a State not Party to this Convention, or has had such facilities at any time since [1.1.1946];
- (iii) whether it has transferred or received any equipment for the production of chemical weapons [and documentation relevant to the production of chemical weapons] since [1.1.1946], and whether it has transferred to, or received from, anyone the control of such equipment [and documentation].

---

1/ The view was expressed that the Annex to this Article needs to be reviewed.

2/ It is agreed that the concept of "jurisdiction or control" requires additional discussion and elaboration. To facilitate work on the issue an informal discussion-paper dated 20 March 1987 was prepared, on the request of the Chairman of the Committee, by Dr. Bolewski (Federal Republic of Germany), Dr. Szénási (Hungary) and Mr. Effendi (Indonesia).

(c) Other declarations

The precise location, nature and general scope of activities of any facility and establishment 1/ on its territory or under its jurisdiction or under its control anywhere 2/ designed, constructed or used since [1.1.46] for development of chemical weapons, inter alia, laboratories and test and evaluation sites.

2. Each State Party making affirmative statements in regard to any of the provisions under subparagraphs 1a and 1b of this Article shall carry out all relevant measures envisaged in any or all of Articles IV and V.

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1/ The scope of the phrase "any facility and establishment" is to be clarified and an appropriate formulation found.

2/ It is agreed that the concept of "on its territory or under its jurisdiction or under its control anywhere" requires additional discussion and elaboration.

#### IV. CHEMICAL WEAPONS

1. The provisions of this article and its Annex shall apply to any and all chemical weapons under the jurisdiction or control of a State Party, regardless of location, including those on the territory of another State.

2. Each State Party, within 30 days after the Convention enters into force for it, shall submit a declaration which:

(a) specifies the [precise location,] 1/ aggregate quantity and detailed inventory of any chemical weapons under its jurisdiction or control;

(b) reports any chemical weapons on its territory under the jurisdiction or control of others, including a State not Party to this Convention; 2/

(c) specifies any transfer or receipt by the State Party of any chemical weapons since [1 January 1946] [26 March 1975] or any transfer of control by that State Party of such weapons; and

(d) provides its general plan for destruction of its chemical weapons.

3. [Each State Party shall, immediately after the declaration under para. 2 of this Article has been submitted, provide access to its chemical weapons for the purpose of systematic international on-site verification of the declaration through on-site inspection. Thereafter, each State Party shall ensure, through access to its chemical weapons for the purpose of systematic international on-site verification and through on-site inspection and continuous monitoring with on-site instruments, that the chemical weapons are not removed except to a destruction facility.] 1/

4. Each State Party shall submit detailed plans for the destruction of chemical weapons not later than [3][6] months before each destruction period begins. The detailed plans shall encompass all stocks to be destroyed during the next coming period, and shall include the precise location and the detailed composition of the chemical weapons which are subject to destruction during that period.

5. Each State Party shall:

(a) destroy all chemical weapons pursuant to the Order specified in the Annex to Article IV, beginning not later than 12 months and finishing not later than 10 years after the Convention enters into force for it;

(b) provide information annually regarding the implementation of its plans for destruction of chemical weapons; and

(c) certify, not later than 30 days after the destruction process has been completed, that all chemical weapons have been destroyed.

---

1/ One delegation reserved its position on this question.

2/ A question was raised as to the applicability of this subparagraph.

6. Each State Party shall provide access to any chemical weapons destruction facilities and the facilities' storage for the purpose of systematic international on-site verification of destruction through the continuous presence of inspectors and continuous monitoring with on-site instruments, in accordance with the Annex to Article IV. 1/

7. Any chemical weapons discovered by a State Party after the initial declaration of chemical weapons shall be reported, secured and destroyed, as provided in the Annex to Article IV. 2/

8. All locations where chemical weapons are [stored or] 3/ destroyed shall be subject to systematic international on-site verification, through on-site inspection and monitoring with on-site instruments in accordance with the Annex to Article IV. 1/

9. Any State Party which has on its territory chemical weapons which are under the control of a State that is not a Party to this Convention shall ensure that such weapons are removed from its territory not later than ... months after the date on which the Convention entered into force for it.

10. The declaration, plans and information submitted by each State Party under this article shall be made in accordance with the Annex to Article III and the Annex to Article IV.

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1/ The provisions of the Annex to Article IV, which address verification, require further elaboration.

2/ Consultations were carried out on this issue. The results are reflected in CD/CW/WP.177/Rev.1. Different views were expressed, inter alia on the question of the responsibility for the destruction of these weapons. Further work is needed.

3/ One delegation reserved its position on this question.

V. CHEMICAL WEAPONS PRODUCTION FACILITIES

1. The provisions of this article shall apply to any and all chemical weapons production facilities under the jurisdiction or control of a State Party, regardless of location. 1/

2. Each State Party with any chemical weapons production facility shall cease immediately all activity at each chemical weapons production facility except that required for closure.

3. No State Party shall construct any new facility or modify any existing facility for the purpose of chemical weapons production or for any other purpose prohibited by the Convention. 2/

4. Each State Party, within 30 days after the Convention enters into force for it, shall submit a declaration which:

(a) specifies any chemical weapons production facilities under its jurisdiction or control, or on its territory under the control of others, 3/ including a State not party to this Convention, at any time since [1 January 1946] [at the time of entry into force of the Convention];

(b) specifies any transfer or any receipt by the State Party of any equipment for the production of chemical weapons [and documentation relevant to the production of chemical weapons] since [1.1.1946] or any transfer of control by that Party of such equipment [and documentation];

(c) specifies actions to be taken for closure of each chemical weapons production facility;

(d) outlines its general plan for destruction [or reconstruction for peaceful purposes] for each chemical weapons production facility, and

(e) outlines its general plan for any temporary conversion of any chemical weapons production facility into a facility for destruction of chemical weapons.

5. Each State Party shall, immediately after the declaration, under para. 4, has been submitted, provide access to each chemical weapons production facility for the purpose of [systematic] international on-site verification of the declaration through on-site inspection.

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1/ It is understood that the above provisions also apply to any facility on the territory of another State [regardless of ownership and form of contract, on the basis of which they have been set up and functioned for the purposes of production of chemical weapons].

2/ Some delegations consider this paragraph redundant.

3/ Some delegations expressed doubts as to the applicability of this phrase.

6. Each State Party shall:

(a) close within three months after the Convention enters into force for it, each chemical weapons production facility in a manner that will render each facility inoperable; and

(b) provide access to each chemical weapons production facility, subsequent to closure, for the purpose of systematic international on-site verification through periodic on-site inspection and continuous monitoring with on-site instruments in order to ensure that the facility remains closed and is subsequently [dismantled and] destroyed, or [dismantled] [and reconstructed for peaceful purposes].

7. Each State Party shall submit detailed plans for [destruction] [elimination] of each facility not later than [3 months] before the [destruction] [elimination] [conversion] of the facility begins. 1/

8. Each State Party shall:

(a) [destroy] [eliminate] all chemical weapons production facilities pursuant to [the [order] [schedule] specified in] the Annex to Article V beginning not later than 12 months, and finishing not later than 10 years, after the Convention enters into force for it; 2/

(b) provide information annually regarding the implementation of its plans for the [destruction] [elimination] of its chemical weapons production facilities, and

(c) certify, not later than 30 days after the destruction process has been completed, that its chemical weapons production facilities have been [destroyed] [eliminated].

9. A chemical weapons production facility may be temporarily converted for destruction of chemical weapons. Such a converted facility must be [destroyed] [eliminated] as soon as it is no longer in use for destruction of chemical weapons and, in any case, not later than 10 years after the Convention enters into force for the State Party.

10. [Each State Party shall submit all chemical weapons production facilities] [All chemical weapons production facilities] shall be subject to systematic international on-site verification through on-site inspection and monitoring with on-site instruments in accordance with the Annex to Article V.

11. The declaration, plans and information submitted by each State Party under this article shall be made in accordance with the Annex to Article V.

---

1/ One delegation held the view that the detailed plans in question should be submitted by each State Party within twelve months of the entry into force of the Convention for it.

2/ Some delegations expressed the desire to see the elimination of chemical weapons production facilities at the earliest opportunity.

VI. ACTIVITIES NOT PROHIBITED BY THE CONVENTION 1/

1. Each State Party:

(a) has the right, subject to the provisions of this Convention, to develop, produce, otherwise acquire, retain, transfer and use toxic chemicals and their precursors for purposes not prohibited by the Convention.

(b) shall ensure that toxic chemicals and their precursors are not developed, produced, otherwise acquired, retained, transferred, or used within its territory or anywhere under its jurisdiction or control for purposes prohibited by the Convention.

2. Toxic Chemicals and their Precursors:

(a) Toxic chemicals and their precursors considered in the Annexes to Article VI [1], [2], [3] and [4], which could be used for purposes prohibited by the Convention, as well as facilities which produce, process or consume these toxic chemicals or precursors, shall be subject to international monitoring as provided in those annexes:

Annex to Article VI [1] Schedule [1]: Super-Toxic Lethal Chemicals and [especially dangerous key precursors] [key components of chemical weapons systems].

Annex to Article VI [2] Schedule [2]: Key Precursors.

Annex to Article VI [3] Schedule [3]: Chemicals produced in large commercial quantities and which could be used for chemical weapons purposes.

Annex to Article VI [4]: Commercial production of toxic chemicals not listed in Schedules [1], [2] or [3] that might be relevant to the Convention. 2/

(b) The schedules of chemicals contained in the annexes may be revised. Modalities for revision are contained in the Annex to Article [VI] [0.]. 3/

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1/ One delegation considers that the terminology used in this article and its annexes should be consistent with the final definition of chemical weapons to be agreed upon.

2/ Some delegations consider that these chemicals should be dealt with in the Annex to Article VI [2] Schedule [2]. Other delegations consider that a separate Annex is required.

3/ Furthermore, work was carried out on guidelines for considering inclusion of chemicals in Schedule [1]. The result of this work is enclosed in Appendix II to serve as a basis for future work.

3. Within 30 days of the entry into force of it, each State Party shall declare data on relevant chemicals and the facilities which produce them, in accordance with the Annex to Article VI [1], [2], [3] and [4]. 1/
4. Each State Party shall make an annual declaration regarding the relevant chemicals in accordance with the Annex to Article VI [1], [2], [3] and [4]. 1/
5. Each State Party undertakes to subject the chemicals and [facility] [facilities] under the Annex to Article VI [1] to the measures contained in that annex.
6. Each State Party undertakes to subject the chemicals and facilities under the Annex to Article VI [2] and [4] 1/ to monitoring by data reporting and routine systematic international on-site verification, through on-site inspection and use of on-site instruments as long as production and processing are not impaired.
7. Each State Party undertakes to subject the chemicals and facilities under the Annex to Article VI [3] to monitoring by data reporting.
8. The provisions of this article shall be implemented in a manner designed in so far as possible to avoid hampering the economic or technological development of parties to the Convention and international co-operation in the field of peaceful chemical activities including the international exchange of scientific and technical information and chemicals and equipment for the production, processing or use of chemicals for peaceful purposes in accordance with the provisions of the Convention. 2/
9. In conducting verification activities, the (Consultative Committee) shall:
  - (a) avoid undue interference in the State Party's peaceful chemical activities;
  - (b) take every precaution to protect confidential information coming to its knowledge in the implementation of the Convention; and
  - (c) require only the minimum amount of information and data necessary for the carrying out of its responsibilities under the Convention.
10. For the purpose of on-site verification, each State Party shall grant to the (Consultative Committee) access to facilities as required in the Annex to Article VI [1], [2], [3] and [4]. 1/

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1/ Some delegations consider that the chemicals in the Annex to Article VI [4] should be dealt with in the Annex to Article VI [2] Schedule[2]. Other delegations consider that a separate Annex is required.

2/ The inclusion of this paragraph in this article is to be considered further.

## VII. NATIONAL IMPLEMENTATION MEASURES

Each State Party to this Convention shall adopt any measures it considers necessary in accordance with its constitutional processes to implement this Convention and, in particular, to prohibit and prevent anywhere under its jurisdiction or control any activity that a State Party to this Convention is prohibited from conducting by this Convention.

In order to implement these obligations, each State Party shall, according to its needs and specific conditions, designate or establish a national authority. 1/

Each State Party undertakes to inform the Consultative Committee concerning the national authority and other legislative and administrative measures taken to implement the Convention.

Each State Party undertakes to co-operate with the Consultative Committee in the exercise of all its functions and in particular to provide assistance to the Consultative Committee including data reporting, assistance for international on-site inspections, provided for in this Convention, and a response to all its requests for the provision of expertise, information and laboratory support.

### National Technical Means 2/

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1/ It was suggested that guidelines for the functioning of the national authority for the implementation of the Convention be elaborated.

2/ It was suggested that no reference to National Technical Means is needed in a future Convention.

VIII. CONSULTATIVE COMMITTEE 1/ 2/

A. Establishment of the Consultative Committee

1. There is hereby established the Consultative Committee.
2. The Consultative Committee shall be the principal organ of the Convention.
3. The first session of the Consultative Committee shall be convened by the Depositary at [venue] not later than 30 days after the entry into force of the Convention.

B. Composition, procedure and decision-making

1. The Consultative Committee shall be composed of all the States Parties to this Convention. Each State Party to this Convention shall have one representative in the Consultative Committee, who may be accompanied by alternates and advisers.
  2. The Consultative Committee shall meet in regular annual sessions and in such special sessions as may be convened at the request of ... members of the Consultative Committee or of the Executive Council or as provided in Article IX of the Convention.
  3. Sessions shall take place at the seat of the Consultative Committee unless it decides otherwise.
  4. The Consultative Committee shall adopt its rules of procedure. At the beginning of each regular session, it shall elect its Chairman and such other officers as may be required. They shall hold office until a new Chairman and other officers are elected at the next regular session.
  5. A majority of the members of the Consultative Committee shall constitute a quorum.
  6. Each member of the Consultative Committee shall have one vote.
- [[7. Decisions on questions of procedure, including decisions to convene special sessions of the Consultative Committee, shall be taken by a simple majority.

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1/ Some delegations suggested that the question of how the expenses of the Consultative Committee shall be met needs to be addressed within the Convention at an appropriate time.

2/ Extensive consultations on Article VIII were carried out by the co-ordinator for Cluster IV. Appendix II, contains material submitted by him, to be considered in the further elaboration of the Article.

8. Decisions on questions of substance shall be taken by [a two-third majority] [consensus]. When the issue arises as to whether a question is one of substance or not, that question shall be treated as one of substance unless otherwise decided by the Consultative Committee by the majority required for decisions on questions of substance.]]

[[7. All decisions shall be taken by a two-third majority.]]

C. Powers and functions

1. The Consultative Committee shall [oversee] [review] the implementation of the Convention, consider any questions or matters relevant to the Convention or relating to the powers and functions of any subsidiary organs [established by the Consultative Committee], foster consultation and co-operation among States Parties [for the advancement of chemical industry for peaceful purposes] and promote the verification of compliance with this Convention.

2. In carrying out its functions [referred to in paragraph 1], the Consultative Committee shall inter alia:

(a) co-operate with the appropriate national authorities of States Parties;

(b) facilitate consultations and co-operation among States Parties at their request;

(c) review scientific and technical developments which could affect the operation of this Convention;

(d) encourage international scientific and technical co-operation in the chemical field for peaceful purposes, [especially with the objective of promoting the advancement of chemical industry in the developing States as provided in Article XI;]

(e) carry out all activities relating to measures of verification; for this purpose, the Consultative Committee shall:

(i) specify procedures for systematic international on-site inspection;

(ii) oversee [and carry out] systematic international on-site inspection in accordance with Articles ...;

[(iii) consider and decide on requests to send a fact-finding mission in accordance with Article ...;]

(iv) carry out fact-finding activities in accordance with Article IX;

(f) establish and revise as necessary, procedures for exchange of information, for declarations and for technical matters related to the implementation of this Convention;

(g) receive, keep [and make available to States Parties] declarations, plans and notifications presented by States Parties in accordance with Articles ...;

(h) provide a forum for discussion of any questions raised relating to the objectives or the implementation of the Convention;

(i) elect the members of the Executive Council in accordance with Article ...;

[(j) elect ... (the head of the Secretariat) from among the candidates proposed by members of the Consultative Committee;]

[(k) appoint inspectors as the staff of the Inspectorate and the head of the Inspectorate;]

(l) establish, as appropriate, such subsidiary organs as it finds necessary for the exercise of its functions in accordance with this Convention;

(m) adopt the rules of procedure [of the Executive Council including the method of selecting its Chairman];

(n) consider and approve the proposed annual budget of the Consultative Committee and its subsidiary organs submitted by the Council;

(o) consider and approve the reports of the Executive Council;

(p) after the expiry of a period of ... years from the date of entry into force of this Convention, undertake a review of the operation of this Convention in accordance with Article ... 1/

3. The Consultative Committee shall establish an Executive Council [within 45 days after the entry into force of the Convention].

4. While the Consultative Committee is ultimately responsible for the functions provided for in paragraph 2, it shall delegate the actual implementation of those functions to the Executive Council in accordance with the provisions of this Convention.

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1/ Some delegations were of the view that provisions on review should be more appropriately included in another part of the Convention.

EXECUTIVE COUNCIL 1/

A. Composition, procedure and decision-making

1. The Executive Council shall consist of [15] States Parties to this Convention elected by the Consultative Committee. [In addition, those permanent members of the Security Council of the United Nations which are parties to the Convention should be represented]. Each member of the Executive Council shall have one representative in the Council, who may be accompanied by alternates and advisers.
2. The members of the Executive Council shall be elected on the basis of [an appropriate geographic and political balance.]
3. Election shall take place at regular sessions of the Consultative Committee. Each [elected] member of the Executive Council shall serve for [two] [three] years period, with [five] of the members elected each year.
4. The Executive Council shall function at the seat of the Consultative Committee.
- [5. A majority of the members of the Executive Council shall constitute a quorum.]
6. Each member of the Executive Council shall have one vote.
- [[7. Decisions on questions of procedure shall be taken by a simple majority.
8. Decisions on questions of substance shall be taken by [a two-third majority] [consensus]. When the issue arises as to whether a question is one of substance or not, that question shall be treated as one of substance unless otherwise decided by the Council by the majority required for decisions on questions of substance.]]
- [[7. All decisions shall be taken by a two-third majority.]]

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1/ Some delegations believed that the question of placement within the Convention of some of the provisions relating to the functions of the subsidiary organs will have to be considered at a later stage.

B. Functions <sup>1/</sup>

1. The Executive Council shall be responsible to the Consultative Committee and shall have delegated authority to discharge the functions of the Consultative Committee as provided in paragraph 1 and paragraph 2 (a) to 2 (h) of Section I Subsection C of this Article.

2. The Executive Council shall particularly:

(a) supervise and co-ordinate the activities of the subsidiary organs of the Consultative Committee in implementing the provisions of the Convention;

(b) ensure the effective implementation of, and compliance with, the Convention;

(c) propose to the Consultative Committee, as appropriate, the establishment of such subsidiary organs as it finds necessary for the exercise of its functions in accordance with this Convention;

(d) present reports to the Consultative Committee particularly about the exercise of the functions delegated to it;

(e) request the ... (head of the Secretariat) when appropriate and necessary, to convene a special meeting of the Consultative Committee;

[(f) propose to the Consultative Committee the establishment of appropriate mechanisms for directing and supervising the Inspectorate;]

[(g) propose to the Consultative Committee the appointment of inspectors as the staff of the Inspectorate and appoint among the inspectors the head of the Inspectorate;]

(h) obtain, keep, and disseminate information submitted by States Parties regarding matters pertaining to the Convention.

(i) receive requests for information and clarification regarding compliance with the Convention from States Parties, including requests for fact-finding.

[(j) decide and oversee specific actions to be taken regarding such requests.]

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<sup>1/</sup> Some delegations considered that the provisions on the functions of the Executive Council will require further specification in the light of such functions as may be conferred upon the Council in other parts of the Convention, particularly with regard to verification.

TECHNICAL SECRETARIAT 1/

1. A Technical Secretariat shall be established to assist the Consultative Committee and the Executive Council in the performance of their functions, including technical assistance to States Parties. The International Inspectorate shall be part of the Technical Secretariat and carry out activities relating to the execution of international verification measures provided for in this Convention. Guidelines on the International Inspectorate are specified in ... 2/

2. The Technical Secretariat shall comprise a Director, who shall be its head, and inspectors and such scientific, technical and other personnel as may be required.

3. The Director of the Technical Secretariat shall be appointed for ... years by the Consultative Committee [upon the recommendation of the Executive Council] and shall be responsible to the Consultative Committee and the Executive Council for the appointment of the staff and the organization and functioning of the Technical Secretariat. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity. Only citizens of States Parties shall serve as international inspectors or as other members of the professional and clerical staff. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible. Recruitment shall be guided by the principle that the staff shall be kept to a minimum.

4. In the performance of their duties, the Director of the Technical Secretariat, the inspectors and the other members of the staff shall not seek or receive instructions from any Government or from any other source external to the International Authority. They shall refrain from any action which might reflect on their position as international officials responsible only to the Consultative Committee.

5. Each State Party shall undertake to respect the exclusively international character of the responsibilities of the Director of the Technical Secretariat, the inspectors and the other members of the staff and not to seek to influence them in the discharge of their responsibilities.

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1/ One delegation noted that the positions, composition and functions of the Technical Secretariat will need further discussion and elaboration.

2/ Because of considerations under way in some capitals, the question whether to include these guidelines in Appendix I or Appendix II will be decided during the resumed session. For the convenience of delegations Attachment (A) of the Report of the Co-ordinator for Cluster IV (CD/CW/WP.175) is added to this report.

IX. CONSULTATIONS, CO-OPERATION AND FACT-FINDING 1/

1. States Parties shall consult and co-operate, directly among themselves, or through the Consultative Committee or other appropriate international procedures, including procedures within the framework of the United Nations and in accordance with its Charter, on any matter which may be raised relating to the objectives or the implementation of the provisions of this Convention.

2. States Parties to the Convention shall make every possible effort to clarify and resolve, through exchange of information and consultations among them, any matter which may cause doubt about compliance with this Convention, or which gives rise to concerns about a related matter which may be considered ambiguous. [A Party which receives a request from another Party for clarification of any matter which the requesting Party believes causes such doubts or concerns shall provide the requesting Party, within ... days of the request, with information sufficient to answer the doubts or concerns raised along with an explanation on how the information provided resolves the matter.] Nothing in this Convention affects the right of any two or more States Parties to this Convention to arrange by mutual consent for inspections or any other procedures among themselves to clarify and resolve any matter which may cause doubts about compliance or gives rise to concerns about a related matter which may be considered ambiguous. Such arrangements shall not affect the rights and obligations of any State Party under other provisions of this Convention.

Procedure for requesting clarification

3. A State Party shall have the right to request the Executive Council to assist in clarifying any situation which may be considered ambiguous or which gives rise to doubts about the compliance of another State Party with the Convention. The Executive Council shall provide appropriate information and data in its possession relevant to the situation which can dispel such doubts, whilst [taking every precaution in] protecting commercial and industrial secrets and other confidential information coming to its knowledge in the implementation of the Convention.

4. A State Party shall have the right to request the Executive Council to obtain clarification from another State Party on any situation which may be considered ambiguous or which gives rise to doubts about its compliance with the Convention. In such a case, the following shall apply:

(a) The Executive Council shall forward the request for clarification to the State Party concerned within [24 hours] of its receipt.

(b) The requested State Party shall provide the clarification to the Executive Council within [seven days] of the receipt of the request.

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1/ Some delegations expressed the view that the issue of verification of alleged use of chemical weapons and procedures for conducting such inspections had not yet been considered in-depth and should be discussed at a later stage on the basis of the proposed Annex to Article IX (documents CD/766 and CD/CW/WP.173).

(c) The Executive Council shall forward the clarification to the requesting State Party within [24 hours] of its receipt.

(d) In the event that the requesting State Party deems the clarification to be inadequate, it may request the Executive Council to obtain from the requested State Party further clarification.

(e) For the purpose of obtaining further clarification requested under paragraph 2 (d), the Executive Council may set up a group of experts to examine all available information and data relevant to the situation causing the doubt. The group of experts shall submit a factual report to the Executive Council on its findings.

(f) Should the requesting State Party consider the clarification obtained under paragraphs 2 (d) and 2 (e) to be unsatisfactory, it may request a special meeting of the Executive Council in which States Parties involved not members of the Executive Council shall be entitled to take part in accordance with provisions in Article ... In such a special meeting, the Executive Council shall consider the matter and may recommend any measure it deems appropriate to cope with the situation.

5. A State Party shall have the right to request the Executive Council to clarify any situation which has been considered ambiguous or has given rise to doubts about its compliance with the Convention. The Executive Council shall respond by providing such assistance as appropriate.

6. The Executive Council shall inform the States Parties to this Convention about any request for clarification provided in this Article.

7. [If the doubts or concerns of a State Party about compliance have not been resolved within [two months] after the submission of the request for clarification to the Executive Council, or it believes its doubts warrant urgent consideration, without necessarily exercising its right to the challenge procedure, it may request a special session of the Consultative Committee in accordance with Article ... In such a special session, the Consultative Committee shall consider the matter and may recommend any measure it deems appropriate to cope with the situation.]

Procedure for requesting a fact-finding mission

The further contents of Article IX remain to be elaborated. 1/

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1/ Consultations on this issue were carried out by the Chairman of the Ad Hoc Committee. The state of affairs, as seen by the Chairman, is presented in Appendix II with the aim of facilitating further consideration of the issue.

X. ASSISTANCE

XI. ECONOMIC AND TECHNOLOGICAL DEVELOPMENT

XII. RELATION TO OTHER INTERNATIONAL AGREEMENTS 1/

Nothing in this Convention will be interpreted as in any way impairing the obligations assumed under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925 and in the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, signed at London, Moscow and Washington on 10 April 1972.

XIII. AMENDMENTS

XIV. DURATION, WITHDRAWAL 1/

...

The withdrawal of a State Party from this Convention shall not in any way affect the duty of States to continue fulfilling the obligations assumed under any relevant rules of international law, particularly the Geneva Protocol of 17 June 1925.

XV. SIGNATURE, RATIFICATION, ENTRY INTO FORCE

XVI. LANGUAGES

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1/ Some delegations consider that the texts contained above require further consideration.

ANNEX TO ARTICLE III

I. DECLARATIONS OF CHEMICAL WEAPONS

A. Possession or non-possession

1. Possession of chemical weapons on own territory

Yes .....

No .....

2. Possession, jurisdiction or control over chemical weapons elsewhere

Yes .....

No .....

B. Existence on the territory of any chemical weapons under the jurisdiction or control of anyone else

Yes .....

No .....

C. Past transfers

Yes .....

No .....

II. DECLARATIONS OF CHEMICAL WEAPONS PRODUCTION FACILITIES

A. Possession or non-possession

1. Possession of chemical weapons production facilities on own territory

Yes .....

No .....

2. Possession, jurisdiction or control over chemical weapons production facilities elsewhere

Yes .....

No .....

B. Existence on the territory of any chemical weapons production facilities under the jurisdiction or control of anyone else

Yes .....

No .....

C. Past transfers of equipment [or technical documentation] 1/

Yes .....

No .....

[III. OTHER DECLARATIONS]

1/ The view was expressed that technical documentation should not be included.

ANNEX TO ARTICLE IV

I. DECLARATIONS OF CHEMICAL WEAPONS

A. The declaration by a State Party of the aggregate quantity [location], 1/ and detailed composition of chemical weapons under its jurisdiction or control shall include the following:

1. The aggregate quantity of each chemical declared.

[2. The precise location of each declared storage site of chemical weapons, expressed by:

- name;

- geographical co-ordinates.] 1/

3. Detailed inventory 2/ for each storage facility:

(1) Chemicals defined as chemical weapons in accordance with Article II:

(a) Chemicals shall be declared within the schedules specified in the Annex to Article VI. 3/

(b) For a chemical not listed in the Schedules in the Annex to Article VI, 3/ the information required for possible assignment of the chemical to one of the proper schedules shall be provided, including the toxicity of the pure compound. For a precursor chemical, the toxicity and identity of the principal final reaction product(s) shall be provided.

(c) Chemicals shall be identified by chemical name in accordance with current IUPAC (International Union of Pure and Applied Chemistry) nomenclature, structural formula and Chemical Abstracts Service registry number, if assigned. For a precursor chemical, the toxicity and identity of the principal final reaction product(s) shall be provided.

(d) In cases involving mixtures of two or more chemicals, all such components shall be identified and the percentage of each component shall be provided, and the mixture shall be declared under the category of the most toxic chemical.

---

1/ One delegation reserved its position on this question.

2/ At a later stage, when agreement has been reached concerning an Order of Destruction the possibility of grouping the declared weapons according to such an Order could be discussed.

3/ A view was expressed that in the context of Article IV, consideration should be given to the development of schedules applicable to chemical weapons declared under the Article.

(e) In cases involving multi-component munitions, devices, bulk containers, and other containers, the quantity of each chemical component shall be provided, as well as the projected quantity of the final principal reaction product obtained. Such items shall be declared under the category of the [key precursor] [key component].

(f) For each chemical the form of storage, i.e. munitions, sub-munitions, devices, equipment or bulk containers and other containers shall be declared. For each form of storage the following shall be listed:

- type
- size or calibre
- number of items
- weight of chemical fill per item 1/
- purity of chemical fill 2/

(g) For each chemical the total weight present at the storage site shall be declared.

(h) For each intended chemical fill, unfilled munitions and/or sub-munitions and/or devices and/or equipment, defined as chemical weapons. 3/ 4/ For each type the information shall include:

- the number of items
- the fill volume per item 5/
- alternative chemical fill(s), if known.

1/ The question of precisely how to determine this weight remain to be resolved.

2/ Four different approaches have been taken by delegations:  
(1) initial purity; (2) purity of the compound as stored, with an approximation of some 10 per cent; (3) that declaration of purity was not necessary; (4) that purity is necessary where equivalence has to be calculated.

3/ At a later stage, when agreement has been reached concerning an Order of Destruction, the possibility of grouping the declared weapons according to such an Order could be discussed.

4/ Some delegations do not consider the inclusion of this under 3(1) appropriate and prefer to include it under 3(2).

5/ Some delegations did not consider this information necessary.

(2) Unfilled munitions and/or sub-munitions and/or devices and/or equipment, defined as chemical weapons. 1/ 2/ For each type the information shall include:

- (a) the number of items
- (b) the fill volume per item 3/
- (c) the intended chemical fill, if known.

(3) Equipment specifically designed for use directly in connection with the employment of munitions, sub-munitions, devices or equipment under points (1) and (2). (Example: single purpose rocket launchers).

(4) Chemicals specifically designed for use directly in connection with the employment of munitions, sub-munitions, devices or equipment under points (1) and (2). (Example: thickeners). 4/

B. Detailed information on any chemical weapons on the territory of a State Party which are under the jurisdiction or control of others, including a State not Party to the convention (to be developed).

C. Past transfers and receipts.

A State Party that has transferred or received chemical weapons shall declare this (these) transfer(s) or receipt(s), [provided the amount transferred or received exceeded one metric tonne per chemical 5/ and per year]. This declaration shall be made according to the inventory format in paragraph 3 above. This declaration shall also reflect the supplier and recipient countries, timing and current location, if known, of the transferred items.

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1/ At a later stage, when agreement has been reached concerning an Order of Destruction, the possibility of grouping the declared weapons according to such an Order could be discussed.

2/ Some delegations do not consider this as a separate declaration but prefer to include this under 3(1).

3/ Some delegations did not consider this information necessary.

4/ Different views exist concerning if, or to what extent, such chemicals should be declared. Furthermore, it appears that this question will have to be decided in the light of the final definition of chemical weapons.

5/ Nominal chemical fill weight for unfilled munitions.

D. Locations and detailed inventories of chemical weapons stocks to be declared before the commencement of each elimination period 1/

For each stock the following shall be declared:

1. Location

Geographical location expressed by ...

2. Detailed inventory

Composition and quantities of the chemical weapons shall be declared in accordance with paragraph A of this Annex.

II. 2/ PRINCIPLES, METHODS AND ORGANIZATION OF THE DESTRUCTION OF CHEMICAL WEAPONS

1. Destruction of chemical weapons means a process by which chemicals are converted in an essentially irreversible way to a form unsuitable for production of chemical weapons, and which in an irreversible manner renders munitions and other devices unusable as such.

2. Each State Party possessing chemical weapons shall determine how it shall destroy them, except that the following processes may not be used: dumping in any body of water, land burial or open-pit burning. It shall destroy chemical weapons only at specifically designated and appropriately designed and equipped facility(ies).

3. The State Party shall ensure that its chemical weapons destruction facility(ies) are constructed and operated in a manner to ensure the destruction of the chemical weapons; and that the destruction process can be verified under the provisions of this convention.

III. PRINCIPLES AND ORDER OF DESTRUCTION 3/

1. The elaboration of the Order of Destruction shall build on the undiminished security for all States during the entire destruction stage; confidence-building in the early part of the destruction stage; gradual acquisition of experience in the course of destroying chemical weapons stocks and applicability irrespective of the actual composition of the stockpiles and the methods chosen for the destruction of the chemical weapons.

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1/ Some delegations held the view that overall declarations should be made within 30 days after the Convention's entry into force for a State Party.

2/ For some delegations, the question of the applicability of this section of the Annex to obsolete chemical weapons (ordnances) retrieved from the combat zones of World War I will have to be resolved later.

3/ The further development of this entire section has been subject to consultations by the Chairman of the Ad Hoc Committee, the result of which is enclosed in Appendix II. The Co-ordinator on Cluster I also held some consultations on this question.

2. The destruction of chemical weapons stocks shall start for all States Parties possessing chemical weapons simultaneously. The whole destruction stage shall be divided into nine annual periods.

3. Each State Party shall destroy not less than one ninth of its stockpile [in measure of stockpile equivalent and/or equivalent mustard weight] during each destruction period. 1/ 2/ However, a State Party is not precluded from destroying its stocks at a faster pace. Each State Party shall determine its detailed plans for each destruction period, as specified in part III of this Annex and shall report annually on the implementation of each destruction period. 3/

4. Order of Destruction (to be elaborated). 4/

#### IV. PLANS FOR DESTRUCTION OF CHEMICAL WEAPONS 5/

##### A. General plans for destruction of chemical weapons

The general plan for destruction of chemical weapons, submitted pursuant to article IV shall specify:

(a) a general schedule for destruction, giving types and quantities of chemical weapons to be destroyed in each period;

(b) for each existing or planned chemical weapons destruction facility:

- name and address;
- location;
- chemical weapons intended to be destroyed;
- method of destruction;
- capacity;
- expected period of operation;
- products of the destruction process.

---

1/ It is considered necessary to elaborate a method for comparing different categories of chemical weapons stocks. The comparison of lethal and harmful chemicals remains unresolved and is subject to further consideration.

2/ Some delegations expressed the view that the question of the regulation of the destruction of stockpiles needs further and full discussion.

3/ It has been recognized that the destruction of chemical weapons stocks and the elimination of relevant production facilities should be considered together.

4/ Some delegations feel that it would be appropriate to introduce the idea of security stockpile levels to meet the security concerns of countries with small stockpiles of chemical weapons.

5/ The further development of this entire section has been subject to consultations, the result of which is enclosed in Appendix II as a basis for further work.

B. Detailed plans for destruction of chemical weapons

These plans shall be submitted to the Consultative Committee in accordance with article IV and shall specify:

(a) the number of chemical weapons destruction facilities and a detailed schedule for the destruction of chemical weapons at each of these facilities;

(b) the aggregate quantity of each individual type of chemical weapons planned to be destroyed at each facility;

(c) data about each facility:

- name, postal address, geographical location;
- method of destruction;
- end-products;
- layout plan of the facility;
- technological scheme;
- operation manuals;
- method of storage and volume of the facility's storage, estimated by types and quantities of chemical weapons;
- types and quantities of chemical weapons kept at the storage during each destruction period;
- the system of verification;
- safety measures in force at the facility;
- living and working conditions for the international inspectors.

V. PRINCIPLES AND METHODS FOR THE VERIFICATION OF THE DESTRUCTION OF CHEMICAL WEAPONS 1/

1. The aim of verification of destruction of chemical weapons stocks shall be:

- to confirm the identity and quantity of the chemical weapons stocks to be destroyed, and
- to confirm that these stocks for all practical purposes have been destroyed.

---

1/ The further development of this entire section has been subject to consultations, the result of which is enclosed in Appendix II as a basis for further work.

2. After a review of the detailed plans provided in Section IV above, the Technical Secretariat, if the need arises, will enter into consultation with the State Party concerned in order to ensure the facility is designed to assure destruction, to allow advanced planning on how verification measures may be applied and that the application of verification measures is consistent with proper facility operation, and to ensure that the facility operation allows appropriate verification.

3. Each State Party should execute a detailed agreement with the Technical Secretariat covering detailed inspection procedures for each facility subject to inspection. (This concept remains to be further elaborated.)

4. The inspectors will be granted access to the chemical weapons destruction facility ... prior to commencement of the active destruction phase, to carry out the engineering review of the facility, to include the facility's construction and layout, the equipment and instruments for measuring and controlling the destruction process, and the checking and testing of the accuracy of the verification equipment.

5. The inspectors will be granted access to conduct their activities at the facility and the facility storage during the entire active phase of destruction. They will conduct their activities in the presence and with the co-operation of representatives of the facility's management and the National Authority if they wish to be present.

6. The inspectors may monitor by either physical observation or devices:

- (a) the facility storage and the chemical weapons present;
- (b) the movement of chemical weapons from the storage to the facility;
- (c) the process of destruction (assuring that no chemical weapons are diverted);
- (d) the material balance (to be elaborated further); and
- (e) the accuracy and calibration of the instruments.

7. To the extent consistent with verification needs, verification procedures should make use of information from routine facility operations.

8. If inspectors detect irregularities which may give rise to doubts they will report the irregularities to the representatives of the facility and the National Authority and request that the situation be resolved. Uncorrected irregularities will be reported to the Executive Council.

9. After the completion of each period of destruction the Technical Secretariat shall certify the declaration of the National Authority, reporting the completion of destruction of the designated quantity of chemical weapons.

VI. INTERNATIONAL VERIFICATION OF DECLARATIONS OF CHEMICAL WEAPONS,  
INTERNATIONAL SYSTEMATIC MONITORING OF STORAGE FACILITIES, INTERNATIONAL  
VERIFICATION OF REMOVAL OF CHEMICAL WEAPONS FOR DESTRUCTION 1/

1. Storage facility description

(a) Each site or location where, pending their destruction chemical weapons, declared in accordance with Article IV, are stored on the territory of a State Party or under its jurisdiction or control elsewhere, shall hereafter be designated as "storage facility".

(b) At the time of the submission of its declaration of chemical weapons, in accordance with Article IV, a State Party shall provide the International Authority with the detailed description and location of its storage facility(ies) containing:

- boundary map;
- location of bunkers/storage areas, within the facility;
- the detailed inventory of the contents of each bunker/storage area;
- relevant details of the construction of bunkers/storage areas;
- recommendations for the emplacement by the International Authority of seals and monitoring instruments.

2. Measures to secure the storage facility and storage facility preparation

(a) Not later than when submitting its declaration of chemical weapons, a State Party shall take such measures as it considers appropriate to secure its storage facility(ies) and shall prevent any movement of its chemical weapons, except their removal for destruction.

(b) In order to prepare its storage facility(ies) for international verification, a State Party shall ensure that its chemical weapons at its storage facility(ies) are so configured that seals and monitoring devices may be effectively applied, and that such configuration allows ready access for such verification.

(c) While the storage facility remains closed for any movement of chemical weapons other than their removal for destruction activities necessary for maintenance and safety monitoring by national authorities may continue at the facility.

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1/ One delegation expressed reservations on this whole section in view of its position on the issue of declaration of location of chemical weapons stocks in Article IV.

3. Agreements on subsidiary arrangements 1/

(a) Within .. months after entry into force of the convention, States Parties shall conclude with the International Authority agreements on subsidiary arrangements for verification of their storage facilities. Such agreements shall be based on a Model Agreement and shall specify for each storage facility the number, intensity, duration of inspections, detailed inspection procedures and the installation, operation and maintenance of the seals and monitoring devices by the International Authority. The Model Agreement shall include provisions to take into account future technological developments.

(b) States Parties shall ensure that the verification of declarations of chemical weapons and the initiation of the systematic monitoring of storage facilities can be accomplished by the International Authority at all storage facilities within the agreed time frames after the convention enters into force. 2/

4. International verification of declarations of chemical weapons

(a) International verification by on-site inspections

(i) The purpose of the international verification of declarations of chemical weapons shall be to confirm through on-site inspections the accuracy of the declarations made in accordance with Article IV. 3/

(ii) The International Inspectors shall conduct this verification promptly after a declaration is submitted. They shall, inter alia verify the quantity and identity of chemicals, types and number of munitions, devices and other equipment.

(iii) They shall employ, as appropriate, agreed seals, markers or other inventory control procedures to facilitate an accurate inventory of the chemical weapons at each storage facility.

(iv) As the inventory progresses, International Inspectors shall install such agreed seals as may be necessary to clearly indicate if any stocks are removed, and to ensure the securing of the storage facility.

---

1/ The coverage of the subsidiary arrangements is to be discussed.

2/ Procedures to ensure the implementation of the verification scheme within designated time frames are to be developed.

3/ The applicability of Article IV, paragraph 2(b) is to be discussed.

(b) Co-ordination for international systematic monitoring of storage facilities

In conjunction with the on-site inspections of verification of declarations of chemical weapons, the International Inspectors shall undertake necessary co-ordination for measures of systematic monitoring of storage facilities.

5. International systematic monitoring of storage facilities

(a) The purpose of the international systematic monitoring of storage facilities shall be to ensure that no undetected removal of chemical weapons takes place.

(b) The international systematic monitoring shall be initiated as soon as possible after the declaration of chemical weapons is submitted and shall continue until all chemical weapons have been removed from the storage facility. It shall be ensured, in accordance with the agreement on subsidiary arrangements, through a combination of continuous monitoring with on-site instruments and systematic verification by international on-site inspections or, where the continuous monitoring with on-site instruments is not feasible, by the presence of International Inspectors.

(c) If the relevant agreement on subsidiary arrangements for the systematic monitoring of a chemical weapons storage facility is concluded, International Inspectors shall install for the purpose of this systematic monitoring a monitoring system as referred to below under (e). If no such agreement has been concluded, the International Inspectors will initiate the systematic monitoring by their continuous presence on-site until the agreement is concluded, and the monitoring system installed and activated.

(d) In the period before the activation of the continuous monitoring with on-site instruments and at other times when this continuous monitoring is not feasible, seals installed by International Inspectors may only be opened in the presence of an International Inspector. If an extraordinary event requires the opening of a seal when an inspector is not present, a State Party shall immediately inform the International Authority and International Inspectors will return as soon as possible to validate the inventory and re-establish the seals.

(e) Monitoring with instruments.

(i) For the purpose of the systematic monitoring of a chemical weapons storage facility, International Inspectors will install, in the presence of host country personnel and in conformity with the relevant agreement on subsidiary arrangements, a monitoring system consisting of, inter alia, sensors, ancillary equipment and transmission systems. The agreed types of these instruments shall be specified in the Model Agreement. They shall incorporate, inter alia, seals and other tamper-indicating and tamper-resistant devices as well as data protection and data authentication features.

- (ii) The monitoring system shall have such abilities and be installed, adjusted or directed in such a way as to correspond strictly and efficiently to the sole purpose of detecting prohibited or unauthorized activities within the chemical weapons storage facility as referred to above under (a). The coverage of the monitoring system shall be limited accordingly. The monitoring system will signal the International Authority if any tampering with its components or interference with its functioning occurs. Redundancy shall be built into the monitoring system to ensure that failure of an individual component will not jeopardise the monitoring capability of the system.
  - (iii) When the monitoring system is activated, International Inspectors will verify the accuracy of the inventory of chemical weapons, as required.
  - (iv) Data will be transmitted from each storage facility to the International Verification Headquarters by means (to be determined). The transmission system will incorporate frequent transmissions from the storage facility and a query and response system between the storage facility and the International Verification Headquarters. International Inspectors shall periodically check the proper functioning of the monitoring system.
  - (v) In the event that the monitoring system indicated any irregularity, the International Inspectors would immediately determine whether this resulted from equipment malfunction or activities at the storage facility. If, after this examination the problem remained unresolved, the International Authority would immediately ascertain the actual situation, including through immediate on-site inspection or visit of the storage facility if necessary. The International Authority shall report any such problem immediately after its detection to the State Party who should assist in its resolution.
  - (vi) The State Party shall immediately notify the International Authority if an event at the storage facility occurs, or may occur, which may have an impact on the monitoring system. The State Party shall co-ordinate subsequent actions with the International Authority with a view to restoring the operation of the monitoring system, and establishing interim measures, if necessary, as soon as possible.
- (f) Systematic on-site inspections and visits.
- (i) Visits to service the monitoring system may be required in addition to systematic on-site inspections to perform any necessary maintenance, replacement of equipment or to adjust the coverage of the monitoring system, if required.

(ii) (The guidelines for determining the frequency of systematic on-site inspections are to be elaborated.) The particular storage facility to be inspected shall be chosen by the International Authority in such a way as to preclude the prediction of precisely when the facility is to be inspected. During each inspection, the International Inspectors will verify that the monitoring system is functioning correctly and verify the inventory in agreed percentage of bunkers and storage areas.

(g) When all chemical weapons have been removed from the storage facility, the International Authority shall certify the declaration of the National Authority to that effect. After this certification, the International Authority shall terminate the international systematic monitoring of the storage facility and will promptly remove all devices and monitoring equipment installed by the International Inspectors.

6. International verification of the removal of chemical weapons for destruction

(a) The State Party shall notify the International Authority [14] days in advance of the exact timing of removal of chemical weapons from the storage facility and of the planned arrival at the facility where they will be destroyed.

(b) The State Party shall provide the Inspectors with the detailed inventory of the chemical weapons to be moved. The International Inspectors shall be present when chemical weapons are removed from the storage facility and shall verify that the chemical weapons on the inventory are loaded on to the transport vehicles. Upon completion of the loading operations, the International Inspectors shall seal the cargo and/or means of transport, as appropriate.

(c) If only a portion of the chemical weapons is removed, the International Inspectors will verify the accuracy of the inventory of the remaining chemical weapons and make any appropriate adjustments in the monitoring system in accordance with the agreement on subsidiary arrangements.

(d) The International Inspectors shall verify the arrival of the chemical weapons at the destruction facility by checking the seals on the cargo and/or the means of transport and shall verify the accuracy of the inventory of the chemical weapons transported.

7. Inspections and visits

(a) The International Authority shall notify the State Party of its decision to inspect or visit the storage facility 48 hours prior to the planned arrival of the inspection team at the facility for systematic inspections or visits. In the event of inspections or visits to resolve urgent problems, this period may be shortened. The International Authority shall specify the purpose(s) of the inspection or visit.

(b) A State Party shall make any necessary preparations for the arrival of the Inspectors and shall ensure their expeditious transportation from their point of entry on the territory of the State Party to the storage facility. The agreement on subsidiary arrangements will specify administrative arrangements for Inspectors.

(c) International Inspectors shall, in accordance with agreements on subsidiary arrangements:

- have unimpeded access to all parts of the storage facilities including any munitions, devices, bulk containers, or other containers therein. While conducting their activity, Inspectors shall comply with the safety regulations at the facility. The items to be inspected will be chosen by the Inspectors;
- bring with them and use such agreed instruments as may be necessary for the completion of their tasks;
- receive samples taken at their request from any devices and bulk containers and other containers at the facility. Such samples will be taken by representatives of the State Party in the presence of the Inspectors;
- perform on-site analysis of samples;
- transfer, if necessary, samples for analysis off-site at a laboratory designated by the International Authority, in accordance with agreed procedures;
- afford the opportunity to the Host State Party to be present when samples are analysed;
- ensure, in accordance with procedures (to be developed), that samples transported, stored and processed are not tampered with;
- communicate freely with the International Authority.

(d) The State Party receiving the inspection shall, in accordance with agreed procedures:

- have the right to accompany the International Inspectors at all times during the inspection and observe all their verification activities at the storage facility;
- have the right to retain duplicates of all samples taken and be present when samples are analysed;
- have the right to inspect any instrument used or installed by the International Inspectors and to have it tested in the presence of its personnel;

- provide assistance to the International Inspectors, upon their request, for the installation of the monitoring system and the analysis of samples on-site;
  - receive copies of the reports on inspections of its storage facility(ies);
  - receive copies, at its request, of the information and data gathered about its storage facility(ies) by the International Authority.
- (e) The International Inspectors may request clarification of any ambiguities arising from the inspection. In the event that any ambiguities arise which cannot be resolved in the course of the inspection, the Inspectors shall inform the International Authority immediately.
- (f) After each inspection or visit to the storage facility, International Inspectors shall submit a report with their findings to the International Authority which will transmit a copy of this report to the State Party having received the inspection or visit. Information (to be designated) received during the inspection shall be treated as confidential (procedures to be developed).

ANNEX TO ARTICLE V

I. DECLARATIONS AND REPORTS ON CHEMICAL WEAPONS PRODUCTION FACILITIES

A. Declarations of [existing] chemical weapons production facilities

The declaration should contain for each facility:

1. Name and exact location.
2. Ownership, operation, control, who ordered and procured the facility.
3. Designation of each facility:
  - (a) Facility for producing chemicals defined as chemical weapons.
  - (b) Facility for filling chemical weapons.
4. Products of each facility and dates that they were produced:
  - (a) Chemicals produced.
  - (b) Munitions or devices filled, identity of chemical fill.
5. Capacity of the facility, expressed in terms of:
  - (a) The quantity of end product that the facility can produce in (period), assuming the facility operates (schedule).
  - (b) The quantity of chemical that the facility can fill into each type of munition or device in (period), assuming that the facility operates (schedule).
6. Detailed facility description:
  - (a) Layout of the facility.
  - (b) Process flow diagram.
  - (c) Detailed inventory of equipment, buildings and any spare or replacement parts on site.
  - (d) Quantities of any chemicals or munitions on site.

B. Declarations of former chemical weapons production facilities

The declaration should contain for each facility:

1. All information as in paragraph A, above, that pertains to the operation of the facility as a chemical weapons facility.
2. Date chemical weapons production ceased.

3. Current status of special equipment that was used for chemical weapons production.
4. Dates of conversion from CW use, date of beginning of non-CW use.
5. Current ownership, operation and control.
6. Current production, stating types and quantities of product(s).
7. Current capacity of the facility, expressed in terms of the quantity of end product that can be produced in (period), assuming the facility operates (schedule).
8. Current detailed facility description:

- (a) Layout of the facility.
- (b) Process flow diagram.
- (c) Location of any CW-specific equipment remaining on-site.
- (d) Quantities of any chemical weapons remaining on-site.

C. Declarations of [existing] chemical weapons production facilities under the control of others on the territory of the State Party

- Responsibility for declarations (to be discussed).
- All elements contained in part IA of this Annex should be declared.

D. Declarations of former chemical weapons production facilities under the control of others on the territory of the State Party

- Responsibility for declarations (to be discussed).
- All elements contained in part IB of this Annex should be declared.

E. Declarations of transfers

1. Chemical weapons production equipment means (to be developed).
2. The declaration should specify:
  - (a) who received/transferred chemical weapons production equipment [and technical documentation];
  - (b) the identity of the equipment;
  - (c) date of transfer;
  - (d) whether the chemical weapons production equipment [and documentation] were eliminated;
  - (e) current disposition, if known.

F. Declarations of measures to ensure closure of:

1. Facilities under the jurisdiction or control of the State Party (data on national measures and the time-frames).
2. Facilities on the State Party's territory under the control of others (to be developed).

G. Annual Reports

H. Final Certification of Elimination

II. PRINCIPLES AND METHODS OF ELIMINATION OF CHEMICAL WEAPONS PRODUCTION FACILITIES

A. General

Each State Party shall decide on methods to be applied for the elimination of its chemical weapons production facilities, according to the principles laid down in this Annex. The process of elimination might be carried out through destruction, 1/ dismantling, 2/ [or conversion 3/].

- responsibility for carrying out measures when more than one State is involved (to be discussed).

B. Closure and methods for closing the facility (to be elaborated)

C. Activities related to elimination

1. Facilities producing Schedule [I] chemicals.
2. Facilities producing other categories of chemicals.
3. Filling facilities.

D. Activities related to temporary conversion to destruction facility

E. Activities related to former chemical weapons production facilities

1/ One delegation suggests the following formulation: "Destruction means disassembling of technological equipment, its removal from buildings and constructions where it had been installed with its further irreversible transformation into articles unsuitable for the purposes of production of chemical weapons."

2/ One delegation suggests the following formulation: "Dismantling means disassembling of technological equipment, its removal from buildings and constructions where it had been installed with its further use for permitted purposes."

3/ One delegation suggests the following formulation: "Conversion of facilities means use of facilities after their reconstruction for permitted purposes not connected with chemical weapons."

III. ORDER OF ELIMINATION (to be developed)

IV. PLANS

A. General Plans

1. For each facility the following information should be supplied:

- (a) envisaged time-frame for measures to be taken;
- (b) methods of elimination.

2. In addition, the following information should be supplied for each facility:

[(a) In relation to dismantling:]

[(b) In relation to conversion for peaceful purposes:

- (i) description of the facility after conversion
- (ii) designation of the facility after conversion and names of products to be manufactured.]

3. In relation to temporary conversion into chemical weapons destruction facility:

- (i) envisaged time-frame for conversion into a destruction facility;
- (ii) envisaged time for utilizing the facility as a destruction facility;
- (iii) description of the new facility;
- (iv) method of elimination of special equipment;
- (v) time-frame for elimination of the converted facility after it has been utilized to destroy chemical weapons;
- (vi) method of elimination of the converted facility.

4. In relation to former chemical weapons production facilities (to be elaborated).

B. Detailed plans

1. The detailed plans for elimination of each facility should contain:

- (a) detailed time schedule of elimination process;
- (b) layout of the facility;
- (c) process flow diagram;

- (d) detailed inventory of equipment, buildings and other items to be eliminated;
- (e) measures to be applied to each item on the inventory;
- (f) proposed measures for verification;
- (g) security/safety measures to be observed during the destruction of the facility;
- (h) working and living conditions to be provided for international inspectors.

2. In addition, the following information should be included:

[(a) In relation to dismantling:]

[(b) In relation to conversion for peaceful purposes:

(i) projected use of the facility after conversion and products to be manufactured;

(ii) layout of the facility after conversion;

(iii) process flow diagram of the facility after conversion];

3. In relation to the temporary conversion into a chemical weapons destruction facility.

In addition to the information contained in part IV.B.1 of this Annex the following information should be provided:

(i) method of conversion into a destruction facility;

(ii) data on the destruction facility, in accordance with the Annex to Article IV, part IV.B.1(c).

4. In relation to elimination of a facility that was temporarily converted for destruction of chemical weapons, information should be provided in accordance with part IV.B.1 of this Annex.

5. In relation to former chemical weapons production facilities (to be elaborated).

V. INTERNATIONAL VERIFICATION OF DECLARATIONS OF CHEMICAL WEAPONS PRODUCTION FACILITIES AND THEIR CLOSURE, INTERNATIONAL SYSTEMATIC MONITORING, INTERNATIONAL SYSTEMATIC VERIFICATION OF ELIMINATION OF CHEMICAL WEAPONS PRODUCTION FACILITIES 1/

1. International verification of declarations of chemical weapons production facilities and of cessation of their activities

(a) International verification by initial on-site inspections

(i) The purpose of the international verification of declarations of chemical weapons production facilities shall be:

- to confirm that all activity has ceased except that required for closure;
- to confirm through on-site inspections the accuracy of the declarations made in accordance with Article V.

(ii) The International Inspectors shall conduct this initial verification promptly, and in any event not later than [60] days after a declaration is submitted.

(iii) They shall employ, as appropriate, agreed seals, markers or other inventory control procedures to facilitate an accurate inventory of the declared items at each chemical weapons production facility.

(iv) International Inspectors shall install such agreed devices as may be necessary to indicate if any resumption of production of chemical weapons occurs or if any declared item is removed. They shall take the necessary precaution not to hinder closure activities by the State Party. International Inspectors may return to maintain and verify the integrity of the devices.

(b) Co-ordination for international systematic monitoring of chemical weapons production facilities

In conjunction with the initial on-site inspections to verify declarations of chemical weapons production facilities, the International Inspectors shall undertake necessary co-ordination for measures of systematic monitoring of these facilities as provided for in paragraph 4, below.

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1/ This Section of this Annex will require further discussion and elaboration upon resolution of the definitions of chemical weapons, chemical weapons production facilities, and methods of elimination.

2. Agreements on subsidiary arrangements <sup>1/</sup>

(a) Within [6] months after entry into force of the Convention, States Parties shall conclude with the International Authority detailed agreements on subsidiary arrangements for the systematic monitoring of their chemical weapons production facilities. Such agreements shall be based on a Model Agreement and shall specify for each production facility the detailed inspection procedures and arrangements for the installation, operation and maintenance of the seals and monitoring devices by the International Authority, taking into account the specific characteristics of each facility. The Model Agreement shall include provisions to take into account future technological developments.

(b) States Parties shall ensure that the verification of declarations of chemical weapons production facilities and the initiation of systematic monitoring can be accomplished by the International Authority at all such facilities within the agreed time frames after the Convention enters into force. <sup>2/</sup>

3. Measures for closure of chemical weapons production facilities

(a) The purpose of the closure of a chemical weapons production facility is to render it inoperable as such.

(b) Agreed measures for closure will be taken by the State Party with due regard to the specific characteristics of each facility. Such measures shall include, inter alia: <sup>3/</sup>

- prohibition of occupation of buildings except for agreed activities;
- disconnection of equipment directly related to the production of chemical weapons to include, inter alia, process control equipment and utilities;
- disabling of protective installations and equipment used exclusively for the safety of operations of the chemical weapons production facility;
- interruption of rail and other roads to the chemicals weapons production facility except those required for agreed activities.

(c) While the chemical weapons production facility remains closed, the State Party may continue safety activities at the facility.

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<sup>1/</sup> The coverage of the subsidiary arrangements is to be discussed.

<sup>2/</sup> Procedures to ensure the implementation of the verification scheme within designated time frames are to be developed.

<sup>3/</sup> The activities and items in these measures will need further elaboration.

4. International verification of closure of chemical weapons production facilities

Subsequent to the on-site verification of declarations as referred to in paragraph 1, the International Inspectors shall conduct on-site inspections at each chemical weapons production facility for the purpose of verifying that measures referred to under 3 (b) have been accomplished.

5. International systematic monitoring of chemical weapons production facilities

(a) The purpose of the international systematic monitoring of a chemical weapons production facility shall be to ensure that no resumption of production of chemical weapons nor removal of declared items would go undetected at this facility.

(b) The international systematic monitoring shall be initiated as soon as possible after the closure of the chemical weapons production facility and shall continue until this facility is eliminated. Systematic monitoring shall be ensured, in accordance with the agreements on subsidiary arrangements, through a combination of continuous monitoring with on-site instruments and systematic verification by international on-site inspections or, where the continuous monitoring with on-site instruments is not feasible, by the presence of International Inspectors.

(c) In conjunction with the on-site verification of the closure of chemical weapons production facilities referred to in paragraph 4 above and, if the relevant agreement on subsidiary arrangements for the systematic monitoring of a chemical weapons production facility has been concluded, International Inspectors shall install for the purpose of this systematic monitoring a monitoring system as referred to under (e) below. If no such agreement has been concluded, the International Inspectors will initiate the systematic monitoring by their continuous presence on-site until the agreement is concluded, and the monitoring system installed and activated.

(d) In the period before the activation of the monitoring system and at other times when the continuous monitoring with on-site instruments is not feasible, devices installed by International Inspectors, in accordance with paragraph 1 above, may only be removed in the presence of an International Inspector. If an extraordinary event results in, or requires, the removal of a device when an inspector is not present, a State Party shall immediately inform the International Authority and International Inspectors will return as soon as possible to validate the inventory and re-establish the devices.

(e) Monitoring with instruments

(i) For the purpose of the systematic monitoring of a chemical weapons production facility, International Inspectors will install, in the presence of host country personnel and in conformity with the relevant agreement on subsidiary arrangements, a monitoring system consisting of, inter alia, sensors, ancillary equipment and transmission systems. The agreed types of these instruments shall be specified in the Model Agreement. They shall incorporate, inter alia, seals

and other tamper-indicating and tamper-resistant devices as well as data protection and data authentication features.

(ii) The monitoring system shall have such abilities and be installed, adjusted or directed in such a way as to correspond strictly and efficiently to the sole purpose of detecting prohibited or unauthorized activities within the chemical weapons production facility as referred to above under (a). The coverage of the monitoring system shall be limited accordingly. The monitoring system will signal the International Authority if any tampering with its components or interference with its functioning occurs. Redundancy shall be built into the monitoring system to ensure that failure of an individual component will not jeopardize the monitoring capability of the system.

(iii) When the monitoring system is activated, International Inspectors will verify the accuracy of the inventory of declared items at each chemical weapons production facility as required.

(iv) Data will be transmitted from each production facility to the International Verification Headquarters by (means to be determined). The transmission system will incorporate frequent transmissions from the production facility and a query and response system between the production facility and the International Verification Headquarters. International Inspectors shall periodically check the proper functioning of the monitoring system.

(v) In the event that the monitoring system indicates any irregularity, the International Inspectors would immediately determine whether this resulted from equipment malfunction or activities at the production facility. If, after this examination the problem remained unresolved, the International Authority would immediately ascertain the actual situation, including through immediate on-site inspection or visit of the production facility if necessary. The International Authority shall report any such problem immediately after its detection to the State Party who should assist in its resolution.

(vi) The State Party shall immediately notify the International Authority if an event at the production facility occurs, or may occur, which may have an impact on the monitoring system. The State Party shall co-ordinate subsequent actions with the International Authority with a view to restoring the operation of the monitoring system and establishing interim measures, if necessary, as soon as possible.

(f) Systematic on-site inspections and visits

(i) During each inspection, the International Inspectors will verify that the monitoring system is functioning correctly and

verify the declared inventory as required. In addition, visits to service the monitoring system will be required to perform any necessary maintenance or replacement of equipment, or to adjust the coverage of the monitoring system as required.

- (ii) (The guidelines for determining the frequency of systematic on-site inspections are to be elaborated). The particular production facility to be inspected shall be chosen by the International Authority in such a way as to preclude the prediction of precisely when the facility is to be inspected.

6. International verification of elimination of chemical weapons production facilities

(a) The purpose of international verification of elimination of chemical weapons production facilities will be to confirm that the facility is eliminated as such in accordance with the obligations under the Convention and that each item on the declared inventory is eliminated in accordance with the agreed detailed plan for elimination.

(b) [3-6] months before elimination of a chemical weapons production facility, a State Party shall provide to the Technical Secretariat the detailed plans for elimination to include proposed measures for verification of elimination referred to in Section IV.B.1 (f) of the present Annex, with respect to, e.g.:

- timing of the presence of the inspectors at the facility to be eliminated;
- procedures for verification of measures to be applied to each item on the declared inventory;
- measures for phasing out systematic monitoring or for adjustment of the coverage of the monitoring system.

(c) On the basis of the detailed plan for elimination and proposed measures for verification submitted by the State Party, and on experience from previous inspections, the Technical Secretariat shall prepare a plan for verifying the elimination of the facility, consulting closely with the State Party. Any differences between the Technical Secretariat and the State Party concerning appropriate measures should be resolved through consultations. Any unresolved matters shall be forwarded to the Executive Council 1/ for appropriate action with a view to facilitating the full implementation of the Convention.

(d) The agreed combined plans for elimination and verification, with an appropriate recommendation by the Technical Secretariat, will be forwarded to the members of the Executive Council for review. These plans should allow a State Party to destroy any item agreed to be diverted. The members of the Executive Council shall review the plans with a view to approving them,

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1/ The role of the Executive Council in the review process will need to be reviewed in the light of its composition and decision-making process.

consistent with verification objectives. This review is designed to determine that the planned disposition of each item is consistent with the obligations under the Convention and the objective of eliminating the facility. It should also confirm that verification schemes for elimination are consistent with verification objectives, and are efficient and workable. This review should be completed [60] days before the planned initiation of elimination.

(e) Each member of the Executive Council may consult with the Technical Secretariat on any issues regarding the adequacy of the combined plan for elimination and verification. If there are no objections by any members of the Executive Council, the plan shall be put into action.

(f) If there are any difficulties, the Executive Council should enter into consultations with the State Party to reconcile them. If any difficulties remain unresolved they should be referred to the Consultative Committee. The resolution of any differences over methods of elimination should not delay the execution of other parts of the elimination plan that are acceptable.

(g) If agreement is not reached with the Executive Council on aspects of verification, or if the approved verification plan cannot be put into action, verification of elimination will proceed by the continuous on-site monitoring and presence of inspectors.

(h) Elimination and verification should proceed according to the agreed plan. The verification should not unduly interfere with the elimination process.

(i) If required verification or elimination actions are not taken as planned, all States Parties should be so informed. (Procedures to be developed.)

(j) For those items to be eliminated through destruction, verification of elimination should be conducted through the presence on-site of Inspectors to witness the destruction. 1/

(k) For those items that may be diverted for permitted purposes. 2/

(l) When all items on the declared inventory have been eliminated, the International Authority shall certify, in writing, the declaration of the State Party to that effect. After this certification, the International Authority shall terminate the international systematic monitoring of the chemical weapons production facility and will promptly remove all devices and monitoring equipment installed by the International Inspectors.

(m) After this certification, the State Party will make the declaration that the facility has been eliminated.

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1/ This verification measure may not necessarily be the only one and others, as appropriate, may need to be further elaborated.

2/ Specification of the items, permitted purposes and methods of verification of disposition will need to be elaborated.

7. International verification of temporary conversion of a chemical weapons production facility into a chemical weapons destruction facility

(to be elaborated)

8. Inspections and visits

(a) The International Authority shall notify the State Party of its decision to inspect or visit a chemical weapons production facility 48 hours prior to the planned arrival of the inspection team at the facility for systematic inspections or visits. In the event of inspections or visits to resolve urgent problems, this period may be shortened. The International Authority shall specify the purpose(s) of the inspection or visit.

(b) A State Party shall make any necessary preparations for the arrival of the Inspectors and shall ensure their expeditious transportation from their point of entry on the territory of the State Party to the chemical weapons production facility. The agreement on subsidiary arrangements will specify administrative arrangements for Inspectors.

(c) International Inspectors shall, in accordance with agreements on subsidiary arrangements:

- have unimpeded access to all parts of the chemical weapons production facilities. While conducting their activity, Inspectors shall comply with the safety regulations at the facility. The items on the declared inventory to be inspected will be chosen by the Inspectors;

- bring with them and use such agreed instruments as may be necessary for the completion of their tasks;

- communicate freely with the International Authority.

(d) The State Party receiving the inspection shall, in accordance with agreed procedures:

- have the right to accompany the International Inspectors at all times during the inspection and observe all their verification activities at the chemical weapons production facility;

- have the right to inspect any instrument used or installed by the International Inspectors and to have it tested in the presence of State Party personnel;

- provide assistance to the International Inspectors upon their request for the installation of the monitoring system;

- receive copies of the reports on inspections of its chemical weapons production facility(ies);

- receive copies, at its request, of the information and data gathered about its chemical weapons production facility(ies) by the International Authority.

(e) The International Inspectors 1/ may request clarification of any ambiguities arising from the inspection. In the event that any ambiguities arise which cannot be resolved in the course of the inspections, the inspectors shall inform the International Authority immediately.

(f) After each inspection or visit to the chemical weapons production facility, International Inspectors shall submit a report with their findings to the International Authority which will transmit a copy of this report to the State Party having received the inspection or visit. Information (to be designated) received during the inspection shall be treated as confidential (procedures to be developed).

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1/ The question of whether or not an individual Inspector shall have the rights set out in this and the following paragraph remains open.

## ANNEX TO ARTICLE VI [O.]

## MODALITIES FOR REVISION OF LISTS

1. The revisions envisaged would consist of additions to, deletions from, or shifts between the lists.
2. A revision could be proposed by a State Party. [If the Technical Secretariat has information which in its opinion may require a revision of the lists of chemicals, it should provide that information to the [Executive Council] which should communicate it to all States Parties.] A State Party may request the assistance of the Technical Secretariat in the substantiation of its proposal.
3. A proposal for revision should be submitted to [the International Authority] [the Executive Council] [the Depository of the Convention].
4. [The International Authority] [The Executive Council] [The Depository of the Convention], upon receipt of a proposal for revision, will be responsible for informing States Parties about it.
5. The proponent should substantiate its proposal with the necessary information. Any State Party and, as requested, the Technical Secretariat, could also provide relevant information for the evaluation of the proposal.
6. Technical evaluations of a proposal may be made by the International Authority, [the Executive Council], any State Party [and the Technical Secretariat].
7. The decision on a proposal should be taken by the International Authority [the Consultative Committee] by [a majority vote] [consensus] [tacit approval of all States Parties 60 days after they have been informed of the proposal by the International Authority. If there is no tacit approval, the matter should be reviewed by the [Consultative Committee] at its next meeting.] [If urgent consideration is requested by five or more Parties, a special meeting of the Consultative Committee should be promptly convened.]
8. The revision procedure should be concluded within [60 days] after the receipt of the proposal. Once a decision is taken, it should enter into force after a period of [30 days].
9. The Technical Secretariat should provide assistance to any State Party, when requested, in evaluating an unlisted chemical. This assistance should be confidential [unless it is established in the evaluation that the chemical has chemical weapon properties].

ANNEX TO ARTICLE VI [1]

1. General provisions

A State Party shall not produce, acquire, retain, transfer or use chemicals in Schedule [1] unless:

- (i) the chemicals are applied to research, medical or protective purposes, 1/, and
- (ii) the types and quantities of chemicals are strictly limited to those which can be justified for research, medical or protective purposes, and
- (iii) the aggregate amount of such chemicals at any given time for [permitted] [protective] purposes is equal to or less than one metric tonne, and
- (iv) the aggregate amount for [permitted] [protective] purposes acquired by a State Party in any calendar year through production, withdrawal from chemical weapons stocks and transfer is equal to or less than one metric tonne.

2. Single Small Scale Production Facility

- (i) Each State Party which produces chemicals in Schedule [1] for [permitted] [protective] purposes shall carry out the production at a single small-scale facility, the capacity of which shall not exceed [one] metric tonne per year, as measured by the method established in [            ]. 2/
- (ii) Each State Party which plans to operate such a facility shall provide the Consultative Committee with the location and a detailed technical description of the facility, including an inventory of equipment and detailed diagrams. For existing facilities, this information shall be provided not later than 30 days after the

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1/ A view was expressed that for consistency in this Annex, "permitted purposes" should be used instead of "research, medical or protective purposes". The view was also expressed that the use of the term "permitted" would broaden considerably the sphere of use of super-toxic lethal chemicals which could be used as chemical weapons and that this was very undesirable.

2/ The view was expressed that the single small-scale production facility should be State-owned.

Convention enters into force for the State Party. Information on new facilities shall be provided six months before operations are to begin. 1/

3. Other Facilities

- (i) [Facilities which synthesize, acquire or use chemicals in Schedule [1] for research or medical purposes shall be approved by the State Party. Synthesis at each such facility for research and medical purposes shall be limited per annum to a total maximum of [...]g and to [...]g of any one chemical on the Schedule.]

[Facilities which acquire or use chemicals in Schedule [1] for permitted purposes shall be approved by the State Party. Each transfer from the single small-scale production facility to such facilities shall be notified to the Consultative Committee by inclusion in the annual data reporting, with an indication of the chemical or chemicals involved, the amount transferred and the purpose of the transfer.]

- (ii) The location of the approved facilities shall be provided to the Consultative Committee.

4. Transfers

- (i) A State Party may transfer chemicals in Schedule [1] only to another State Party and only for research, medical or protective purposes in accordance with paragraph 1.
- (ii) Thirty days prior to any such transfer, both States Parties shall notify the Consultative Committee.
- (iii) Chemicals transferred shall not be retransferred to a third State.

5. Verification of the Single Small-Scale Production Facility

- (i) The single small-scale production facility referred to in paragraph 2 shall be subject to [systematic] [permanent] international on-site verification, through on-site inspection and continuous monitoring with on-site instruments. 2/
- (ii) The aim of verification activities at the facility shall be to verify that the quantities of Schedule [1] chemicals produced are correctly declared and, in particular, that their aggregate amount does not exceed one metric tonne.

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1/ It was noted that consideration would need to be given to the compatibility of the requirement in the last sentence with the obligations specified in paragraph 5 (vi).

2/ The view was expressed that continuous monitoring with on-site instruments might not be necessary for very small facilities.

- (iii) [The number, intensity, duration, timing and mode of inspections for a particular facility shall be based on the risk to the objectives of the Convention posed by the relevant chemicals, the characteristics of the facility and the nature of the activities carried out there. The guidelines to be used shall include: (to be developed).]
- (iv) Each State Party possessing a facility shall make a detailed annual declaration regarding the activities of the facility for the previous year and anticipated production for the coming year. The declaration shall include: (to be developed).
- (v) Each facility shall receive an initial visit from international inspectors promptly after the facility is declared. The purpose of the initial visit shall be to verify information provided concerning the facility, including verification that the capacity will not permit the production, on an annual basis, of quantities [significantly] above one metric tonne, and to obtain any additional information needed for planning future verification activities at the facility, including inspection visits and use of on-site instruments.
- (vi) Each State Party possessing or planning to possess a facility shall execute an agreement, based on a model agreement, with the [international authority] before the facility begins operation or is used, covering detailed inspection procedures for the facility. Each agreement shall include: (to be developed). 1/

#### 6. Verification of Other Facilities

Facilities referred to in paragraph 3 shall be monitored through annual data reporting to the Consultative Committee. The following information shall be included: (to be developed).

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1/ The view was expressed that pending conclusion of the agreement between a State Party and the [International Authority] there would be a need for provisional inspection procedures to be formulated.

ANNEX TO ARTICLE VI [1]  
SCHEDULE [1]

PROVISIONAL LIST

1. O-Alkyl alkylphosphonofluoridates

e.g. Sarin: O-isopropyl methylphosphonofluoridate  
Soman: O-pinacolyl methylphosphonofluoridate

2. O-Alkyl N,N-dialkylphosphoramidocyanidates

e.g. Tabun: O-ethyl N,N-dimethylphosphoramidocyanidate

3. O-Alkyl S-2-dialkylaminoethylalkylphosphonothiolates

e.g. VX: O-ethyl S-2-diisopropylaminoethylmethyl-phosphonothiolate

4. Sulphur mustards:

e.g. Mustard gas (H): bis(2-chloroethyl) sulphide  
Sesquimustard (Q): 1,2-bis(2-chloroethylthio)ethane  
O-Mustard (T): bis(2-chloroethylthioethyl) ether

5. Lewisites

Lewisite 1: 2-chlorovinyl dichloroarsine  
Lewisite 2: bis(2-chlorovinyl) chloroarsine  
Lewisite 3: tris(2-chlorovinyl) arsine

6. Nitrogen mustards

HN1: bis(2-chloroethyl) ethylamine  
HN2: bis(2-chloroethyl) methylamine  
HN3: tris(2-chloroethyl) amine

7. 3-Quinuclidinyl benzilate (BZ)

8. Alkylphosphonyldifluorides

e.g. DF

9. Ethyl O-2-diisopropylaminoethyl alkylphosphonites

e.g. QL

To be discussed further

1. Saxitoxin
2. 3,3-Dimethylbutan-2-ol (pinacolyl alcohol)
3. CS
4. CR
5. Chloro Soman and Chloro Sarin
6. Sulphur Mustards: to include compounds listed below.

2-chloroethylchloromethylsulphide

bis(2-chloroethyl) sulphone

bis(2-chloroethylthio)methane

1,3-bis(2-chloroethylthio)-n-propane

1,4-bis(2-chloroethylthio)-n-butane

ANNEX TO ARTICLE VI [2]

KEY PRECURSOR CHEMICALS

DECLARATIONS

The Initial and Annual Declarations to be provided by a State Party under paragraphs [3] and [4] of Article VI shall include:

1. For the Initial Declaration

Aggregate national data on the production, processing and consumption of each chemical listed in Schedule [2], on the export and import of the chemicals in the year preceding the date of entry of the Convention into force with an indication of the countries involved.

For the Annual Declaration

Aggregate data on each of the production, consumption, import and export of each chemical listed in Schedule [2].

2. The following information for each facility which produces, processes or consumes more than [ ] tonnes per annum of the chemicals listed in Schedule [2]:

Key Precursor Chemical(s)

- (i) The chemical name, common or trade name used by the facility, structural formula, and Chemical Abstracts Service Registry Number.
- (ii) The total amount produced, consumed, imported and exported in the previous calendar year. 1/

Facility 2/

- (i) The name of the facility and of the owner, company, or enterprise operating the facility.

1/ Whether the total amount is to be expressed as an exact figure or within a range is to be discussed.

2/ One delegation suggested that, in the case of a multi-purpose facility currently producing key precursor chemicals, the following should be specified:

- general description of the products;
- detailed technological plan of the facility;
- list of special equipment included in the technological plan;
- type of waste treatment equipment;
- description of each final product (chemical name, chemical structure and register number);
- unit capacity for each product;
- use of each product.

- (ii) The exact location of the facility (including the address, location of the complex, location of the facility within the complex including the specific building and structure number, if any).
- (iii) Whether the facility is dedicated to producing or processing the listed key precursor or is multipurpose.
- (iv) [The main orientation (purpose) of the facility.] 1/
- (v) The capability and capacity (both to be defined) of the facility.
- (vi) Which of the following activities are performed with regard to the key precursor chemicals:
  - (a) production
  - (b) processing with conversion into another chemical
  - (c) processing without chemical conversion
  - (d) other - specify.
- (vii) Whether listed key precursors are stored on-site in quantities greater than [ ] [tonnes]. 2/

Application of Chemical(s)

- (i) The purpose(s) for which the key precursor chemical(s) are produced, consumed or processed:
  - (a) conversion on-site (specify product type)
  - (b) sale or transfer to other domestic industry (specify final product type)
  - (c) export of a key precursor (specify which country)
  - (d) other.

3. A State Party shall notify the International Authority of the name and location of any facility which intends, in the year following submission of the Annual Declaration, to produce, process or consume more than [ ] tonnes per annum of any of the chemicals listed in Schedule [2].

---

1/ It was suggested that this aspect could be incorporated in paragraph (vi).

2/ The question of a threshold requires further consideration.

Verification 1/

Aim

4. The aim of the measures stipulated in Article VI, paragraph 6 shall be to verify that:

- (i) Facilities declared under this Annex are not used to produce any chemical listed in Schedule [I]. 2/
- (ii) The quantities of chemicals listed in Schedule [2] produced, processed or consumed are consistent with needs for purposes not prohibited by the Chemical Weapons Convention. 3/
- (iii) The chemicals listed in Schedule [2] are not diverted or used for purposes prohibited by the Chemical Weapons Convention.

Obligation and Frequency

5. (i) Each facility notified to the [international authority] under this Annex shall be subject to systematic international on-site inspection on a routine basis.
- (ii) The number, intensity, duration, timing and mode of inspections for a particular facility shall be based on the risk to the objectives of the Convention posed by the relevant chemical, the characteristics of the facility and the nature of the activities carried out there. 4/ The guidelines to be used shall include: (to be developed). 5/ 6/

---

1/ Some of the provisions contained in this section have general application throughout the Convention. It is understood that the retention of these will be reviewed at a later stage in the negotiations.

2/ It was suggested that "or for any other purposes prohibited by the Convention" should be added.

3/ Opinions were expressed on the need to consider the question of the existence in a facility of excessive capacity for the production of chemicals in Schedule [2].

4/ A number of possible factors that could influence the number, intensity, duration, timing and mode of inspections have been identified and discussed. The result of this work is enclosed in Appendix II to serve as a basis for future work.

5/ It was noted that a "weighted approach" might be taken in determining the inspection régime for specific chemicals. The importance of establishing a threshold(s) in this context was also noted. It was mentioned that a threshold(s) should relate to "military significant quantities" of the relevant chemical(s).

6/ There was general agreement that the guidelines should stipulate the main elements relevant to the basic features of the facility. A view was expressed that one of the guidelines might provide that inspections will usually be carried out at a time when the facility inspected is operating in the normal way. The view was also expressed that this approach would be inconsistent with the language of paragraph 6.

Selection

6. The particular facility to be inspected shall be chosen by the [international authority] in such a way to preclude the prediction of precisely when the facility is to be inspected.

Notification

7. A State Party shall be notified by the [international authority] of the decision to inspect a facility referred to in paragraph 1 ..... hours prior to the arrival of the inspection team.

Host State Party

8. The host State Party shall have the right to designate personnel to accompany an international inspection team. The exercise of this right shall not affect the right of inspectors to obtain access to the facility, as provided by the Convention, nor shall it delay or otherwise impede the carrying out of the inspection.

Initial Visit

9. Each facility notified to the [international authority] under this Annex shall be liable to receive an initial visit from international inspectors, promptly after the State becomes a Party to the Convention.

10. The purpose of the initial visit shall be to verify information provided concerning the facility to be inspected and to obtain any additional information needed for planning future verification activities at the facility, including inspection visits and use of on-site instruments.

Agreement on Inspection Procedures

11. Each State Party shall execute an agreement, based on a model agreement, 1/ with the [international authority], within ..... months after the Convention enters into force for the State, governing the conduct of the inspections of the facilities declared by the State Party. 2/ The agreement shall provide for the detailed subsidiary arrangements which shall govern inspections at each facility.

---

1/ Several delegations considered that the model agreement should be elaborated by the time the Convention is concluded.

2/ A model for such an agreement is contained in Appendix II.

12. The detailed subsidiary arrangements shall include, inter alia, the size of the team required for the inspection; the duration of the inspection; the relevant parts of the site to be inspected; and the need for permanent on-site instrumentation.

Verification Inspections

13. The areas of a facility to be inspected under subsidiary arrangements may, inter alia, include: 1/

- (i) areas where feed chemicals (reactants) are delivered and/or stored;
- (ii) areas where manipulative processes are performed upon the reactants prior to addition to the reaction vessel;
- (iii) feed lines as appropriate from subparagraph (i) and/or subparagraph (ii) to the reaction vessel, together with any associated valves, flow meters, etc.;
- (iv) the external aspect of the reaction vessel and its ancillary equipment;
- (v) lines from the reaction vessel leading to long- or short-term storage or for further processing of the designated chemical;
- (vi) control equipment associated with any of the items (i) to (v);
- (vii) equipment and areas for waste and effluent handling;
- (viii) equipment and areas for disposition of off-specification chemicals.

14. The inspectors have the right at any stage during the inspection to obtain samples from any of the areas inspected. They also have the right to request that appropriate analyses be performed in their presence, either in-house or in a mobile field laboratory, or if necessary to have samples analysed at a laboratory designated by the [international authority]. They may request clarification of any ambiguities arising from the inspection.

15. The Technical Secretariat may retain at each site a sealed container for photographs, plans and other information that it may wish to refer to in the course of subsequent inspection.

---

1/ Opinions were expressed on the need to consider the question of the existence in a facility of excessive capacity for the production of chemicals in Schedule [2].

Submission of Inspectors' Report

16. The inspectors shall submit a report to the [international authority] on the activities conducted by them and on their findings. 1/

17. In the event that any ambiguities arise which cannot be resolved in the course of the inspection, the inspectors may in their report recommend appropriate steps for clarification.

---

1/ It was suggested that the report of the inspectors should be made available to the State Party subject to the inspection.

ANNEX TO ARTICLE VI [2]  
SCHEDULE [2]

PROVISIONAL LIST

1. Chemicals containing one P-methyl, P-ethyl, or P-propyl (normal or iso) bond.
2. N,N-Dialkylphosphoramidic dihalides.
3. Dialkyl N,N-dialkylphosphoramidates.
4. Arsenic trichloride.
5. 2,2-Diphenyl-2-hydroxyacetic acid.
6. Quinuclidin-3-ol
7. N,N-Diisopropylaminoethyl-2-chloride.
8. N,N-Diisopropylaminoethan-2-ol.
9. N,N-Diisopropylaminoethane-2-thiol.

TO BE DISCUSSED FURTHER

- (1) The following compounds:

Bis(2-hydroxyethyl) sulphide (thiodiglycol)

3,3-Dimethylbutan-2-ol (pinacolyl alcohol)

- (2) Expanded groups for compounds 5, 6, 7, 8 and 9, as follows:

(No. 5): 2-phenyl-2-(phenyl, cyclohexyl, cyclopentyl or cyclobutyl)-2-hydroxyacetic acids and their methyl, ethyl, n-propyl and iso-propyl esters.

(No. 6): 3- or 4-hydroxypiperidine and their [derivatives] and [analogs].

(Nos. 7,8,9): N,N-Disubstituted aminoethyl-2-halides  
N,N-Disubstituted aminoethan-2-ols  
N,N-Disubstituted aminoethane-2-thiols

ANNEX TO ARTICLE VI [3]

Chemicals which are produced in large commercial quantities and which could be used for chemical weapons purposes

DECLARATIONS

1. The Initial and Annual Declarations to be provided by a State Party under paragraph [4] of Article VI shall include the following information for each of the chemicals listed in Schedule [3]:

- (i) The chemicals name, common or trade name used by the facility, structural formula and Chemical Abstracts Service Registry Number.
- (ii) The total amount produced, consumed, imported and exported in the previous calendar year.
- (iii) The final product or end use of the chemical in accordance with the following categories (to be developed),
- (iv) for each facility which produces, processes, consumes or transfers 1/ 2/ one of the chemicals listed in Schedule [3] (on an industrial scale - to be defined). 3/
  - (a) The name of the facility and of the owner, company, or enterprise operating the facility.
  - (b) The location of the facility.
  - (c) The capacity (to be defined) of the facility.
  - (d) The approximate amount of production and consumption of the chemical in the previous year (ranges to be specified).

---

1/ These issues need further consideration with regard to the possibility of appropriate information and data reporting.

2/ The relevance of transfers in this connection is to be considered further.

3/ It was proposed that a threshold for the dual purpose agents (Phosgene, Cyanogen chloride, Hydrogen cyanide, Chloropicrin) could be established at [50 tonnes/year] [500 tonnes/year] and for precursors at [5 tonnes/year] [50 tonnes/year]. The proposal was presented in an informal discussion paper dated 30 March 1987, prepared on the request of the Chairman of the Committee, by Dr. Peroni (Brazil), Lt. Col. Bretfeld (German Democratic Republic) and Dr. Ooms (Netherlands).

2. A State Party shall notify the (International Authority) of the name and location of any facility which intends, in the year following submission of the Annual Declaration, to produce, process or consume any of the chemicals listed in Schedule [3] (on an industrial scale - to be defined). 1/ 2/

VERIFICATION

The verification régime for chemicals listed in Schedule [3] will comprise both the provision of data by a State Party to the [International Authority] and the monitoring of that data by the [International Authority]. 3/

1/ The requirement contained in this provision is to be considered further.

2/ It was proposed that a threshold for the dual purpose agents (Phosgene, Cyanogen chloride, Hydrogen cyanide, Chloropicrin) could be established at [50 tonnes/year] [500 tonnes/year] and for precursors at [5 tonnes/year] [50 tonnes/year]. The proposal was presented in an informal discussion paper dated 30 March 1987, prepared on the request of the Chairman of the Committee, by Dr. Peroni (Brazil), Lt. Col. Bretfeld (German Democratic Republic) and Dr. Ooms (Netherlands).

3/ Some delegations consider that provision should be made for resort to an on-site "spot-check" inspection, if required, to verify information supplied by a State Party. Other delegations believe that the provisions of Articles VII, VIII and IX of the Convention are sufficient in this respect.

ANNEX TO ARTICLE VI [3]  
SCHEDULE [3]

Phosphorus oxychloride	(10025-87-3) <u>1/</u>
Phosphorus trichloride	(7719-12-2)
Phosgene	(75-44-5)
Cyanogen chloride	(506-77-4)
Hydrogen cyanide	(74-90-8)
Trichloronitromethane (chloropicrin)	(76-06-2)
Di- and Trimethyl/Ethyl Esters of Phosphorus [P III] Acid:	
Trimethyl phosphite	(121-45-9)
Triethyl phosphite	(122-52-1)
Dimethyl phosphite	(868-85-9)
Diethyl phosphite	(762-04-9)
Sulphur monochloride	(19925-67-9)
Sulphur dichloride	(19545-99-0)

1/ The possibility of including Chemical Abstracts Service Registry Numbers also in other Schedules needs to be discussed.

ANNEX TO ARTICLE VI. [4] 1/

Commercial production of toxic chemicals, not listed in Schedules [1], [2] or [3] that might be relevant to the Convention

DECLARATIONS

1. The Initial and Annual Declarations to be provided to the [international authority] by a State Party under Article VI shall

for each facility which produces or processes [more than [10 kg] [100 kg] [1,000 kg] 2/ per annum 3/ of] any chemical 4/ 5/ with an LD<sub>50</sub> equal to or less than 0.5 mg per kg bodyweight 6/ or an LC<sub>t50</sub> equal to or less than 2,000 mg-min/m<sup>3</sup> and has a production capacity 7/ for any such chemical exceeding 1,000 kg 2/ 8/ per annum 9/.

include the following information:

1/ Some delegations consider that the chemicals in this Annex should be dealt with in the Annex to Article VI [2] Schedule [2]. Other delegations consider that a separate Annex is required.

2/ Some delegations felt that the thresholds for production and production capacity should correspond to militarily significant quantities.

3/ The question of production or processing not occurring annually requires further discussion.

4/ Some delegations expressed the view that additional criteria of suitability for chemical weapons purposes should be added.

5/ Some delegations expressed the view that whether or not a list of these chemicals would be needed, should be discussed.

6/ It is understood that further discussion is needed with regard to chemicals with a somewhat lower toxicity. In this context various ideas were put forward, i.a.:

- that chemicals falling within a deviation-range of 10-20 per cent could be considered;
- that chemicals with an LD<sub>50</sub> close to 0.5 mg/kg bodyweight could be included as exceptions;
- that the modalities for revisions of lists could be made use of to take care of possible concerns in this regard.

7/ How to define production capacity remains to be agreed upon. In this context reference was made to the proposal contained in CD/CW/WP.171.

8/ It is understood that the quantitative value of the threshold for production capacity remains to be discussed.

9/ One delegation expressed the view that the question of production capacities should be considered in accordance with the relevant provisions in the Annex to Article VI, Schedules [2] and [3] (cf. CD/CW/WP.167 pp. 62, 68).

Chemical(s)

- (i) The chemical name, common or trade name used by the facility, structural formula, and Chemical Abstracts Service Registry Number (if assigned);
- (ii) For each chemical the total amount produced and/or processed [ , imported and exported, with an indication of the countries involved,] in the previous calendar year; 1/ 2/
- (iii) The purpose(s) for which the chemical(s) are produced or processed:
  - (a) conversion on-site (specify product type);
  - (b) sale or transfer to other domestic industry (specify final product type or end use);
  - (c) export (specify which country);
  - (d) other.

Facility

- (i) The name of the facility and of the owner, company, or enterprise operating the facility;
- (ii) The exact location of the facility (including the address, location of the complex, location of the facility within the complex including the specific building and structure number, if any);
- (iii) Whether the facility is dedicated to producing or processing the declared chemical(s) or is multipurpose;
- (iv) The production capacity of the facility for the declared chemical(s); 3/
- (v) Which of the following activities are performed with regard to the declared chemical(s) and for which purpose(s):
  - (a) production;
  - (b) processing with conversion into another chemical;
  - (c) processing without chemical conversion (e.g. purification);
  - (d) other - specify.

1/ Whether the total amount is to be expressed as an exact figure or within a range is to be discussed.

2/ One delegation expressed the view that aggregate national data on the production of any such chemical should also be provided.

3/ How to define production capacity remains to be agreed upon.

(vi) Whether declared chemicals are stored on-site in quantities greater than [ ]. 1/

2. A State Party shall notify the [international authority] of the name and location of any facility which intends, in the year following submission of the Annual Declaration, to produce or process

[more than [10 kg] [100 kg] [1,000 kg] 2/ per annum of] any chemical 3/ 4/ with an LD<sub>50</sub> equal to or less than 0.5 mg per kg bodyweight 5/ or an LCt<sub>50</sub> equal to or less than 2,000 mg-min/m<sup>3</sup> and which has or intends to acquire a production capacity 6/ for any such chemical exceeding 1,000 kg 2/ 7/ per annum. 8/ 9/

1/ The question of a threshold required further consideration.

2/ Some delegations felt that the thresholds for production and production capacity should correspond to militarily significant quantities.

3/ Some delegations expressed the view that additional criteria of suitability for chemical weapons purposes should be added.

4/ Some delegations expressed the view that whether or not a list of these chemicals would be needed, should be discussed.

5/ It is understood that further discussion is needed with regard to chemicals with a somewhat lower toxicity in the light of what might be agreed as regards footnote 6/ to paragraph 1.

6/ How to define production capacity remains to be agreed upon. In this context reference was made to the proposal contained in CD/CW/WP.171.

7/ It is understood that the quantitative value of the threshold for production capacity remains to be discussed.

8/ One delegation expressed the view that the question of production capacities should be considered in accordance with the relevant provisions in the Annex to Article VI, Schedules [2] and [3] (cf. CD/CW/WP.167 pp. 62, 68).

9/ It was pointed out that production plans might be changed at short notice and that the Convention therefore should provide for declarations of such revisions of production plans.

## VERIFICATION 1/

### Aim

3. The aim of the measures stipulated in Article VI, paragraph 6 shall be to verify that:

- (i) facilities declared under this Annex are not used to produce any chemical listed in Schedule [1];
- (ii) the quantities of declared chemicals produced or processed are consistent with needs for purposes not prohibited by the Chemical Weapons Convention;
- (iii) the declared chemicals are not diverted or used for purposes prohibited by the Chemical Weapons Convention.

### Obligation and Frequency

4. (i) Each facility notified to the [international authority] under this Annex shall be subject to systematic international on-site inspection on a routine basis if the production of any declared chemical exceeds ... per annum and the production capacity for any of the declared chemical(s) exceeds ... per annum.
- (ii) The number, intensity, duration, timing and mode of inspections for a particular facility shall be based on the risk to the objectives of the Convention posed by the relevant chemical, the characteristics of the facility and the nature of the activities carried out there. (Guidelines to be used as well as a system for "weighting" need to be developed. In this context, threshold(s) might need to be established). 2/

### Selection

5. The particular facility to be inspected shall be chosen by the [international authority] in such a way to preclude the prediction of precisely when the facility is to be inspected.

### Notification

6. A State Party shall be notified by the [international authority] of the decision to inspect a facility referred to in paragraph [4] [48] [12] hours prior to the arrival of the inspection team.

1/ Some of the provisions contained in this section have general application throughout the Convention. It is understood that the retention of these will be reviewed at a later stage in the negotiations.

2/ Some delegations expressed the view that possible criteria of "suitability for chemical weapons purposes" might be considered in this context rather than in the context of declarations.

### Host State Party

7. The host State Party shall have the right to designate personnel to accompany an international inspection team. The exercise of this right shall not affect the right of inspectors to obtain access to the facility, as provided by the Convention, nor shall it delay or otherwise impede the carrying out of the inspection.

### Initial Visit

8. Each facility notified to the [international authority] under this Annex shall be liable to receive an initial visit from international inspectors, promptly after the State becomes a party to the Convention. 1/

9. The purpose of the initial visit shall be to verify information provided concerning the facility to be inspected and to obtain any additional information needed for planning future verification activities at the facility, including inspection visits and use of on-site instruments.

### Agreement on Inspection Procedures

10. Each State Party shall execute an agreement, based on a model agreement, with the international authority, within ... months after the Convention enters into force for the State, governing the conduct of the inspections of the facilities declared by the State Party. The agreement shall provide for the detailed subsidiary arrangements which shall govern inspections at each facility.

11. The detailed subsidiary arrangements shall include, inter alia, the size of the team required for the inspection; the duration of the inspection; the relevant parts of the site to be inspected; and the need for permanent on-site instrumentation.

### Verification Inspections

12. The areas of a facility to be inspected under subsidiary arrangements may, inter alia, include:

- (i) areas where feed chemicals (reactants) are delivered and/or stored;
- (ii) areas where manipulative processes are performed upon the reactants prior to addition to the reaction vessel;

---

1/ One delegation pointed out that new facilities would have to be notified to the [international authority] at a later stage.

- (iii) feed lines as appropriate from subparagraph (i) and/or subparagraph (ii) to the reaction vessel, together with any associated valves, flow meters, etc.;
- (iv) the external aspect of the reaction vessel and its ancillary equipment;
- (v) lines from the reaction vessel leading to long- or short-term storage or for further processing of the designated chemical;
- (vi) control equipment associated with any of the items under subparagraphs (i) to (v);
- (vii) equipment and areas for waste and effluent handling;
- (viii) equipment and areas for disposition of off-specification chemicals.

13. The inspectors have the right at any stage during the inspection to obtain samples from any of the areas inspected. They also have the right to request that appropriate analyses be performed in their presence, either in-house or in a mobile field laboratory, or if necessary to have samples analysed at a laboratory designated by the [international authority]. They may request clarification of any ambiguities arising from the inspection.

14. The Technical Secretariat may retain at each site a sealed container for photographs, plans and other information that it may wish to refer to in the course of subsequent inspection.

#### Submission of Inspectors' Report

15. The inspectors shall submit a report to the [international authority] on the activities conducted by them and on their findings. 1/

16. In the event that any ambiguities arise which cannot be resolved in the course of the inspection, the inspectors may in their report recommend appropriate steps for clarification.

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1/ It was suggested that the report of the inspectors should be made available to the State Party subject to the inspection.

OTHER DOCUMENT(S)

Preparatory Commission 1/

1. For the purpose of carrying out the necessary preparations for the effective operation of the provisions of the Convention and for preparing for the first meeting of the Consultative Committee, the Depository of the Convention shall convene a Preparatory Commission not later than [30] days after the Convention has been signed by (to be determined) States.
2. The Commission shall consist of the representatives designated by the States which have signed the Convention.
3. The Commission shall be convened at [...] and remain in existence until the Convention comes into force and thereafter until the Consultative Committee has convened.
4. The expenses of the Commission shall be met by the States signatories to the Convention, participating in the Commission, [in accordance with the United Nations scale of assessment, adjusted to take into account differences between the United Nations membership and the participation of States signatories in the Commission].
5. All decisions of the Commission shall be made by [consensus] [a two-thirds majority].
6. The Commission shall
  - (a) elect its own officers, adopt its own rules of procedures, meet as often as necessary and establish such committees as it deems useful;
  - (b) appoint an executive secretary and establish a provisional technical secretariat with units in charge of preparatory work concerning the main activities to be carried out by the Technical Secretariat created under the Convention: declarations and data; inspectorate; evaluation of accounts and reports; agreements and negotiations; personnel, qualifications and training; development of procedures and instruments; technical support; finance and administration;
  - (c) make arrangements for the first session of the Consultative Committee, including the preparation of an agenda and draft rules of procedure;

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1/ Provisions on the Commission could be contained in a resolution of the United Nations General Assembly commending the convention or in an appropriate document associated with the Convention.

(d) make studies, reports and recommendations for the first session of the Consultative Committee and the first meeting of the Executive Council on subjects requiring immediate attention after the entry into force of the Convention, including the programme of work and the budget for the first year of activities of the Consultative Committee, the location of the permanent offices of the International Authority, technical problems relevant to activities connected with the implementation of the Convention, establishment of the Technical Secretariat and of its staff and financial regulations.

7. The Commission shall report on its activities to the first meeting of the Consultative Committee.

APPENDIX II

This appendix contains papers reflecting the results of work undertaken on issues in Clusters I, III and IV. They are enclosed to serve as a basis for future work.

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As regards the actual conduct of a challenge inspection it appears to the Commission that a conference of views has taken place on some aspects of the issues raised in paragraphs 8-12 of Part II below. On other aspects related to the conduct of an inspection, delegations have given expression to quite different approaches. A number of questions have been raised in the search for a satisfactory, problem-oriented description of these questions is also contained in Part II below. The actual inspection has been considered in this paper, issues to be raised and the request for information have been placed. These are referred to in Part II of this paper. It is to be noted that the request for information and the actual inspection are closely related and should be considered together.

- Comment. The need for informing the Executive Council could be discussed. However, it appears logical that the coordinating executive body of the Convention is informed about a development seen as a "rare event" and which implies an activation of the so-called "emergency" of the Convention.
- Comment. The time span of 24-48 hours from the request to the arrival of inspectors should be discussed.
- Comment. Situations could be envisaged, i.e., when the site to be inspected is not in the territory of the requested State Party. Such cases could however be considered in the context of questions related to jurisdiction.

On-site inspection on challenge

This paper represents the views of the Chairman on the state of affairs of consultations carried out by him on the issue of On-site Inspection on Challenge. Nothing contained therein constitutes any agreement and therefore does not bind any delegation. The paper is presented with the sole aim of facilitating for delegations to analyse the situation and to arrive at common approaches and positions in the future work of the Committee.

As a point of departure for the consultations was taken the four points of convergence detected by the Chairman of the Ad Hoc Committee for 1986 as a result of his consultations on Article IX (CD/734).

Furthermore, in evaluating different possible components of a system for challenge inspection the following three questions have proved generally acceptable and useful as yardsticks:

- Would they deter against violations?
- Would they give reassurance of compliance?
- Would they build confidence?

In the consultations a number of elements have been identified which taken together in the view of the Chairman could indicate a possible approach for initiating challenge inspection. This approach is outlined in points 1-7 in Part I below.

As regards the actual conduct of a challenge inspection it appears to the Chairman that a convergence of views has taken place on some aspects of the issue. These are reflected in points 8-13 of Part II below. On other aspects related to the conduct of an inspection, delegations have given expression to quite different approaches. A number of questions have been raised in the search for solutions. A problem-oriented description of these questions is also contained in Part II.

As regards the process after the actual inspection has been concluded only limited discussions have taken place. These are reflected in Part III of this paper.

PART I

The initiation of a challenge inspection

A possible approach could be the following:

- (1) Each State Party should have the right at any time to request a challenge inspection of any site under the "jurisdiction or control" of a State Party, anywhere, in order to clarify doubts about compliance with the provisions of the Convention. 1/
- (2) The request should be submitted to the Head of the Technical Secretariat. It should as precisely as possible specify the site to be inspected and the matters on which reassurance are required, as well as indicate the relevant provision(s) of the Convention, about which doubts of compliance have arisen. 2/
- (3) The Head of the Technical Secretariat should immediately notify the State Party to be inspected, and inform the members of the Executive Council about the request. 3/
- (4) A team of inspectors should be dispatched as soon as possible and arrive at the site to be inspected not later than ... hours after the request. 4/
- (5) The requested State should be obliged to admit the team of inspectors into the country and assist it so that it can arrive at the site on time. 5/

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1/ Comment: The question of "jurisdiction or control" spans over many parts of the Convention. It is under continuous discussion and the exact formulations remain to be agreed upon.

2/ Comment: The designation of the Head of the Technical Secretariat as the recipient of the request indicates that there is no political "filter". As regards the contents of the request the above mentioned elements appear to be necessary for the identification of the site and the problem. The possible inclusion of further information needs to be discussed. In this context it has been suggested that the request would need to specify where and when the suspected violation has occurred and what it consists of.

3/ Comment: The need for informing the Executive Council could be discussed. However, it appears logical that the representative executive body of the Convention is informed about a development seen as a "rare event" and which implies an activation of the so-called "safety-net" of the Convention.

4/ Comment: The time span of 24-48 hours from the request to the arrival has been discussed.

5/ Comment: Situations could be envisaged, i.a. when the site to be inspected is not on the territory of the requested State Party. Such cases could however be considered in the context of questions related to jurisdiction.

- (6) The inspectors should at the arrival be permitted to secure the site in a way they deem necessary to ensure that no material of relevance for the inspection is removed from the site.
- (7) Access to the site for the inspection team should be provided not later than ... hours after the request.

## PART II

### The conduct of a challenge inspection

A possible approach could be the following:

- (8) The requested State should be under fundamental obligation to demonstrate its compliance with the Convention.
- (9) The inspection should be conducted in accordance with the request. The inspectors should have the access to the site which they deem necessary for the conduct of their mission. They should conduct the inspection in the least intrusive manner possible to accomplish their task.
- (10) The team of inspectors should consult with the requested State, on ways and means to conduct the inspection of the site in a manner which protects sensitive installations or objects not related to chemical weapons. 1/
- (11) In the exceptional event the requested State deems the inspection team's access to the site contrary to its vital national security interests, not connected with chemical weapons, it may propose alternative arrangements to demonstrate compliance.
- (12) If alternative arrangements are proposed the requesting and requested States Parties should make every possible effort to reach agreement 2/ on ways and means for the inspection team to carry out its task. In this process advice may be sought from and given by the inspection team. 3/

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1/ Comment: Consultations could be envisaged before as well as during the inspection. It has also been pointed out that detailed provisions as regards methods and instruments to be used would need to be discussed.

2/ Comment: It has been pointed out that in this process the possibility for the requesting State to modify its original request should also be considered.

3/ Comment: In this context the possibility of more fully utilizing the presence of the inspection team was discussed. Suggestions have been made, inter alia, that the team itself might usefully suggest ways and means for it to carry out its task, and that the team might "test" the alternatives suggested.

(13) If agreement on alternative arrangements is reached within ... hours 1/ between the requesting and requested States Parties the inspection team should carry out its task in accordance with those arrangements.

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If no agreement on alternative arrangements can be reached between the requesting and requested States Parties within the stipulated time period, a number of questions arise. These have been extensively but inconclusively addressed during the consultations. Some main lines of thoughts appear to have emerged:

- One line of thought has been that if no agreement on alternative arrangements could be reached the inspection should be carried out in accordance with points 9 and 10 above.
- Another line of thought has been that failing such an agreement the inspection team should return to the Headquarters and report to the Executive Council on the matter. 2/
- A third line of thought has been that the inspection team should report on the matter to the Executive Council and that the Executive Council within ... hours should express itself on whether the inspection team should carry out its task in accordance with the request or alternative arrangements proposed. 3/

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1/ Comment: Some delegations would like this period to be as short as possible. (24 hours has been mentioned. Another suggestion has been a period of 48 hours from the request.) Others have been more inclined to allow as much time as possible for the two parties to reach agreement.

2/ Comment: In this context it has also been suggested that it might be valuable if the team could explore the alternatives suggested, before returning to the Headquarters.

3/ Comment: The exact role of the Executive Council at this stage of the process would need to be carefully considered. A number of questions must be addressed.

- In which form would the Executive Council express itself: a decision? an opinion? a proposal? a recommendation?
- How should the Executive Council arrive at its position? Qualified majority? On which side should such a majority be mustered?
- The composition of the Executive Council.

The last stages in the process of a challenge inspection has only been addressed in the consultations in a limited fashion. However there appears to be broad consent

- that a deadline should be set by which the inspection team should conclude the inspection and return to the Headquarters
- that the inspectors' report should be strictly factual and only contain directly relevant information
- that copies of the report should be made available to the requesting State, the requested State and to the Executive Council.

### PART III

#### The process after the inspection

A number of questions have been raised as regards the further process, inter alia

- What would be the role of the Executive Council in the evaluation of the report?
- What would be the role of the requesting and requested State at this stage?
- Which further actions could be considered if a violation of the Convention has been established?
- Which further actions could be considered if it can be established that the rights under Article IX have been abused?

Principles and Order of Destruction of Chemical Weapons

During the second part of the session the Chairman of the Ad Hoc Committee conducted consultations on the Principles and Order of Destruction of Chemical Weapons. As a starting point was taken Annex IV, Section III, of the rolling text (CD/CW/WP.167). During the consultations the following elements and ideas emerged, which, in the view of the Chairman, could constitute building blocks in the further search for solutions to the problems involved.

1. The elaboration of the Order of Destruction shall build on the undiminished security for all States during the entire destruction stage, confidence-building in the early part of the destruction stage, gradual acquisition of experience in the course of destroying chemical weapons stocks and applicability irrespective of the actual composition of the stockpiles and the methods chosen for the destruction of the chemical weapons.
2. All States Parties possessing chemical weapons shall begin destruction not later than one year after entry into force for it of the Convention, and all stockpiles must have been destroyed by the end of the tenth year.
3. The entire destruction period is divided into nine annual periods. 1/

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1/ The question arises whether such a division would be sufficient or whether it could be useful also to group the annual periods into a few phases with different targets set for each phase. For example, the view was expressed that during an initial phase the destruction process could be such that a quantitative levelling out between different stockpiles of State Parties takes place.

4. The chemical weapons in each stockpile are divided into categories. 1/
5. For each category a comparison factor shall be established.
  - The comparison factor for categories containing chemicals shall be agent tons, i.e. the aggregate weight of the chemicals within each such category.
  - The comparison factor(s) for unfilled munitions shall be expressed in number of items and/or the aggregate fill volume and for other devices and equipment in number of items.

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1/ The precise categorization will need to be discussed.

One possibility could be:

- Chemicals listed in Schedule [1]
- Chemicals listed in Schedule [2] or [3]
- Unfilled munitions, other devices, equipment, etc.

Another possibility could be:

- Soman, VX, QL
- Sarin, DF, Tabun
- Mustards, Lewisites
- Incapacitants, Irritants
- Other lethal chemicals
- All other chemicals stockpiled as chemical weapons
- Unfilled munitions, other devices, equipment, etc.

Chemicals in bulk and chemicals in munition should be calculated separately.

6. Within each category a State Party shall determine its detailed plans for each annual period in such a way that not more than what is specified in the Convention will remain by the end of each such period. 1/

These plans shall be submitted to and approved by the Executive Council: 2/

7. A State Party is not precluded from destroying its stocks at a faster pace.

8. Each State Party shall report annually on the implementation of the destruction in each annual period.

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1/ The possibility could also be discussed that States Parties destroy no less than  $1/n$  part of each stockpile or at some other ratio related to the original size of the stockpile.

2/ In accordance with the provisions in Section V of the Annex to Article IV as regards the plans for elimination of chemical weapons (to be elaborated).

Guidelines for Schedule [1] 1/

The following guidelines, singly or in combination, should be taken into account in considering whether a chemical should be included in Schedule [1];

1. Super-toxic lethal chemicals which have been stockpiled as chemical weapons.
2. Super-toxic lethal chemicals which pose a particular risk of potential use as chemical weapons.
3. Super-toxic lethal chemicals which have little or no use except as chemical weapons.
4. Super-toxic lethal chemicals which possess physical and chemical properties enabling them to be used as chemical weapons. 2/
5. Super-toxic lethal chemicals with chemical structure related/similar to those super-toxic lethal chemicals already listed in Schedule 1. 3/
6. Chemicals whose principal effect is to cause temporary incapacitation and which possess physical and chemical properties enabling them to be used as chemical weapons.
7. Any toxic chemical with a chemical structure related/similar to those chemicals already listed in Schedule 1. 3/
8. Other chemicals which have been stockpiled as chemical weapons.
9. Other chemicals which have little or no use except as chemical weapons.
10. Key precursors which participate in a one-stage process of producing toxic chemicals in munitions and devices. 4/
11. Key precursors which pose a high risk to the objectives of the Convention by virtue of their high potential for use to produce chemical weapons.

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1/ The basis and modalities for the application and revision of the guidelines are to be developed.

2/ A view was expressed that compounds listed in Schedule [1] should possess the properties of chemical warfare agents.

3/ The view was expressed that this by itself would not be sufficient to include a chemical in Schedule [1].

4/ One delegation believes that this provision is not necessary and that it is already covered under point 12.

12. Key precursors which may possess the following characteristics.

- (i) it may react with other chemicals to give, within a short time, a high yield of a toxic chemical defined as a chemical weapon,
- (ii) the reaction may be carried out in such a manner that the toxic product is readily available for military use, and
- (iii) key precursors which have little or no use except for chemical weapons purposes.

POSSIBLE FACTORS IDENTIFIED TO DETERMINE THE NUMBER, INTENSITY,  
DURATION, TIMING AND MODE OF INSPECTIONS OF FACILITIES HANDLING  
SCHEDULE [2] CHEMICALS 1/

1. Factors related to the listed chemical
  - (a) Toxicity of the end product.
2. Factors related to the facility
  - (a) Multipurpose or dedicated facility.
  - (b) Capability and convertibility for initiating production of highly toxic chemicals.
  - (c) Production capacity.
  - (d) On-site storage of listed key precursors in quantities exceeding ... tonnes.
  - (e) Location of the facility and infrastructure for transportation.
3. Factors related to the activities carried out at the facility
  - (a) Production e.g.: continuous, batch, types of equipment.
  - (b) Processing with conversion into another chemical.
  - (c) Processing without chemical conversion.
  - (d) Other types of activities, e.g., consumption, import, export, transfer.
  - (e) Volume produced, processed, consumed, transferred.
  - (f) Relationship between maximum and utilized capacity for a scheduled chemical.
    - multipurpose facility
    - dedicated facility
4. Other factors
  - (a) International monitoring by on-site instruments.
  - (b) Remote monitoring.

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1/ The order in which these factors are listed does not indicate any priority.

Model for an Agreement Relating to Facilities Producing, Processing  
or Consuming Chemicals Listed in Schedule [2] 1/

1. Identification of the facility

- (a) Facility identification code
- (b) Name of the facility
- (c) Owner(s) of the facility
- (d) Name of the company or enterprise operating the facility
- (e) Exact location of the facility
  - . Location of the complex
  - . Location of the facility within the complex, including the specific building and structure number, if any
  - . Location of relevant support facilities within the complex, e.g., research and technical services, laboratories, medical centres, waste treatment plants
- (f) Determination of the area(s) and place(s)/site(s) to which inspectors shall have access

2. Information on the facility

This agreement is based on the design information obtained during the initial visit on [date of visit]. Design information should include,

- (a) Data on the production process (type of process, e.g., continuous or batch, type of equipment, the technology employed, process engineering particulars)
- (b) Data on processing with conversion into another chemical (description of the conversion process, process engineering particulars and end-product)
- (c) Data on processing without chemical conversion (process engineering particulars, description of the process and the end-product, concentration in the end-product)
- (d) Data on waste treatment (disposal and/or storage, waste treatment technology, recycling)

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1/ This paper relates to agreements which have commonly been named "facility attachments". Further work is needed on this issue.

- (e) Data on safety and health measures at the facility
- (f) Data on clean-up procedures and general overhauls
- (g) Data on feedstocks used in the production or processing of declared chemicals (type and capacity of storage)
- (h) Maps and plans of the facility, including data on infrastructure for transportation (site maps showing, for example, all buildings and functions, pipework, roads, fences, mains electricity, water and gas points, and diagrams indicating the relevant material flow at the designated facility)

2.1. Storage of information

Designation of information, provided about the facility under paragraph 2, which shall be kept by the International Authority under lock and key at the facility. (In the event of unresolved ambiguities, the International Authority shall have the right to study such information.)

3. Number and modalities of inspections.

After the initial visit, the number and modalities of inspections shall be decided by the Technical Secretariat on the basis of guidelines (compare CD/CW/WP.167, page 63, subparagraph 5.ii. and CD/CW WP.167, Appendix II, page 3).

4. Verification measures and identification of the specific area(s) and place(s) of a facility to be inspected

- (a) Identification of the relationship between feedstocks and the quantity of end-products
- (b) Identification of key points for measurement (KMP) and sample-taking (STP)
- (c) Identification of methods for continuous monitoring and surveillance, e.g.
  - . key points for the application of monitoring and surveillance measures
  - . installed instruments and devices, seals and markers, methods to check the proper functioning of those instruments, servicing of installed instruments
  - . activities to be undertaken by the State Party concerned with a view to providing the conditions necessary for the installation and proper functioning of the devices
- (d) Certification of relevant losses within the production process and their implications for key measurement points (KMP)

5. Inspection activities

5.1. Mode of routine inspection

To be developed on the basis of the initial visit

5.2. Indication of the scope of the inspection effort in agreed areas under ordinary circumstances

Access to the area to be inspected, including all key points. Activities may comprise:

(a) Examination of relevant records

(b) Identification of relevant plant equipment

(c) Identification and validation of measuring equipment (examination and calibration of measuring equipment; verification of measuring systems using, as appropriate, independent standards)

(d) Taking of analytical samples

(e) Verification of chemical inventory records

- verification of the operator's inventory-taking for completeness and accuracy

- verification of the quantities of feedstocks

(f) Observation of operations relating to movement of chemical substances in the plant

(g) Installation, servicing and review of surveillance and monitoring instruments

(h) .

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5.3. Specific arrangements for the use of special equipment

As the need arises, specific arrangements for the use of special equipment, as requested by inspectors.

6. Provisions governing sample-taking, on-site analyses of samples and on-site analysis equipment

(a) Sample-taking (e.g., standardized procedures)

(b) On-site analyses (e.g., provisions concerning on-site/in-house analyses, analytical methods, equipment, precision and accuracy of analyses)

(c) Duplicates and additional samples

## 7. Records

### 7.1. Type of records

The records to be examined shall be determined after the initial visit and shall include the following:

(a) Accounting records (for example, discards, retained wastes, shipments of end-products, receipts/shipments)

(b) Operating records

Operating records used to establish the quantity, quality and composition of the end-product. These may include:

- . Information on any accident that resulted in a loss/gain of material
- . Information on dissolution, evaporation, etc.

(c) Calibration records

Information on the functioning of analytical/monitoring equipment

### 7.2. Location and language of records

To be determined during the initial visit

### 7.3. Access to records

To be determined after the initial visit

### 7.4. Retention period of records

To be determined on the basis of the initial visit

## 8. Services to be provided by the facility

Point of contact for each type of service, e.g.

- . operator assistance
- . medical and health services

9. Specific facility health and safety rules and regulations to be observed by inspectors

10. Changes, revision and updating of advance information to be provided on the facility

(To be announced in reference to the paragraph on the design information obtained during the initial visit)

11. Interpretation services

Proposal by the Co-ordinator for Cluster I

Annex to Article IV (Section IV)

IV. PRINCIPLES AND METHODS FOR THE VERIFICATION  
OF THE DESTRUCTION OF CHEMICAL WEAPONS 1/

1. The aim of verification of destruction of chemical weapons shall be:
  - to confirm the identity and quantity of the chemical weapons stocks to be destroyed, and
  - to confirm that these stocks for all practical purposes have been destroyed.
2. General plans for destruction of chemical weapons

The general plan for destruction of chemical weapons, submitted pursuant to Article IV shall specify:

- (a) a general schedule for destruction, giving types and quantities of chemical weapons to be destroyed in each period,
- (b) for each existing or planned chemical weapons destruction facility:
  - name and address,
  - location,
  - chemical weapons intended to be destroyed,
  - method of destruction,
  - capacity,
  - expected period of operation,
  - products of the destruction process.

3. Detailed plans for destruction of chemical weapons

These plans shall be submitted to the Consultative Committee in accordance with Article IV and shall specify:

- (a) the number of chemical weapons destruction facilities and a detailed schedule for the destruction of chemical weapons at each of these facilities,
- (b) the aggregate quantity of each individual type of chemical weapons planned to be destroyed at each facility,

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1/ This section is at a very early stage of elaboration. Further work is needed on it.

(c) data about each facility:

- name, postal address, geographical location,
- method of destruction,
- end-products,
- layout plan of the facility,
- technological scheme,
- operation manuals,
- method of storage and volume of the facility's storage, estimated by types and quantities of chemical weapons,
- types and quantities of chemical weapons kept at the storage during each destruction period,
- the system of verification,
- safety measures in force at the facility,
- living and working conditions for the international inspectors.

4. Review of detailed plans for the destruction of chemical weapons

(a) On the basis of the detailed plan for destruction and proposed measures for verification submitted by the State Party, and as the case may be, on experience from previous inspections and on the relevant agreement(s) on subsidiary arrangements, the Technical Secretariat shall prepare before each destruction period, a plan for verifying the destruction of chemical weapons, consulting closely with the State Party. Any differences between the Technical Secretariat and the State Party should be resolved through consultations. Any unresolved matters shall be forwarded to the Executive Council <sup>1/</sup> for appropriate action with a view to facilitating the full implementation of the Convention.

(b) The agreed combined detailed plans for destruction and verification plans, with an appropriate recommendation by the Technical Secretariat, will be forwarded to the members of the Executive Council for review. The members of the Executive Council shall review the plans with a view to approving them, consistent with verification objectives. This review is designed to determine that the destruction of chemical weapons, as planned, is consistent with the obligations under the Convention and the objective of destroying the chemical weapons. It should also confirm that verification schemes for destruction are consistent with verification objectives, and are efficient and workable. This review should be completed [60] days before the destruction period.

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<sup>1/</sup> The role of the Executive Council in the review process will need to be reviewed in the light of its composition and decision-making process.

(c) Each member of the Executive Council may consult with the Technical Secretariat on any issues regarding the adequacy of the combined plan for destruction and verification. If there are no objections by any members of the Executive Council, the plan shall be put into action.

(d) If there are any difficulties, the Executive Council shall enter into consultations with the State Party to reconcile them. If any difficulties remain unresolved they should be referred to the Consultative Committee.

(e) Destruction and verification should proceed according to the agreed plan as referred to above. The verification should not interfere with the destruction process.

5. After a review of the detailed plans of destruction of chemical weapons, the Technical Secretariat, if the need arises, will enter into consultation with the State Party concerned in order to ensure its chemical weapons destruction facility(ies) is(are) designed to assure destruction of chemical weapons, to allow advanced planning on how verification measures may be applied and to ensure that the application of verification measures is consistent with proper facility(ies) operation, and that the facility(ies) operation allows appropriate verification.

6. Agreements on subsidiary arrangements

For each destruction facility, States Parties should conclude with the International Authority detailed agreements on subsidiary arrangements for the systematic verification of destruction of chemical weapons. Such agreements shall be based on a Model Agreement and shall specify, for each destruction facility, the detailed on-site inspection procedures and arrangements for the removal of chemical weapons from the storage facility at the destruction facility, transport from this storage facility to their destruction and the monitoring by on-site instruments, taking into account the specific characteristics of the destruction facility and its mode of operation. The Model Agreement shall include provisions to take into account the need for maintenance and modifications.

7. International inspectors will be granted access to each chemical weapons destruction facility (...) prior to commencement of active destruction phases for the purpose of carrying out an engineering review of the facility, including the facility's construction and layout, the equipment and instruments for measuring and controlling the destruction process, and the checking and testing of the accuracy of the verification equipment.

8. Systematic international on-site verification of destruction of chemical weapons

(a) The inspectors will be granted access to conduct their activities at the chemical weapons destruction facilities and the chemical weapons storage facilities thereat during the entire active phase of destruction. They will conduct their activities in the presence and with the co-operation of representatives of the facility's management and the National Authority if they wish to be present.

(b) The inspectors may monitor by either physical observation or devices:

- (i) the chemical weapons storage facility at the destruction facility and the chemical weapons present;
- (ii) the movement of chemical weapons from the storage to the facility;
- (iii) the process of destruction (assuring that no chemical weapons are diverted);
- (iv) the material balance (to be elaborated further), and
- (v) the accuracy and calibration of the instruments.

(c) To the extent consistent with verification needs, verification procedures should make use of information from routine facility operations.

(d) After the completion of each period of destruction, the Technical Secretariat shall certify the declaration of the National Authority, reporting the completion of destruction of the designated quantity of chemical weapons.

(e) International Inspectors shall, in accordance with agreements on subsidiary arrangements:

- have unimpeded access to all parts of the destruction facilities, including facilities' storages, any munitions, devices, bulk containers, or other containers therein. While conducting their activity, Inspectors shall comply with the safety regulations at the facility. The items to be inspected will be chosen by the Inspectors in accordance with the verification plan that has been agreed to by the State Party and approved by the Executive Council,
- bring with them and use such agreed instruments as may be necessary for the completion of their tasks,
- monitor the systematic on-site analysis of samples during the destruction process,
- receive, if necessary, samples taken at their request from any devices bulk containers and other containers at the facility. Such samples will be taken and analysed by representatives of the State Party in the presence of the Inspectors,
- communicate freely with the International Authority,
- if necessary, (to be discussed) transfer samples for analysis off-site at a laboratory designated by the International Authority, in accordance with agreed procedures,
- ensure, in accordance with procedures (to be developed), that samples transported, stored and processed are not tampered with,
- afford the opportunity to the host State Party to be present when samples are analysed,

(f) The State Party receiving the inspection shall, in accordance with agreed procedures:

- have the right to accompany the International Inspectors at all times during the inspection and observe all their verification activities at the destruction facility, including the facility's storage;
- have the right to retain duplicates of all samples taken at the Inspectors' request and be present when samples are analysed;
- have the right to inspect any agreed standard instrument used or installed by the International Inspectors and to have it tested in the presence of its personnel;
- provide assistance to the International Inspectors, upon their request, for the installation of seals or monitoring devices and the analysis of samples on-site as appropriate to the monitoring of the destruction process;
- receive copies of the reports on inspections of its destruction facility(ies);
- receive copies, at its request, of the information and data gathered about its destruction facility(ies) by the International Authority.

(g) If Inspectors detect irregularities which may give rise to doubts they will report the irregularities to the representatives of the facility and the National Authority and request that the situation be resolved. Uncorrected irregularities will be reported to the Executive Council.

(h) After each inspection to the destruction facility, International Inspectors shall submit a report with their findings to the International Authority which will transmit a copy of this report to the State Party having received the inspection. Information (to be designated) received during the inspection shall be treated as confidential (procedures to be developed).

9. Chemical weapons storage facilities at chemical weapons destruction facilities

(To be developed)

Article VIII

Co-ordinator's Discussion Paper

1. In view of the significant progress made in the elaboration of the text and annexes of the future CW Convention, it has become possible and necessary to give thorough consideration to the organizational machinery to be established under the Convention. This is what the discussions held so far in Working Group C have borne out.

The following questions will have to be addressed:

(a) How far will the detailed procedures developed in connection with Articles IV, V and VI influence the powers and functions of the main organs and how detailed should they be?

(b) In view of the considerable practical implementation work the main organs will be responsible for, how should they interact with each other and be interconnected?

(c) How can both the stability of the Convention and sufficient dynamism and flexibility to adapt to scientific-technological advances be ensured?

(d) How should the legal framework be defined in which the organs will operate? Should an "International Organization for the Prohibition of Chemical Weapons" be constituted as a legal personality under international law?

It must be attempted to build on the results achieved thus far and to draw on the examples of international organizations set up pursuant to other legal instruments.

(Although treaty language is used in the following, the text given is meant to serve as a basis for the discussion of contents.)

Article VIII

The Organization

A. General Provisions

1. There is hereby established the International Organization for the Prohibition of Chemical Weapons.
2. All States Parties shall ipso facto be members of the Organization.
3. The seat of the Organization shall be ...

Comment: All States Parties to the Convention should be members of the Organization. Thus, no provisions governing application for membership, admittance or expulsion would be necessary.

4. There are hereby established as the main organs of the Organization the General Conference, the Executive Council and the Technical Secretariat.

Comment: At this stage, it appears necessary to decide on the names of the organs. Judged by the tasks to be entrusted to the principal organ to be set up under the Convention, the name "Consultative Committee" does not seem to be appropriate. Besides its function as a forum for consultation among States Parties, the organ should address the most important problems to be solved in connection with the implementation of the Convention. The large membership this organ is bound to have does hardly warrant the term "committee". In contrast to the text contained in WP.167, it seems to be preferable to establish ipso jure the other two main organs at the time the Convention enters into force. Growing out of the Preparatory Commission, the Technical Secretariat should, for example, be able to function in an orderly manner from the first day on.

B. The General Conference

- (a) Composition, procedure and decision-making

Comment: Apart from the need to reflect the outstanding consensus on the decision-making procedure and on how the blank can be filled concerning the number of members necessary to convene an extraordinary session, the existing text of Article VIII. B. does not seem to require major changes. A provision on the first session, a provision corresponding to Article VIII. A. 3., would have to be included in that text.

- (b) Powers and functions

1. The Conference shall be the principal organ of the Organization. The other main organs shall be accountable to the Conference, as specifically provided for in the Convention.
2. The Conference shall oversee the implementation of the Convention, consider any questions or matters relevant to the Convention or the powers and functions of any subsidiary organs, foster consultation and co-operation among States Parties for the advancement of chemical industry for peaceful purposes, and promote the verification of compliance with this Convention.

3. At its regular sessions, the Conference shall, on the basis of the annual report of the Organization, review the implementation of the Convention and provide a forum for the discussion of any questions raised in relation to the objectives or the implementation of the Convention.

4. In addition, the powers and functions of the Conference shall be:

(a) to consider and approve the annual programme and budget of the Organization, as submitted by the Executive Council,

(b) to encourage international scientific and technical co-operation for peaceful purposes, in the chemical field, as provided for in Article XI,

(c) to review scientific and technological developments which could affect the operation of the Convention, especially in regard to agreed lists,

(d) to elect the members of the Executive Council,

(e) to appoint the Director of the Technical Secretariat [upon the recommendation of the Executive Council],

(f) to establish, as appropriate, such subsidiary organs as it finds necessary for the exercise of its functions in accordance with this Convention,

(g) to adopt the rules of procedure [of the Executive Council, including the method of selecting its Chairman],

(h) to consider and approve the reports of the Executive Council, e.g., reports on challenge inspections and other fact-finding activities, in accordance with Article IX,

(i) ...

Comment: These four articles should describe the functions on the basis of which the principal organ of the Organization should decide the general policies of the Organization. The second paragraph is largely identical to paragraph 1 in part C of Article VIII of the rolling text. The implementation review function has been elaborated further in a new article relating to the consideration of the annual report. That document should incorporate the regular reports which subsidiary organs are required to give on their fields of activity. This would make it possible to assess how the provisions of the Convention and its annexes are implemented and how the organs of the Convention function. The conclusions drawn from that might lead to amendments to the annexes. In view of the detailed procedural provisions included in the annexes, a rather simple way to amend them either at regular or special sessions should be worked out. Owing to the amount of scientific-technological and organizational work entrusted to the Technical Secretariat, especially in consequence of Articles IV, V and VI, detailed prescriptions concerning the utilization of resources should be included in the programme and budget of the Organization. Among other things, the programme and budget should deal with the following issues:

- receiving, storing and processing the data obtained through declarations, information provision procedures, the plans presented by States Parties and the findings of inspections,

- . operating the verification system, e.g., the planning and evaluation of inspections, follow-up actions, reporting on the results of inspections,
- . developing equipment, techniques and specific procedures for monitoring, measurement, containment and surveillance and for supplying the International Inspectorate with the necessary equipment,
- . recruiting and training inspectors, designating international inspectors, providing administrative support to inspectors, negotiating agreements with States Parties relating to verification activities, and handling personnel, budget and financial planning matters,
- . co-operating with the national authorities of States Parties and facilitating consultation and co-operation among States Parties.

5. The Conference shall consider at special sessions such issues of primary importance for the objectives or the implementation of the Convention as new fundamental scientific and technological developments, violations of the Convention and amendments to annexes to articles of the Convention.

Comment: Most special powers and functions set out in Article VIII. C. 2 of the rolling text are contained, partially redrafted, in the above provisions. While it is an important function of the Organization to carry out verification activities, such a function can hardly be considered a duty to be performed by one of its policy-making organs. The provision on Review Conferences seems to be in need of further study in the light of the annual review to be undertaken by the General Conference.

#### C. The Executive Council

##### (a) Composition, procedure and decision-making

Comment: This chapter needs further in-depth discussion.

##### (b) Powers and functions

1. The Executive Council shall be the executive organ of the Organization. It shall be responsible to the Conference and have delegated authority to represent the Organization and to oversee the effective implementation of and compliance with the Convention when the Conference is not in session.

Comment: While the powers and functions of the Executive Council are to be formulated in full recognition of its character as a subsidiary organ of the Conference, the expression "delegated authority" seems to be appropriate only in relation to Conference functions exercised by proxy.

2. The Executive Council shall, at the regular sessions of the Conference, report on the exercise of its functions and present such special reports as the Conference may request.

3. In particular, the Executive Council shall:

(a) supervise and co-ordinate the activities of the Technical Secretariat and the other subsidiary organs, especially the implementation of the annual programme and budget,

(b) propose to the Conference, as appropriate, the establishment of such subsidiary organs as it finds necessary for the exercise of the functions of the Organization,

(c) submit to the Conference for approval the proposed annual report and the annual programme and budget of the Organization,

(d) make recommendations to the Conference concerning any question or matter within the competence of the Organization,

(e) enter into agreements with the United Nations or other international organizations on behalf of the Organization, subject to approval by the Conference,

(f) approve agreements, concluded by the Director of the Technical Secretariat with States Parties, relating to verification activities,

(g) request a special meeting of the Conference,

(h) obtain, keep and disseminate under established procedures information, submitted by States Parties, pertaining to the Convention,

(i) consider reports on on-site inspections, submitted by the Director of the Technical Secretariat,

(j) receive requests for information and clarification regarding compliance with the Convention, including requests for fact-finding, and decide and oversee specific actions to be taken upon such requests,

(k) ...

## Article VIII

### Problems and Questions to be Addressed in the Further Elaboration of the Article

#### I. International Organization

1. Should the legal framework, in which the organs will operate, be defined as an independent legal personality under international law?

2. Problems pointed out during the discussion:

Powers to enter into agreements with other international organizations and with States Parties.

Each State Party is an ipso facto member of the Organization.

3. Beside the overall mandate of the Organization to implement the provisions of the Convention, is a detailed description of its objectives necessary?

#### II. Main organs

1. Should there be a three-layer structure?

- . Principal organ
- . Executive organ
- . Technical organ

2. Should the name of the principal organ be changed from "Consultative Committee" into "General Conference"?

3. How should the powers and functions of the principal organ be defined in order that it may carry out its primary task, which is to determine the Organization's general policies?

#### III. Review conferences

The regular review of the implementation of the Convention would be undertaken on the basis of the annual report of the Organization. Conclusions to be drawn could be reflected, inter alia, in its annual programme and budget. In the light of this regular review, the issue of holding review conferences at longer intervals will have to be addressed. The objective of such conferences would be a comprehensive assessment of the implementation of every article of the Convention. The principal organ of the Organization would be the appropriate forum for such a conference, thus stressing the role of this body.

#### IV. Amendments to annexes

The solution to this problem would be to reconcile the two objectives: to provide for the stability of the Convention and to allow practical

experience and new scientific-technological achievements to be reflected in the detailed procedure. The solution of this problem will have to be taken into account in the development of Article VIII.

V. The Executive Council

1. What are the powers and functions this organ needs in order to discharge its important responsibilities? What kind of division of labour should exist between the principal and the executive organ?

2. Should the functions the Executive Council would have in terms of "delegated authority" be those which the principal organ, when in session, would take back from the Executive Council?

Therefore, an exact differentiation between "delegated" and genuine functions would be advisable. On the other hand, besides delegated functions, as provided for under (C) (b) 1., there could be a provision to the effect that the General Conference should be free to delegate other functions to the executive organ.

3. Would the accountability of the Executive Council to the General Conference, the regular and special reports the Executive Council will be required to make to the Conference and its responsibility for implementing the decisions of the Conference correspond to the relationship between a principal and an executive organ?

4. Should the three main organs be established ipso jure on the day the Convention enters into force in order to ensure that they become operational as quickly as possible?

II. Privileges and Immunities of Inspectors

1. To the extent necessary for the effective exercise of their functions, inspectors shall be accorded the following privileges and immunities, which shall also apply to the time spent travelling in connection with their missions:

(a) immunity from personal arrest or detention and from seizure of their personal baggage;

(b) immunity from legal process of every kind in regard to what they do, say or write in the performance of their official functions;

(c) inviolability of all the papers, documents, equipment and vehicles they carry with them;

2. These guidelines relate to the activities of inspectors in States Parties, but in connection with routine verification in States Parties.



Attachment (A) to CD/CW/WP.175

Cluster IV

Guidelines on the International Inspectorate \*/

I. Designation

1. Verification activities in a State Party to the Convention shall only be performed by inspectors designated to this State in advance.
2. The Technical Secretariat shall communicate, in writing, to the State concerned the names, nationality and ranks of the inspectors proposed for designation. Furthermore, it shall furnish a certificate of their qualifications and enter into such consultations as the State concerned may request. The latter shall inform the Secretariat, within (30) days after receipt of such a proposal, whether or not it will accept the designation of each inspector proposed. The inspectors accepted by the State Party shall be designated to that State. The Technical Secretariat shall notify the State concerned of such a designation.
3. Should any State Party object to the designation of inspectors, be it at the time they are proposed or at any time thereafter, it shall inform the Technical Secretariat of its objection. If a State Party raises objections to an inspector already designated, this objection shall come into effect 30 days after receipt by the Technical Secretariat. The Technical Secretariat shall immediately inform the State concerned of the withdrawal of the designation of the inspector. In cases of objections to designation of inspectors the Technical Secretariat shall propose to the State Party in question one or more alternative designations. The Technical Secretariat shall refer to the Executive Council any repeated refusal by a State Party to accept the designation of inspectors if the Secretariat is of the opinion that such refusal impedes inspections to be conducted in the State concerned.

II. Privileges and immunities of inspectors

1. To the extent necessary for the effective exercise of their functions, inspectors shall be accorded the following privileges and immunities, which shall also apply to the time spent travelling in connection with their missions:
  - (a) immunity from personal arrest or detention and from seizure of their personal baggage;
  - (b) immunity from legal process of every kind in regard to what they do, say or write in the performance of their official functions;
  - (c) inviolability of all the papers, documents, equipment and samples they carry with them;

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\*/ These guidelines relate to the activities international inspectors carry out in connection with routine verification in States Parties.

(d) the right to use codes for their communication with the Secretariat and to receive papers or correspondence by courier or in sealed bags from the Secretariat;

(e) multiple entry/exit and/or transit visas and the same treatment in entry and transit formalities as is given to members of comparable rank of diplomatic missions;

(f) the same currency and exchange facilities as are accorded to representatives of foreign Governments on temporary official missions;

(g) the same immunities and facilities in respect to their personal baggage as are accorded to members of comparable rank of diplomatic missions.

2. Privileges and immunities shall be granted to inspectors for the sake of the Convention and not for the personal benefit of the individuals themselves. The Secretariat shall have the right and the duty to waive the immunity of any inspector whenever it is of the opinion that the immunity would impede the course of justice and can be waived without prejudice to the Convention.

3. If any State Party to the Convention considers that there has been an abuse of an above-mentioned privilege or immunity, consultations shall be held between that State and the Secretariat to determine whether such an abuse has occurred and, if so, to ensure that it does not repeat itself.

### III. General rules governing inspections and the conduct of inspectors

1. Inspectors shall carry out their functions under the Convention on the basis of the inspection mandate issued by the Technical Secretariat. They shall refrain from activities going beyond this mandate.

2. The activities of inspectors shall be so arranged as to ensure on the one hand the effective discharge of the inspectors' functions and, on the other, the least possible inconvenience to the State concerned and disturbance to the facility or other location inspected. Inspectors shall only request the information and data which are necessary to fulfil their mandate. States Parties shall furnish such information. Inspectors shall not communicate to any State, Organization or person outside the Technical Secretariat any information to which they have access in connection with their activities in a State Party. They shall abide by relevant regulations established within the Technical Secretariat for the protection of confidential information. They shall remain bound by these relevant regulations after they have left their functions as international inspectors.

3. In the performance of their duties on the territory of a State Party, inspectors shall, if the State Party so requests, be accompanied by representatives of this State, provided inspectors are not thereby delayed or otherwise hindered in the exercise of their functions. If a State Party designates the inspectors' point of entry into, and departure from, the State concerned and their routes and modes of travel within the State, it shall be guided by the principle of minimizing the time of travel and any other inconvenience.

4. In exercising their functions, inspectors shall avoid unnecessarily hampering or delaying the operation of a facility or affecting its safety. In particular, inspectors shall not operate any facility or direct the staff of the facility to perform any operation. If inspectors consider that, to fulfil their mandate, particular operations should be carried out in a facility, they shall request the designated representative of the management of the facility to perform them.

5. After the inspection visit, inspectors shall submit to the Technical Secretariat a report on the activities conducted by them and on their findings. The report shall be factual in nature. It shall only contain facts relevant to compliance with the Convention, as provided for under the inspection mandate. Relevant regulations, governing the protection of confidential information, shall be observed. The report shall also provide information as to the manner in which the State Party inspected co-operated with the inspection team. Different views held by inspectors may be attached to the report.

6. The report shall be kept confidential. The National Authority of the State Party shall be informed of the findings of the report. Any written comments, which the State Party may immediately make on these findings shall be annexed to it. Immediately after receiving the report, the Technical Secretariat shall transmit a copy of it to the State Party concerned.

7. Should the report contain uncertainties, or should co-operation between the National Authority and the inspectors not measure up to the standard required, the Technical Secretariat shall approach the State Party for clarification.

8. If the uncertainties cannot be removed or the facts established are of a nature to suggest that obligations undertaken under the Convention have not been met, the Technical Secretariat shall inform the Executive Council without delay.







REPORT OF THE AD HOC COMMITTEE ON THE  
COMPREHENSIVE PROGRAMME OF DISARMAMENT

• • •

B. Other weapons of mass destruction

1. All States should adhere to the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925.
2. All States which have not yet done so should [consider adhering] [adhere] to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction.
3. It is necessary to make all possible efforts for the early achievement at the negotiations in the Conference on Disarmament of an international convention on the complete and effective prohibition of the development, production, stockpiling and use of all chemical weapons and on their destruction.





## FINLAND

Air Monitoring as a Means for the Verification  
of Chemical DisarmamentIntroduction

1. In working paper CCD/502 the United Kingdom presented a theoretical model for using air monitoring to detect chemical weapons tests. Since then Finland has published three reports describing experimental research on air monitoring (Blue Books 1985, 1986, and 1987). On the basis of the results presented in these reports, this paper proposes inclusion of air monitoring to the overall verification scheme of the CW Convention.

2. Current plans call for verification of the compliance with the Convention through international on-site inspections and on-site instrumental verification at declared production facilities, stockpiles, destruction plants, and civilian chemical facilities. The primary role we foresee for ambient air monitoring in the verification scheme is as a means to the detection of possible nondeclared activities.

Network of monitoring stations

3. A global network consisting of automatic air monitoring stations, 400-500 km apart, and selected stations capable of collecting and analysing high-volume air samples, would seem both adequate and realistic. Dilution in the air of the original agent cloud leads to extension of the cloud and so increases the probability of detecting agents at some of the stations hundreds of kilometres from the release site. If monitoring stations were spaced 400-500 km or less apart, chemical warfare agents could be detected before major atmospheric transformation.

4. Present developments in meteorological observation technology will improve radically the possibility to track specific air masses and these can probably be developed into routine operation within a few years, i.e. be operative when the Convention enters into force.

5. Should the monitors detect banned agents in the air, the possible emission site could be determined by meteorological calculations similar to those done when a rise in the level of background radioactivity is detected. Aircraft could be dispatched to collect large air samples from the designated air mass if further confirmation of the results was considered necessary.

6. Delayed verification of chemical warfare agents has been found to be feasible. Sarin and soman could be unambiguously identified from air samples collected on the spot almost two weeks after contamination of the soil. Since sarin is one of the most volatile agents, detection of chemical warfare agents at air monitoring stations might reasonably be confirmed by collecting air samples at the suspect emission site even a few weeks later.

7. The feasibility of monitoring production processes through air samples outside the production premises has been verified. At least chemicals having considerable vapour pressure can be detected by near-site air monitoring. Near-site monitoring may be difficult nevertheless where a hermetic production facility incinerates all exhaust gases and water before release. The feasibility of detecting hidden stockpiles by collecting samples outside the stockpile premises has not been tested. On the other hand, air samples may be very informative when collected during on-site inspections inside the facilities and stockpiles.

#### Instrumentation for automatic monitoring

8. Ideally, the optimum instrumentation for automatic air monitoring of chemical warfare agents should be reliable, selective, sensitive, low-cost, and, like meteorological sensors, completely automatic. It should also be capable of detecting as many chemical warfare agents as possible in order to be cost-effective and so allow the support of a high density of stations.

9. Mass spectrometry (e.g. a Bruker-Franzen mobile mass spectrometer) is an efficient but quite an expensive analysis method. A relatively low-cost instrumentation, based on high resolution gas chromatography, is sensitive and reliable, though not yet fully automatic. When combined with a technique exploiting adsorbent resin for air sampling and subsequent thermal desorption

and cold trapping the instrumentation affords an easily automated method also for sample collection and preparation. Compounds are reliably identified using retention index monitoring in combination with retention spectrometry (detection limit for sarin at low  $\text{ng}/\text{m}^3$  level, reliability of identification of known compounds comparable to that of electron ionization mass spectrometry). The instrumentation works well also in field conditions in a field laboratory.

#### Instrumentation for high-volume air sampling and analysis

10. At the present state of the art, the high-volume air sampling system needs manual sample preparation and sophisticated analytical methods for analysis of possible agents. Thus this method should be integrated into the routine monitoring schemes of existing laboratories already equipped with sophisticated instrumentation, e.g. environmental laboratories. High recoveries of agents are obtained in spite of the hundreds of organic compounds present in the air as aerosol particles or as a vapour phase.

11. Several sensitive and reliable techniques are available for the identification of agents in high background samples: (1) gas chromatography with selective and sensitive detectors, (2) high pressure liquid chromatography with diode array detection, (3) enzymatic analysis, (4) tandem mass spectrometry, (5) retention spectrometry, and (6) Fourier transform infrared spectrometry used on-line with gas chromatography for sample introduction.

#### Conclusions

12. A global network of monitoring stations could be used to reveal possible use, field tests of agents, and transport accidents. Clandestine production and stockpiles of chemical weapons would be revealed only in the event of leaks of agents due to faults in handling or aging of the munitions. If such a monitoring network were established, the governments of the States Parties to the Convention could monitor the compliance in their own countries and the possible atmospheric transport of agents from other countries.

and data regarding the instrument...  
for sample collection and preparation...  
using retention index...  
detection limit for each at low...  
of known compounds...  
spectrometry...  
field laboratory...

10. At the present state of the art...  
needs...  
analysis of possible...  
containing...  
recovery of...  
compounds present...

11. Several...  
identification...  
with selected...  
chromatograms...  
mass spectrometry...  
indicated...  
laboratory...

12. A...  
use, field...  
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