Preventing the Proliferation of Weapons of Mass Destruction

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Preventing the Proliferation of Weapons of Mass Destruction

Key Documents
2nd Edition

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Key Documents

Edited by the German Federal Foreign Office, Nuclear Arms Control and Nonproliferation Division

Compilation of Documents: Institute for Security Studies at the University of Kiel (ISUK)

Foreword

This is the second edition of a compilation of multilateral treaties, agreements and other documents in the field of disarmament, arms control and non-proliferation, edited by the Nuclear Arms Control and Non-Proliferation Division of the German Federal Foreign Office. Like the first edition, which was published in 2004, this compilation should be understood as an expression of Germany's commitment to the values and objectives of a treaty-based, transparent and verifiable system of disarmament, arms control and non-proliferation.

This system faces severe challenges. North Korea's declared withdrawal from the Non-Proliferation Treaty and its recent explosion of a nuclear device, as well as the prolonged dispute surrounding the Iranian nuclear programme, rightly remain high on the international agenda. At the same time, the international consensus with regard to disarmament and non-proliferation is clearly in danger of erosion, as various unfortunate developments have demonstrated in recent years. We would have liked to have been able to add to this edition a final document from the last NPT Review Conference, or the relevant chapters on disarmament and non-proliferation from the 2005 UN Summit Outcome, or agreed mandates for negotiations in the Geneva Conference on Disarmament – to name only the most striking examples of missed opportunities.

In difficult times it is helpful to recall basic principles and good examples. In this spirit this publication is intended to serve as a useful reference tool for everyone interested in the subject of non-proliferation and disarmament. It is our hope that it will make a modest contribution towards fostering an informed and fruitful debate in this field.

I would like to thank the Institute for Security Policy at the University of Kiel, and in particular Prof. Joachim Krause, for taking care of this project once again. This time, too, the objective was to make the relevant documents available in a single volume, an objective which by its very nature requires us to be highly selective. Notwithstanding the availability of a great variety of material on the Internet in this field, the first edition of the Key Documents was received with much interest by a wide audience. We take this also as an expression of interest in a treaty-based approach to questions of non-proliferation and disarmament and are pleased to publish a second edition to coincide with Germany's Presidencies of the European Union and the G8 in 2007.

Friedrich Gröning

Federal Government Commissioner for Disarmament and Arms Control

Content

A. Nonproliferation of Nuclear Weapons: Treaties and Political Documents

1. Treaty on the Non-Proliferation of Nuclear Weapons (1 July 1968)

The States concluding this Treaty, hereinafter referred to as the "Parties to the Treaty",

Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples,

Believing that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war,

In conformity with resolutions of the United Nations General Assembly calling for the conclusion of an agreement on the prevention of wider dissemination of nuclear weapons,

Undertaking to co-operate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities,

Expressing their support for research, development and other efforts to further the application, within the framework of the International Atomic Energy Agency safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points,

Affirming the principle that the benefits of peaceful applications of nuclear technology, including any technological by-products which may be derived by nuclear-weapon States from the development of nuclear explosive devices, should be available for peaceful purposes to all Parties to the Treaty, whether nuclear-weapon or non-nuclear-weapon States,

Convinced that, in furtherance of this principle, all Parties to the Treaty are entitled to participate in the fullest possible exchange of scientific information for, and to contribute alone or in co-operation with other States to, the further development of the applications of atomic energy for peaceful purposes,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

Urging the co-operation of all States in the attainment of this objective,

Recalling the determination expressed by the Parties to the 1963 Treaty banning nuclear weapons tests in the atmosphere, in outer space and under water in its Preamble to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end,

Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals

of nuclear weapons and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and effective international control,

Recalling that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations, and that the establishment and maintenance of international peace and security are to be promoted with the least diversion for armaments of the world's human and economic resources,

Have agreed as follows:

Article I

Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Article II

Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

Article III

1. Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system, for the exclusive purpose of verification of the fulfilment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Procedures for the safeguards required by this Article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this Article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.

2. Each State Party to the Treaty undertakes not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this Article.

3. The safeguards required by this Article shall be implemented in a manner designed to comply with Article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international co-operation in the field of peaceful nuclear activities, including the international exchange of nuclear material and equipment for the processing, use or production of nuclear material for peaceful purposes in accordance with the provisions of this Article and the principle of safeguarding set forth in the Preamble of the Treaty.

4. Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this Article either individually or together with other States in accordance with the Statute of the International Atomic Energy Agency. Negotiation of such agreements shall commence within 180 days from the original entry into force of this Treaty. For States depositing their instruments of ratification or accession after the 180-day period, negotiation of such agreements shall commence not later than the date of such deposit. Such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations.

Article IV

1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.

2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also co-operate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

Article V

Each Party to the Treaty undertakes to take appropriate measures to ensure that, in accordance with this Treaty, under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear-weapon States Party to the Treaty on a non-discriminatory basis and that the charge to such Parties for the explosive devices used will be as low as possible and exclude any charge for research and development. Non-nuclear-weapon States Party to the Treaty shall be able to obtain such benefits, pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear-weapon States. Negotiations on this subject shall commence as soon as possible after the Treaty enters into force. Non-nuclear-weapon States Party to the Treaty so desiring may also obtain such benefits pursuant to bilateral agreements.

Article VI

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

Article VII

Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

Article VIII

1. Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Depositary Governments shall convene a conference, to which they shall invite all the Parties to the Treaty, to consider such an amendment.

2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.

3. Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realised. At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objective of reviewing the operation of the Treaty.

Article IX

1. This Treaty shall be open to all States for signature. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this Article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United Kingdom of Great Britain and Northern Ireland, the Union of Soviet Socialist Republics

and the United States of America, which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after its ratification by the States, the Governments of which are designated Depositaries of the Treaty, and forty other States signatory to this Treaty and the deposit of their instruments of ratification. For the purposes of this Treaty, a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967.

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of this Treaty, and the date of receipt of any requests for convening a conference or other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article X

1. Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

2. Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.

Article XI

This Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

DONE in triplicate, at the cities of London, Moscow and Washington, the first day of July, one thousand nine hundred and sixty-eight.

The Legal Status of the NPT

Opened for signature at London, Moscow and Washington: 1 July 1968; entered into force: 5 March 1970; Depositary Governments: Russian Federation, United Kingdom of Great Britain and Northern Ireland and United States of America; current status: 91 signature states, 189 deposit states, one of them has announced its withdrawal from the Treaty and considers itself no longer bound by it (North Korea)

State	**Signature**	**Deposit of ratification**
Afghanistan	1 July 1968	4 February 1970)
Albania		12 September 1990(a)
Algeria		12 January 1995(a) ,
Andorra		7 June 1996(a)
Angola		14 October 1996(a)
Antigua and Barbuda		17 June 1985(s)
Argentina		10 February 1995(a)*)
Armenia		21 June 1993(a))
Australia	27 February 1970*	23 January 1973
Austria	1 July 1968	27 June 1969
Azerbaijan		22 September 1992(a)
Bahamas		11 August 1976(s)*
Bahrain		3 November 1988(a)*
Bangladesh		31 August 1979(a)
Barbados	1 July 1968	21 February 1980
Belarus		9 February 1993(a)
Belgium	20 August 1968	2 May 1975
Belize		9 August 1985(s)
Benin	1 July 1968	31 October 1972
Bhutan		23 May 1985(a)
Bolivia	1 July 1968	26 May 1970
Bosnia and Herzegovina		15 August 1994(s)
Botswana	1 July 1968	
Brazil		18 September 1998(a)
Brunei Darussalam		26 March 1985(a)
Bulgaria	1 July 1968	5 September 1969
Burkina Faso	25 November 1968	3 March 1970
Burundi		19 March 1971(a)

Cambodia		2 June 1972(a)
Cameroon	17 July 1968	8 January 1969
Canada	29 July 1968	8 January 1969
Cape Verde		24 October 1979(a)
Central African Republic		25 October 1970(a)
Chad	1 July 1968	10 March 1971
Chile		25 May 1995(a)
China		9 March 1992(a) *
Colombia	1 July 1968	8 April 1986(a)
Comoros		4 October 1995(a)
Congo, Peoples Rep. of		23 October 1978(a)
Costa Rica	1 July 1968	3 March 1970
Côte d'Ivoire	1 July 1968	6 March 1973
Croatia		29 June 1992(s)
Cuba		4 November 2002 (a)
Cyprus	1 July 1968	10 February 1970
Czech Republic		1 January 1993(s)**
[Democratic People's Republic of Korea]		12 December 1985(a); withdrawal announced on 10 January 2003
Democratic Republic of the Congo	22 July 1968	4 August 1970
Denmark	1 July 1968	3 January 1969
Djibouti		16 October 1996(a)
Dominica		10 August 1984(s)
Dominican Republic		24 July 1971
Ecuador		7 March 1969
Egypt	1 July 1968	26 February 1981*
El Salvador	1 July 1968	11 July 1972
Equatorial Guinea		1 November 1984(a)
Eritrea		16 March 1995(a)
Estonia		7 January 1992(a)
Ethiopia	5 September 1968	5 February 1970
Fiji		21 July 1972(s)*
Finland	1 July 1968	5 February 1969
France		2 August 1992(a)
Gabon		19 February 1974(a)
Gambia	4 September 1968	12 May 1975
Georgia		7 March 1994(a)

Germany	28 November 1969**	2 May 1975***
Ghana	1 July 1968	4 May 1970
Greece	1 July 1968	11 March 1970
Grenada		2 September 1975(s)
Guatemala	26 July 1968	22 September 1970
Guinea		29 April 1985(a)
Guinea-Bissau		20 August 1976(a)
Guyana		19 October 1993(a)
Haiti	1 July 1968	2 June 1970
Holy See		25 February 1971(a)*
Honduras	1 July 1968	16 May 1973
Hungary	1 July 1968	27 May 1969
Iceland	1 July 1968	18 July 1969
Indonesia	2 March 1970*	12 July 1979 **
Iran (Islamic Republic of)	1 July 1968	2 February 1970
Iraq	1 July 1968	29 October 1969
Ireland	1 July 1968	1 July 1968
Italy	28 January 1969	2 May 1975**
Jamaica	14 April 1969	5 March 1970
Japan	3 February 1970*	8 June 1976*
Jordan	10 July 1968	11 February 1970
Kazakhstan		14 February 1994(a)
Kenya	1 July 1968	11 June 1970
Kiribati		18 April 1985
Kuwait	15 August 1968	17 November 1989*
Kyrgyzstan		5 July 1994(a)
Lao People's Democratic Republic	1 July 1968	20 February 1970
Latvia		31 January 1992(a)
Lebanon	1 July 1968	15 July 1970
Lesotho	9 July 1968	20 May 1970
Liberia	1 July 1968	5 March 1970
Libyan Arab Jamahiriya	18 July 1968	26 May 1975
Liechtenstein		20 April 1978(a)
Lithuania		23 September 1991(a)
Luxembourg	14 August 1968	2 May 1975
Madagascar	22 August 1968	8 October 1970
Malawi		18 February 1986(a)

Malaysia	1 July 1968	5 March 1970
Maldives	11 September 1968	7 April 1970
Mali	14 July 1969	10 February 1970
Malta	17 April 1969	6 February 1970
Marshall Islands		30 January 1995(a)
Mauritania		26 October 1993(a)
Mauritius	1 July 1968	8 April 1969
Mexico	26 July 1968	21 January 1969
Micronesia (Federated States of)		14 April 1995(a)
Monaco		13 March 1995(a)
Mongolia	1 July 1968	14 May 1969
Morocco	1 July 1968	27 November 1970
Mozambique		4 September 1990(a)
Myanmar		2 December 1992(a)
Namibia		2 October 1992(a)
Nauru		7 June 1982(a)
Nepal	1 July 1968	5 January 1970
Netherlands	20 August 1968	2 May 1975 *
New Zealand	1 July 1968	10 September 1969
Nicaragua	1 July 1968	6 March 1973
Niger		9 October 1992(a)
Nigeria	1 July 1968	27 September 1968
Norway	1 July 1968	5 February 1969
Oman		23 January 1997(a)
Palau		14 April 1995(a)
Panama	1 July 1968	13 January 1977
Papua New Guinea		13 January 1982(a)
Paraguay	1 July 1968	4 February 1970
Peru	1 July 1968	3 March 1970 (W)
Philippines	1 July 1968	5 October 1972
Poland	1 July 1968	12 June 1969
Portugal		15 December 1977(a
Qatar		3 April 1989(a
Republic of Korea	1 July 1968*	23 April 1975
Republic of Moldova		11 October 1994(a)
Romania	1 July 1968	4 February 1970
Russian Federation	1 July 1968	5 March 1970

Rwanda		20 May 1975(a
Saint Kitts and Nevis		6 November 1984(s)*
Saint Lucia		28 December 1979(s)
Saint Vincent and the Grenadines		6 November 1984(s)*
Samoa		17 March 1975(a)
San Marino	1 July 1968	10 August 1970
Sao Tome and Principe		20 July 1983(a)
Saudi Arabia		3 October 1988(a)
Senegal	1 July 1968	17 December 1970
Serbia and Montenegro	10 July 1968	4 March 1970*
Seychelles		12 March 1985(a)
Sierra Leone		26 February 1975(a)
Singapore	5 February 1970	10 March 1976
Slovakia		1 January 1993(s)
Slovenia		7 April 1992(s)
Solomon Islands		17 June 1981(s)
Somalia	1 July 1968	5 March 1970
South Africa		10 July 1991(a)
Spain		5 November 1987(a)
Sri Lanka	1 July 1968	5 March 1979
Sudan	24 December 1968	31 October 1973
Suriname		30 June 1976(s)*
Swaziland	24 June 1969	11 December 1969
Sweden	19 August 1968	9 January 1970
Switzerland	27 November 1969*	9 March 1977**
Syrian Arab Republic	1 July 1968	24 September 1968*
Tajikistan		17 January 1994(a)
Thailand		7 December 1972(a)
the former Yugoslav Republic of Macedonia		30 March 1995(s)
Timor Leste		5 May 2003 (a)
Togo	1 July 1968	26 February 1970
Tonga		7 July 1971(s)*
Trinidad and Tobago	20 August 1968	30 October 1986
Tunisia	1 July 1968	26 February 1970
Turkey	28 January 1969	17 Apr. 1980
Turkmenistan		29 September 1994(a)

Tuvalu		19 January 1979(s))
Uganda		20 October 1982(a)
Ukraine		5 December 1994(a)
United Arab Emirates		26 September 1995(a)
United Kingdom of Great Britain and Northern Ireland	1 July 1968	29 November 1968 **
United Republic of Tanzania		31 May 1991(a) *
United States of America	1 July 1968	5 March 1970
Uruguay	1 July 1968	31 August 1970
Uzbekistan		7 May 1992(a)
Vanuatu		24 August 1995(a)
Venezuela	1 July 1968	25 September 1975
Viet Nam		14 June 1982(a)
Yemen	14 November 1968 (M)	1 June 1979 [14 May 1986(s)]
Zambia		15 May 1991(a)
Zimbabwe		26 September 1991(a)
Total	**91**	**189 (-1)**

On 28 January 1970 Taiwan deposited an instrument of ratification in the name of the Republic of China. The government of Taiwan considers itself to be bound by the Treaty.
(a): accession
(s): accession by state succession
Dates given are the earliest dates on which states signed the agreement or deposited their ratifications or accessions
* declaration made on the occasion of signature or deposit
** additional statement made on the occasion of signature or deposit
*** reservation made on the occasion of signature or deposit

2. Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water (5 August 1963)

The Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland, and the Union of Soviet Socialist Republics, hereinafter referred to as the "Original Parties,"

Proclaiming as their principal aim the speediest possible achievement of an agreement on general and complete disarmament under strict international control in accordance with the objectives of the United Nations which would put an end to the armaments race and eliminate the incentive to the production and testing of all kinds of weapons, including nuclear weapons,

Seeking to achieve the discontinuance of all test explosions of nuclear weapons for all time, determined to continue negotiations to this end, and desiring to put an end to the contamination of man's environment by radioactive substances,

Have agreed as follows:

Article I

1. Each of the Parties to this Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control:

(a) in the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas; or

(b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted. It is understood in this connection that the provisions of this subparagraph are without prejudice to the conclusion of a Treaty resulting in the permanent banning of all nuclear test explosions, including all such explosions underground, the conclusion of which, as the Parties have stated in the Preamble to this Treaty, they seek to achieve.

2. Each of the Parties to this Treaty undertakes furthermore to refrain from causing, encouraging, or in any way participating in, the carrying out of any nuclear weapon test explosion, or any other nuclear explosion, anywhere which would take place in any of the environments described, or have the effect referred to, in paragraph 1 of this Article.

Article II

1. Any Party may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to this Treaty. Thereafter, if requested to do so by one-third or more of the Parties, the Depositary Governments shall convene a conference, to which they shall invite all the Parties, to consider such amendment.

2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to this Treaty, including the votes of all of the Original Parties. The amendment

shall enter into force for all Parties upon the deposit of instruments of ratification by a majority of all the Parties, including the instruments of ratification of all of the Original Parties.

Article III

1. This Treaty shall be open to all States for signature. Any State which does not sign this Treaty before its entry into force in accordance with paragraph 3 of this Article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the Original Parties -- the United States of America, the United Kingdom of Great Britain and Northern Ireland, and the Union of Soviet Socialist Republics -- which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after its ratification by all the Original Parties and the deposit of their instruments of ratification.

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification of and accession to this Treaty, the date of its entry into force, and the date of receipt of any requests for conferences or other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article IV

This Treaty shall be of unlimited duration.

Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty three months in advance.

Article V

This Treaty, of which the English and Russian texts are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

DONE in triplicate at the city of Moscow the fifth day of August, one thousand nine hundred and sixty-three.

Legal Status of the Partial Test Ban Treaty

Signed by the Original Parties, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America at Moscow: 5 August 1963. Opened for signature at London (L), Moscow (M) and Washington (W): 8 August 1963; Entered into force: 10 October 196; Depositary Governments: Russian Federation, United Kingdom of Great Britain and Northern Ireland and United States of America; 105 signatures, 124 deposits

State	**Signature**	**Deposit of ratification**
Afghanistan	8 August 1963	12 March 1964
Algeria	14 August 1963)	
Antigua and Barbuda		16 November 1988 (s) *
Argentina	8 August 1963	14 November 1986
Armenia		7 June 1994(a) *
Australia	8 August 1963	12 November 1963
Austria	11 September 1963	17 July 1964
Bahamas		16 July 1976(s)*
Bangladesh		11 March 1985(a)
Belarus	8 October 1963	16 December 1963
Belgium	8 August 1963	1 March 1966
Benin	27 August 1963	15 December 1964
Bhutan		8 June 1978(a)
Bolivia	8 August 1963	4 August 1965
Bosnia and Herzegovina		15 August 1994(s)
Botswana		5 January 1968(s) *
Brazil	8 August 1963	15 December 1964
Bulgaria	8 August 1963	13 November 1963
Burkina Faso	30 August 1963	
Burundi	4 October 1963	
Cameroon	27 August 1963*	
Canada	8 August 1963	28 January 1964
Cape Verde		24 October 1979(a)
Central African Republic		22 December 1964(a)
Chad		1 March 1965
Chile	8 August 1963	6 October 1965
Colombia	16 August 1963	17 October 1985
Costa Rica	9 August 1963	10 July 1967

Côte d'Ivoire	5 September 1963	5 February 1965
Croatia		8 October 1991
Cyprus	8 August 1963	15 April 1965
Czech Republic		1 January 1993(s)
Democratic Republic of the Congo	9 August 1963	28 October 1965
Denmark	9 August 1963	15 January 1964
Dominican Republic	16 September 1963	3 June 1964
Ecuador	27 September 1963	6 May 1964
Egypt	8 August 1963	10 January 1964*
El Salvador	21 August 1963	3 December 1964
Equatorial Guinea		16 January 1989(a)
Ethiopia	9 August 1963	
Fiji		18 July 1972(s)*
Finland	8 August 1963	9 January 1964
Gabon	10 September 1963	20 February 1964
Gambia		27 April 1965(s)*
Germany	19 August 1963	1 December 1964**
Ghana	8 August 1963	27 November 1963
Greece	9 August 1963	18 December 1963
Guatemala	23 September 1963	6 January 1964*
Guinea-Bissau		20 August 1976(a)
Haiti	9 October 1963	
Honduras	8 August 1963	2 October 1964
Hungary	8 August 1963	21 October 1963
Iceland	12 August 1963	29 April 1964
India	8 August 1963	10 October 1963
Indonesia	23 August 1963	20 January 1964
Iran (Islamic Republic of)	8 August 1963	5 May 1964
Iraq	8 August 1963	30 November 1964
Ireland	8 August 1963	18 December 1963
Israel	8 August 1963	15 January 1964
Italy	8 August 1963	10 December 1964
Jamaica	13 August 1963	11 November 1991
Japan	14 August 1963	15 June 1964
Jordan	12 August 1963	29 May 1964
Kenya		10 June 1965(a)

Kuwait	20 August 1963	20 May 1965*
Lao People's Democratic Republic	12 August 1963	10 February 1965
Lebanon	12 August 1963	14 May 1965
Liberia	8 August 1963	19 May 1964
Libyan Arab Jamahiriya	9 August 1963	15 July 1968
Luxembourg	13 August 1963	10 February 1965
Madagascar	23 September 1963	15 March 1965
Malawi		26 November 1964(s)*
Malaysia	8 August 1963	15 July 1964
Mali	23 August 1963	
Malta		25 November 1964(s) *
Mauritania	13 September 1963	6 April 1964
Mauritius		30 April 1969(s)*
Mexico	8 August 1963	27 December 1963
Mongolia	8 August 1963	1 November 1963
Morocco	27 August 1963	1 February 1966
Myanmar	14 August 1963	15 November 1963
Nepal	26 August 1963	7 October 1963
Netherlands	9 August 1963	14 September 1964*, **
New Zealand	8 August 1963	10 October 1963
Nicaragua	13 August 1963	26 January 1965
Niger	24 September 1963	3 July 1964
Nigeria	30 August 1963	17 February 1967
Norway	9 August 1963	21 November 1963
Pakistan	14 August 1963	3 March 1988
Panama	20 September 1963	24 February 1966
Papua New Guinea		27 October 1980(s)
Paraguay	15 August 1963	
Peru	23 August 1963	20 July 1964
Philippines	8 August 1963	10 November 1965*
Poland	8 August 1963	14 October 1963
Portugal	9 October 1963	
Republic of Korea	30 August 1963	24 July 1964*
Romania	8 August 1963	12 December 1963
Russian Federation	5 August 1963	10 October 1963
Rwanda	19 September 1963	22 October 1963(a)

Samoa	5 September 1963	15 January 1965
San Marino	17 September 1963	3 July 1964
Senegal	20 September 1963	6 May 1964
Serbia and Montenegro	8 August 1963	15 January 1964
Seychelles		12 March 1963(a))
Sierra Leone	4 September 1963	21 February 1964
Singapore		12 July 1968(s)*
Slovakia		1 January 1993(s)
Slovenia		7 April 1992(s)
Somalia	19 August 1963	
South Africa		10 October 1963(a)
Spain	13 August 1963	17 August 1964
Sri Lanka	22 August 1963	5 February 1964
Sudan	9 August 1963	4 March 1966
Suriname		6 January 1993(a)
Swaziland		29 May 1969(a)
Sweden	12 August 1963	9 December 1963
Switzerland	26 August 1963	16 August 1964
Syrian Arab Republic	13 August 1963	1 June 1964
Thailand	8 August 1963	15 November 1963
Togo	18 September 1963	7 December 1964
Tonga		22 June 1971(s) *
Trinidad and Tobago	12 August 1963	14 July 1964
Tunisia	8 August 1963	26 May 1965
Turkey	9 August 1963	8 July 1965
Uganda	29 August 1963	24 March 1964
Ukraine	8 October 1963	30 December 1963
United Kingdom of Great Britain and Northern Ireland	5 August 1963	10 October 1963
United Republic of Tanzania	16 September 1963	6 February 1964
United States of America	5 August 1963	10 October 1963
Uruguay	12 August 1963	25 February 1969
Venezuela	16 August 1963	22 February 1965
Yemen	6 September 1963	1 June 1979(a)
Zambia		11 January 1965(s)*

On 18 May 1964 Taiwan deposited an instrument of ratification in the name of the Republic of China. The government of Taiwan considers itself to be bound by the Treaty.
(a): accession
(s): accession by state succession
Dates given are the earliest dates on which states signed the agreement or deposited their ratifications or accessions
* declaration made on the occasion of signature or deposit
** additional statement made on the occasion of signature or deposit
*** reservation made on the occasion of signature or deposit

3. Comprehensive Nuclear-Test-Ban Treaty (24 September 1996)

Preamble

The States Parties to this Treaty (hereinafter referred to as "the States Parties"),

Welcoming the international agreements and other positive measures of recent years in the field of nuclear disarmament, including reductions in arsenals of nuclear weapons, as well as in the field of the prevention of nuclear proliferation in all its aspects,

Underlining the importance of the full and prompt implementation of such agreements and measures,

Convinced that the present international situation provides an opportunity to take further effective measures towards nuclear disarmament and against the proliferation of nuclear weapons in all its aspects, and declaring their intention to take such measures,

Stressing therefore the need for continued systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons, and of general and complete disarmament under strict and effective international control,

Recognizing that the cessation of all nuclear weapon test explosions and all other nuclear explosions, by constraining the development and qualitative improvement of nuclear weapons and ending the development of advanced new types of nuclear weapons, constitutes an effective measure of nuclear disarmament and non-proliferation in all its aspects,

Further recognizing that an end to all such nuclear explosions will thus constitute a meaningful step in the realization of a systematic process to achieve nuclear disarmament,

Convinced that the most effective way to achieve an end to nuclear testing is through the conclusion of a universal and internationally and effectively verifiable comprehensive nuclear test-ban treaty, which has long been one of the highest priority objectives of the international community in the field of disarmament and non-proliferation,

Noting the aspirations expressed by the Parties to the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time,

Noting also the views expressed that this Treaty could contribute to the protection of the environment,

Affirming the purpose of attracting the adherence of all States to this Treaty and its objective to contribute effectively to the prevention of the proliferation of nuclear weapons in all its aspects, to the process of nuclear disarmament and therefore to the enhancement of international peace and security,

Have agreed as follows:

Article I - Basic obligations

1. Each State Party undertakes not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control.

2. Each State Party undertakes, furthermore, to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.

Article II - The Organization

A. General provisions

1. The States Parties hereby establish the Comprehensive Nuclear Test-Ban Treaty Organization (hereinafter referred to as "the Organization") to achieve the object and purpose of this Treaty, to ensure the implementation of its provisions, including those for international verification of compliance with it, and to provide a forum for consultation and cooperation among States Parties.

2. All States Parties shall be members of the Organization. A State Party shall not be deprived of its membership in the Organization.

3. The seat of the Organization shall be Vienna, Republic of Austria.

4. There are hereby established as organs of the Organization: the Conference of the States Parties, the Executive Council and the Technical Secretariat, which shall include the International Data Centre.

5. Each State Party shall cooperate with the Organization in the exercise of its functions in accordance with this Treaty. States Parties shall consult, directly among themselves, or through the Organization 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 object and purpose, or the implementation of the provisions, of this Treaty.

6. The Organization shall conduct its verification activities provided for under this Treaty in the least intrusive manner possible consistent with the timely and efficient accomplishment of their objectives. It shall request only the information and data necessary to fulfil its responsibilities under this Treaty. It shall take every precaution to protect the confidentiality of information on civil and military activities and facilities coming to its knowledge in the implementation of this Treaty and, in particular, shall abide by the confidentiality provisions set forth in this Treaty.

7. Each State Party shall treat as confidential and afford special handling to information and data that it receives in confidence from the Organization in connection with the implementation of this Treaty. It shall treat such information and data exclusively in connection with its rights and obligations under this Treaty.

8. The Organization, as an independent body, shall seek to utilize existing expertise and facilities, as appropriate, and to maximize cost efficiencies, through cooperative arrangements with other international organizations such as the International Atomic En-

ergy Agency. Such arrangements, excluding those of a minor and normal commercial and contractual nature, shall be set out in agreements to be submitted to the Conference of the States Parties for approval.

9. The costs of the activities of the Organization shall be met annually by the States Parties in accordance with the United Nations scale of assessments adjusted to take into account differences in membership between the United Nations and the Organization.

10. Financial contributions of States Parties to the Preparatory Commission shall be deducted in an appropriate way from their contributions to the regular budget.

11. A member of the Organization which is in arrears in the payment of its assessed contribution to the Organization shall have no vote in the Organization if the amount of its arrears equals or exceeds the amount of the contribution due from it for the preceding two full years. The Conference of the States Parties may, nevertheless, permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

B. The Conference of the States Parties

Composition, Procedures and Decision-making

12. The Conference of the States Parties (hereinafter referred to as "the Conference") shall be composed of all States Parties. Each State Party shall have one representative in the Conference, who may be accompanied by alternates and advisers.

13. The initial session of the Conference shall be convened by the Depositary no later than 30 days after the entry into force of this Treaty.

14. The Conference shall meet in regular sessions, which shall be held annually, unless it decides otherwise.

15. A special session of the Conference shall be convened:

(a) When decided by the Conference;

(b) When requested by the Executive Council; or

(c) When requested by any State Party and supported by a majority of the States Parties.

The special session shall be convened no later than 30 days after the decision of the Conference, the request of the Executive Council, or the attainment of the necessary support, unless specified otherwise in the decision or request.

16. The Conference may also be convened in the form of an Amendment Conference, in accordance with Article VII.

17. The Conference may also be convened in the form of a Review Conference, in accordance with Article VIII.

18. Sessions shall take place at the seat of the Organization unless the Conference decides otherwise.

19. The Conference shall adopt its rules of procedure. At the beginning of each session, it shall elect its President and such other officers as may be required. They shall hold office until a new President and other officers are elected at the next session.

20. A majority of the States Parties shall constitute a quorum.

21. Each State Party shall have one vote.

22. The Conference shall take decisions on matters of procedure by a majority of members present and voting. Decisions on matters of substance shall be taken as far as possible by consensus. If consensus is not attainable when an issue comes up for decision, the President of the Conference shall defer any vote for 24 hours and during this period of deferment shall make every effort to facilitate achievement of consensus, and shall report to the Conference before the end of this period. If consensus is not possible at the end of 24 hours, the Conference shall take a decision by a two-thirds majority of members present and voting unless specified otherwise in this Treaty. When the issue arises as to whether the question is one of substance or not, that question shall be treated as a matter of substance unless otherwise decided by the majority required for decisions on matters of substance.

23. When exercising its function under paragraph 26 (k), the Conference shall take a decision to add any State to the list of States contained in Annex 1 to this Treaty in accordance with the procedure for decisions on matters of substance set out in paragraph 22. Notwithstanding paragraph 22, the Conference shall take decisions on any other change to Annex 1 to this Treaty by consensus.

Powers and Functions

24. The Conference shall be the principal organ of the Organization. It shall consider any questions, matters or issues within the scope of this Treaty, including those relating to the powers and functions of the Executive Council and the Technical Secretariat, in accordance with this Treaty. It may make recommendations and take decisions on any questions, matters or issues within the scope of this Treaty raised by a State Party or brought to its attention by the Executive Council.

25. The Conference shall oversee the implementation of, and review compliance with, this Treaty and act in order to promote its object and purpose. It shall also oversee the activities of the Executive Council and the Technical Secretariat and may issue guidelines to either of them for the exercise of their functions.

26. The Conference shall:

(a) Consider and adopt the report of the Organization on the implementation of this Treaty and the annual programme and budget of the Organization, submitted by the Executive Council, as well as consider other reports;

(b) Decide on the scale of financial contributions to be paid by States Parties in accordance with paragraph 9;

(c) Elect the members of the Executive Council;

(d) Appoint the Director-General of the Technical Secretariat (hereinafter referred to as "the Director-General");

(e) Consider and approve the rules of procedure of the Executive Council submitted by the latter;

(f) Consider and review scientific and technological developments that could affect the operation of this Treaty. In this context, the Conference may direct the Director-General to establish a Scientific Advisory Board to enable him or her, in the performance of his or her functions, to render specialized advice in areas of science and technology relevant to this Treaty to the Conference, to the Executive Council, or to States Parties. In that case, the Scientific Advisory Board shall be composed of independent experts serving in their individual capacity and appointed, in accordance with terms of reference adopted by the Conference, on the basis of their expertise and experience in the particular scientific fields relevant to the implementation of this Treaty;

(g) Take the necessary measures to ensure compliance with this Treaty and to redress and remedy any situation that contravenes the provisions of this Treaty, in accordance with Article V;

(h) Consider and approve at its initial session any draft agreements, arrangements, provisions, procedures, operational manuals, guidelines and any other documents developed and recommended by the Preparatory Commission;

(i) Consider and approve agreements or arrangements negotiated by the Technical Secretariat with States Parties, other States and international organizations to be concluded by the Executive Council on behalf of the Organization in accordance with paragraph 38 *(h)*;

(j) Establish such subsidiary organs as it finds necessary for the exercise of its functions in accordance with this Treaty; and

(k) Update Annex 1 to this Treaty, as appropriate, in accordance with paragraph 23.

C. The Executive Council

Composition, Procedures and Decision-making

27. The Executive Council shall consist of 51 members. Each State Party shall have the right, in accordance with the provisions of this Article, to serve on the Executive Council.

28. Taking into account the need for equitable geographical distribution, the Executive Council shall comprise:

(a) Ten States Parties from Africa;

(b) Seven States Parties from Eastern Europe;

(c) Nine States Parties from Latin America and the Caribbean;

(d) Seven States Parties from the Middle East and South Asia;

(e) Ten States Parties from North America and Western Europe; and

(f) Eight States Parties from South–East Asia, the Pacific and the Far East.

All States in each of the above geographical regions are listed in Annex 1 to this Treaty. Annex 1 to this Treaty shall be updated, as appropriate, by the Conference in accordance with paragraphs 23 and 26 (k). It shall not be subject to amendments or changes under the procedures contained in Article VII.

29. The members of the Executive Council shall be elected by the Conference. In this connection, each geographical region shall designate States Parties from that region for election as members of the Executive Council as follows:

(a) At least one-third of the seats allocated to each geographical region shall be filled, taking into account political and security interests, by States Parties in that region designated on the basis of the nuclear capabilities relevant to the Treaty as determined by international data as well as all or any of the following indicative criteria in the order of priority determined by each region:

(i) Number of monitoring facilities of the International Monitoring System;

(ii) Expertise and experience in monitoring technology; and

(iii) Contribution to the annual budget of the Organization;

(b) One of the seats allocated to each geographical region shall be filled on a rotational basis by the State Party that is first in the English alphabetical order among the States Parties in that region that have not served as members of the Executive Council for the longest period of time since becoming States Parties or since their last term, whichever is shorter. A State Party designated on this basis may decide to forgo its seat. In that case, such a State Party shall submit a letter of renunciation to the Director-General, and the seat shall be filled by the State Party following next-in-order according to this subparagraph; and

(c) The remaining seats allocated to each geographical region shall be filled by States Parties designated from among all the States Parties in that region by rotation or elections.

30. Each member of the Executive Council shall have one representative on the Executive Council, who may be accompanied by alternates and advisers.

31. Each member of the Executive Council shall hold office from the end of the session of the Conference at which that member is elected until the end of the second regular annual session of the Conference thereafter, except that for the first election of the Executive Council, 26 members shall be elected to hold office until the end of the third regular annual session of the Conference, due regard being paid to the established numerical proportions as described in paragraph 28.

32. The Executive Council shall elaborate its rules of procedure and submit them to the Conference for approval.

33. The Executive Council shall elect its Chairman from among its members.

34. The Executive Council shall meet for regular sessions. Between regular sessions it shall meet as may be required for the fulfilment of its powers and functions.

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

36. The Executive Council shall take decisions on matters of procedure by a majority of all its members. The Executive Council shall take decisions on matters of substance by a

two–thirds majority of all its members unless specified otherwise in this Treaty. When the issue arises as to whether the question is one of substance or not, that question shall be treated as a matter of substance unless otherwise decided by the majority required for decisions on matters of substance.

Powers and Functions

37. The Executive Council shall be the executive organ of the Organization. It shall be responsible to the Conference. It shall carry out the powers and functions entrusted to it in accordance with this Treaty. In so doing, it shall act in conformity with the recommendations, decisions and guidelines of the Conference and ensure their continuous and proper implementation.

38. The Executive Council shall:

(a) Promote effective implementation of, and compliance with, this Treaty;

(b) Supervise the activities of the Technical Secretariat;

(c) Make recommendations as necessary to the Conference for consideration of further proposals for promoting the object and purpose of this Treaty;

(d) Cooperate with the National Authority of each State Party;

(e) Consider and submit to the Conference the draft annual programme and budget of the Organization, the draft report of the Organization on the implementation of this Treaty, the report on the performance of its own activities and such other reports as it deems necessary or that the Conference may request;

(f) Make arrangements for the sessions of the Conference, including the preparation of the draft agenda;

(g) Examine proposals for changes, on matters of an administrative or technical nature, to the Protocol or the Annexes thereto, pursuant to Article VII, and make recommendations to the States Parties regarding their adoption;

(h) Conclude, subject to prior approval of the Conference, agreements or arrangements with States Parties, other States and international organizations on behalf of the Organization and supervise their implementation, with the exception of agreements or arrangements referred to in sub-paragraph (i);

(i) Approve and supervise the operation of agreements or arrangements relating to the implementation of verification activities with States Parties and other States; and

(j) Approve any new operational manuals and any changes to the existing operational manuals that may be proposed by the Technical Secretariat.

39. The Executive Council may request a special session of the Conference.

40. The Executive Council shall:

(a) Facilitate cooperation among States Parties, and between States Parties and the Technical Secretariat, relating to the implementation of this Treaty through information exchanges;

(b) Facilitate consultation and clarification among States Parties in accordance with Article IV; and

(c) Receive, consider and take action on requests for, and reports on, on-site inspections in accordance with Article IV.

41. The Executive Council shall consider any concern raised by a State Party about possible non-compliance with this Treaty and abuse of the rights established by this Treaty. In so doing, the Executive Council shall consult with the States Parties involved and, as appropriate, request a State Party to take measures to redress the situation within a specified time. To the extent that the Executive Council considers further action to be necessary, it shall take, inter alia, one or more of the following measures:

(a) Notify all States Parties of the issue or matter;

(b) Bring the issue or matter to the attention of the Conference;

(c) Make recommendations to the Conference or take action, as appropriate, regarding measures to redress the situation and to ensure compliance in accordance with Article V.

D. The Technical Secretariat

42. The Technical Secretariat shall assist States Parties in the implementation of this Treaty. The Technical Secretariat shall assist the Conference and the Executive Council in the performance of their functions. The Technical Secretariat shall carry out the verification and other functions entrusted to it by this Treaty, as well as those functions delegated to it by the Conference or the Executive Council in accordance with this Treaty. The Technical Secretariat shall include, as an integral part, the International Data Centre.

43. The functions of the Technical Secretariat with regard to verification of compliance with this Treaty shall, in accordance with Article IV and the Protocol, include inter alia:

(a) Being responsible for supervising and coordinating the operation of the International Monitoring System;

(b) Operating the International Data Centre;

(c) Routinely receiving, processing, analysing and reporting on International Monitoring System data;

(d) Providing technical assistance in, and support for, the installation and operation of monitoring stations;

(e) Assisting the Executive Council in facilitating consultation and clarification among States Parties;

(f) Receiving requests for on-site inspections and processing them, facilitating Executive Council consideration of such requests, carrying out the preparations for, and providing technical support during, the conduct of on-site inspections, and reporting to the Executive Council;

(g) Negotiating agreements or arrangements with States Parties, other States and international organizations and concluding, subject to prior approval by the Executive Council, any such agreements or arrangements relating to verification activities with States Parties or other States; and

(h) Assisting the States Parties through their National Authorities on other issues of verification under this Treaty.

44. The Technical Secretariat shall develop and maintain, subject to approval by the Executive Council, operational manuals to guide the operation of the various components of the verification regime, in accordance with Article IV and the Protocol. These manuals shall not constitute integral parts of this Treaty or the Protocol and may be changed by the Technical Secretariat subject to approval by the Executive Council. The Technical Secretariat shall promptly inform the States Parties of any changes in the operational manuals.

45. The functions of the Technical Secretariat with respect to administrative matters shall include:

(a) Preparing and submitting to the Executive Council the draft programme and budget of the Organization;

(b) Preparing and submitting to the Executive Council the draft report of the Organization on the implementation of this Treaty and such other reports as the Conference or the Executive Council may request;

(c) Providing administrative and technical support to the Conference, the Executive Council and other subsidiary organs;

(d) Addressing and receiving communications on behalf of the Organization relating to the implementation of this Treaty; and

(e) Carrying out the administrative responsibilities related to any agreements between the Organization and other international organizations.

46. All requests and notifications by States Parties to the Organization shall be transmitted through their National Authorities to the Director-General. Requests and notifications shall be in one of the official languages of this Treaty. In response the Director-General shall use the language of the transmitted request or notification.

47. With respect to the responsibilities of the Technical Secretariat for preparing and submitting to the Executive Council the draft programme and budget of the Organization, the Technical Secretariat shall determine and maintain a clear accounting of all costs for each facility established as part of the International Monitoring System. Similar treatment in the draft programme and budget shall be accorded to all other activities of the Organization.

48. The Technical Secretariat shall promptly inform the Executive Council of any problems that have arisen with regard to the discharge of its functions that have come to its notice in the performance of its activities and that it has been unable to resolve through consultations with the State Party concerned.

49. The Technical Secretariat shall comprise a Director–General, who shall be its head and chief administrative officer, and such scientific, technical and other personnel as may be required. The Director-General shall be appointed by the Conference upon the recommendation of the Executive Council for a term of four years, renewable for one further term, but not thereafter. The first Director-General shall be appointed by the Conference at its initial session upon the recommendation of the Preparatory Commission.

50. The Director-General shall be responsible to the Conference and the Executive Council for the appointment of the staff and for 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 professional expertise, experience, efficiency, competence and integrity. Only citizens of States Parties shall serve as the Director-General, as inspectors or as 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 the minimum necessary for the proper discharge of the responsibilities of the Technical Secretariat.

51. The Director-General may, as appropriate, after consultation with the Executive Council, establish temporary working groups of scientific experts to provide recommendations on specific issues.

52. In the performance of their duties, the Director-General, the inspectors, the inspection assistants and the members of the staff shall not seek or receive instructions from any Government or from any other source external to the Organization. They shall refrain from any action that might reflect adversely on their positions as international officers responsible only to the Organization. The Director-General shall assume responsibility for the activities of an inspection team.

53. Each State Party shall respect the exclusively international character of the responsibilities of the Director-General, the inspectors, the inspection assistants and the members of the staff and shall not seek to influence them in the discharge of their responsibilities.

E. Privileges and immunities

54. The Organization shall enjoy on the territory and in any other place under the jurisdiction or control of a State Party such legal capacity and such privileges and immunities as are necessary for the exercise of its functions.

55. Delegates of States Parties, together with their alternates and advisers, representatives of members elected to the Executive Council, together with their alternates and advisers, the Director-General, the inspectors, the inspection assistants and the members of the staff of the Organization shall enjoy such privileges and immunities as are necessary in the independent exercise of their functions in connection with the Organization.

56. The legal capacity, privileges and immunities referred to in this Article shall be defined in agreements between the Organization and the States Parties as well as in an agreement between the Organization and the State in which the Organization is seated. Such agreements shall be considered and approved in accordance with paragraph 26 (h) and (i).

57. Notwithstanding paragraphs 54 and 55, the privileges and immunities enjoyed by the Director-General, the inspectors, the inspection assistants and the members of the staff of the Technical Secretariat during the conduct of verification activities shall be those set forth in the Protocol.

Article III - National implementation measures

1. Each State Party shall, in accordance with its constitutional processes, take any necessary measures to implement its obligations under this Treaty. In particular, it shall take any necessary measures:

(a) To prohibit natural and legal persons anywhere on its territory or in any other place under its jurisdiction as recognized by international law from undertaking any activity prohibited to a State Party under this Treaty;

(b) To prohibit natural and legal persons from undertaking any such activity anywhere under its control; and

(c) To prohibit, in conformity with international law, natural persons possessing its nationality from undertaking any such activity anywhere.

2. Each State Party shall cooperate with other States Parties and afford the appropriate form of legal assistance to facilitate the implementation of the obligations under paragraph 1.

3. Each State Party shall inform the Organization of the measures taken pursuant to this Article.

4. In order to fulfil its obligations under the Treaty, each State Party shall designate or set up a National Authority and shall so inform the Organization upon entry into force of the Treaty for it. The National Authority shall serve as the national focal point for liaison with the Organization and with other States Parties.

Article IV- Verification

A. General provisions

1. In order to verify compliance with this Treaty, a verification regime shall be established consisting of the following elements:

(a) An International Monitoring System;

(b) Consultation and clarification;

(c) On-site inspections; and

(d) Confidence-building measures.

At entry into force of this Treaty, the verification regime shall be capable of meeting the verification requirements of this Treaty.

2. Verification activities shall be based on objective information, shall be limited to the subject matter of this Treaty, and shall be carried out on the basis of full respect for the sovereignty of States Parties and in the least intrusive manner possible consistent with the effective and timely accomplishment of their objectives. Each State Party shall refrain from any abuse of the right of verification.

3. Each State Party undertakes in accordance with this Treaty to cooperate, through its National Authority established pursuant to Article III, paragraph 4, with the Organization and with other States Parties to facilitate the verification of compliance with this Treaty by, inter alia:

(a) Establishing the necessary facilities to participate in these verification measures and establishing the necessary communication;

(b) Providing data obtained from national stations that are part of the International Monitoring System;

(c) Participating, as appropriate, in a consultation and clarification process;

(d) Permitting the conduct of on-site inspections; and

(e) Participating, as appropriate, in confidence-building measures.

4. All States Parties, irrespective of their technical and financial capabilities, shall enjoy the equal right of verification and assume the equal obligation to accept verification.

5. For the purposes of this Treaty, no State Party shall be precluded from using information obtained by national technical means of verification in a manner consistent with generally recognized principles of international law, including that of respect for the sovereignty of States.

6. Without prejudice to the right of States Parties to protect sensitive installations, activities or locations not related to this Treaty, States Parties shall not interfere with elements of the verification regime of this Treaty or with national technical means of verification operating in accordance with paragraph 5.

7. Each State Party shall have the right to take measures to protect sensitive installations and to prevent disclosure of confidential information and data not related to this Treaty.

8. Moreover, all necessary measures shall be taken to protect the confidentiality of any information related to civil and military activities and facilities obtained during verification activities.

9. Subject to paragraph 8, information obtained by the Organization through the verification regime established by this Treaty shall be made available to all States Parties in accordance with the relevant provisions of this Treaty and the Protocol.

10. The provisions of this Treaty shall not be interpreted as restricting the international exchange of data for scientific purposes.

11. Each State Party undertakes to cooperate with the Organization and with other States Parties in the improvement of the verification regime, and in the examination of the verification potential of additional monitoring technologies such as electromagnetic pulse monitoring or satellite monitoring, with a view to developing, when appropriate, specific measures to enhance the efficient and cost-effective verification of this Treaty. Such measures shall, when agreed, be incorporated in existing provisions in this Treaty, the Protocol or as additional sections of the Protocol, in accordance with Article VII, or, if appropriate, be reflected in the operational manuals in accordance with Article II, paragraph 44.

12. The States Parties undertake to promote cooperation among themselves to facilitate and participate in the fullest possible exchange relating to technologies used in the verification of this Treaty in order to enable all States Parties to strengthen their national implementation of verification measures and to benefit from the application of such technologies for peaceful purposes.

13. The provisions of this Treaty shall be implemented in a manner which avoids hampering the economic and technological development of the States Parties for further development of the application of atomic energy for peaceful purposes.

Verification Responsibilities of the Technical Secretariat

14. In discharging its responsibilities in the area of verification specified in this Treaty and the Protocol, in cooperation with the States Parties the Technical Secretariat shall, for the purpose of this Treaty:

(a) Make arrangements to receive and distribute data and reporting products relevant to the verification of this Treaty in accordance with its provisions, and to maintain a global communications infrastructure appropriate to this task;

(b) Routinely through its International Data Centre, which shall in principle be the focal point within the Technical Secretariat for data storage and data processing:

(i) Receive and initiate requests for data from the International Monitoring System;

(ii) Receive data, as appropriate, resulting from the process of consultation and clarification, from on-site inspections, and from confidence-building measures; and

(iii) Receive other relevant data from States Parties and international organizations in accordance with this Treaty and the Protocol;

(c) Supervise, coordinate and ensure the operation of the International Monitoring System and its component elements, and of the International Data Centre, in accordance with the relevant operational manuals;

(d) Routinely process, analyse and report on International Monitoring System data according to agreed procedures so as to permit the effective international verification of this Treaty and to contribute to the early resolution of compliance concerns;

(e) Make available all data, both raw and processed, and any reporting products, to all States Parties, each State Party taking responsibility for the use of International Monitoring System data in accordance with Article II, paragraph 7, and with paragraphs 8 and 13 of this Article;

(f) Provide to all States Parties equal, open, convenient and timely access to all stored data;

(g) Store all data, both raw and processed, and reporting products;

(h) Coordinate and facilitate requests for additional data from the International Monitoring System;

(i) Coordinate requests for additional data from one State Party to another State Party;

(j) Provide technical assistance in, and support for, the installation and operation of monitoring facilities and respective communication means, where such assistance and support are required by the State concerned;

(k) Make available to any State Party, upon its request, techniques utilized by the Technical Secretariat and its International Data Centre in compiling, storing, processing, analysing and reporting on data from the verification regime; and

(l) Monitor, assess and report on the overall performance of the International Monitoring System and of the International Data Centre.

15. The agreed procedures to be used by the Technical Secretariat in discharging the verification responsibilities referred to in paragraph 14 and detailed in the Protocol shall be elaborated in the relevant operational manuals.

B. The International Monitoring System

16. The International Monitoring System shall comprise facilities for seismological monitoring, radionuclide monitoring including certified laboratories, hydroacoustic monitoring, infrasound monitoring, and respective means of communication, and shall be supported by the International Data Centre of the Technical Secretariat.

17. The International Monitoring System shall be placed under the authority of the Technical Secretariat. All monitoring facilities of the International Monitoring System shall be owned and operated by the States hosting or otherwise taking responsibility for them in accordance with the Protocol.

18. Each State Party shall have the right to participate in the international exchange of data and to have access to all data made available to the International Data Centre. Each State Party shall cooperate with the International Data Centre through its National Authority.

Funding the International Monitoring System

19. For facilities incorporated into the International Monitoring System and specified in Tables 1-A, 2-A, 3 and 4 of Annex 1 to the Protocol, and for their functioning, to the extent that such facilities are agreed by the relevant State and the Organization to provide data to the International Data Centre in accordance with the technical requirements of the Protocol and relevant operational manuals, the Organization, as specified in agreements or arrangements pursuant to Part I, paragraph 4 of the Protocol, shall meet the costs of:

(a) Establishing any new facilities and upgrading existing facilities, unless the State responsible for such facilities meets these costs itself;

(b) Operating and maintaining International Monitoring System facilities, including facility physical security if appropriate, and application of agreed data authentication procedures;

(c) Transmitting International Monitoring System data (raw or processed) to the International Data Centre by the most direct and cost-effective means available, including, if necessary, via appropriate communications nodes, from monitoring stations, laboratories, analytical facilities or from national data centres; or such data (including samples where appropriate) to laboratory and analytical facilities from monitoring stations; and

(d) Analysing samples on behalf of the Organization.

20. For auxiliary network seismic stations specified in Table 1-B of Annex 1 to the Protocol the Organization, as specified in agreements or arrangements pursuant to Part I, paragraph 4 of the Protocol, shall meet the costs only of:

(a) Transmitting data to the International Data Centre;

(b) Authenticating data from such stations;

(c) Upgrading stations to the required technical standard, unless the State responsible for such facilities meets these costs itself;

(d) If necessary, establishing new stations for the purposes of this Treaty where no appropriate facilities currently exist, unless the State responsible for such facilities meets these costs itself; and

(e) Any other costs related to the provision of data required by the Organization as specified in the relevant operational manuals.

21. The Organization shall also meet the cost of provision to each State Party of its requested selection from the standard range of International Data Centre reporting products and services, as specified in Part I, Section F of the Protocol. The cost of preparation and transmission of any additional data or products shall be met by the requesting State Party.

22. The agreements or, if appropriate, arrangements concluded with States Parties or States hosting or otherwise taking responsibility for facilities of the International Monitoring System shall contain provisions for meeting these costs. Such provisions may include modalities whereby a State Party meets any of the costs referred to in paragraphs 19 (a) and 20 (c) and (d) for facilities which it hosts or for which it is responsible, and is compensated by an appropriate reduction in its assessed financial contribution to the Organization. Such a reduction shall not exceed 50 per cent of the annual assessed financial contribution of a State Party, but may be spread over successive years. A State Party may share such a reduction with another State Party by agreement or arrangement between themselves and with the concurrence of the Executive Council. The agreements or arrangements referred to in this paragraph shall be approved in accordance with Article II, paragraphs 26 (h) and 38 (i).

Changes to the International Monitoring System

23. Any measures referred to in paragraph 11 affecting the International Monitoring System by means of addition or deletion of a monitoring technology shall, when agreed, be incorporated into this Treaty and the Protocol pursuant to Article VII, paragraphs 1 to 6.

24. The following changes to the International Monitoring System, subject to the agreement of those States directly affected, shall be regarded as matters of an administrative or technical nature pursuant to Article VII, paragraphs 7 and 8:

(a) Changes to the number of facilities specified in the Protocol for a given monitoring technology; and

(b) Changes to other details for particular facilities as reflected in the Tables of Annex 1 to the Protocol (including, inter alia, State responsible for the facility; location; name of facility; type of facility; and attribution of a facility between the primary and auxiliary seismic networks).

If the Executive Council recommends, pursuant to Article VII, paragraph 8 (d), that such changes be adopted, it shall as a rule also recommend pursuant to Article VII, paragraph 8 (g), that such changes enter into force upon notification by the Director-General of their approval.

25. The Director-General, in submitting to the Executive Council and States Parties information and evaluation in accordance with Article VII, paragraph 8 (b), shall include in the case of any proposal made pursuant to paragraph 24:

(a) A technical evaluation of the proposal;

(b) A statement on the administrative and financial impact of the proposal; and

(c) A report on consultations with States directly affected by the proposal, including indication of their agreement.

Temporary Arrangements

26. In cases of significant or irretrievable breakdown of a monitoring facility specified in the Tables of Annex 1 to the Protocol, or in order to cover other temporary reductions of monitoring coverage, the Director-General shall, in consultation and agreement with those States directly affected, and with the approval of the Executive Council, initiate temporary arrangements of no more than one year's duration, renewable if necessary by agreement of the Executive Council and of the States directly affected for another year. Such arrangements shall not cause the number of operational facilities of the International Monitoring System to exceed the number specified for the relevant network; shall meet as far as possible the technical and operational requirements specified in the operational manual for the relevant network; and shall be conducted within the budget of the Organization. The Director-General shall furthermore take steps to rectify the situation and make proposals for its permanent resolution. The Director-General shall notify all States Parties of any decision taken pursuant to this paragraph.

Cooperating National Facilities

27. States Parties may also separately establish cooperative arrangements with the Organization, in order to make available to the International Data Centre supplementary data from national monitoring stations that are not formally part of the International Monitoring System.

28. Such cooperative arrangements may be established as follows:

(a) Upon request by a State Party, and at the expense of that State, the Technical Secretariat shall take the steps required to certify that a given monitoring facility meets the technical and operational requirements specified in the relevant operational manuals for an International Monitoring System facility, and make arrangements for the authentication of its data. Subject to the agreement of the Executive Council, the Technical Secretariat shall then formally designate such a facility as a cooperating national facility. The Technical Secretariat shall take the steps required to revalidate its certification as appropriate;

(b) The Technical Secretariat shall maintain a current list of cooperating national facilities and shall distribute it to all States Parties; and

(c) The International Data Centre shall call upon data from cooperating national facilities, if so requested by a State Party, for the purposes of facilitating consultation and clarification and the consideration of on-site inspection requests, data transmission costs being borne by that State Party.

The conditions under which supplementary data from such facilities are made available, and under which the International Data Centre may request further or expedited reporting, or clarifications, shall be elaborated in the operational manual for the respective monitoring network.

C. Consultation and clarification

29. Without prejudice to the right of any State Party to request an on-site inspection, States Parties should, whenever possible, first make every effort to clarify and resolve, among themselves or with or through the Organization, any matter which may cause concern about possible non-compliance with the basic obligations of this Treaty.

30. A State Party that receives a request pursuant to paragraph 29 directly from another State Party shall provide the clarification to the requesting State Party as soon as possible, but in any case no later than 48 hours after the request. The requesting and requested States Parties may keep the Executive Council and the Director–General informed of the request and the response.

31. A State Party shall have the right to request the Director-General to assist in clarifying any matter which may cause concern about possible non-compliance with the basic obligations of this Treaty. The Director-General shall provide appropriate information in the possession of the Technical Secretariat relevant to such a concern. The Director-General shall inform the Executive Council of the request and of the information provided in response, if so requested by the requesting State Party.

32. A State Party shall have the right to request the Executive Council to obtain clarification from another State Party on any matter which may cause concern about possible non-compliance with the basic obligations of this Treaty. In such a case, the following shall apply:

(a) The Executive Council shall forward the request for clarification to the requested State Party through the Director-General no later than 24 hours after its receipt;

(b) The requested State Party shall provide the clarification to the Executive Council as soon as possible, but in any case no later than 48 hours after receipt of the request;

(c) The Executive Council shall take note of the clarification and forward it to the requesting State Party no later than 24 hours after its receipt;

(d) If the requesting State Party deems the clarification to be inadequate, it shall have the right to request the Executive Council to obtain further clarification from the requested State Party.

The Executive Council shall inform without delay all other States Parties about any request for clarification pursuant to this paragraph as well as any response provided by the requested State Party.

33. If the requesting State Party considers the clarification obtained under paragraph 32 (d) to be unsatisfactory, it shall have the right to request a meeting of the Executive Council in which States Parties involved that are not members of the Executive Council shall be entitled to take part. At such a meeting, the Executive Council shall consider the matter and may recommend any measure in accordance with Article V.

D. On-site inspections

Request for an On-Site Inspection

34. Each State Party has the right to request an on-site inspection in accordance with the provisions of this Article and Part II of the Protocol in the territory or in any other place under the jurisdiction or control of any State Party, or in any area beyond the jurisdiction or control of any State.

35. The sole purpose of an on-site inspection shall be to clarify whether a nuclear weapon test explosion or any other nuclear explosion has been carried out in violation of Article I and, to the extent possible, to gather any facts which might assist in identifying any possible violator.

36. The requesting State Party shall be under the obligation to keep the on-site inspection request within the scope of this Treaty and to provide in the request information in accordance with paragraph 37. The requesting State Party shall refrain from unfounded or abusive inspection requests.

37. The on-site inspection request shall be based on information collected by the International Monitoring System, on any relevant technical information obtained by national technical means of verification in a manner consistent with generally recognized principles of international law, or on a combination thereof. The request shall contain information pursuant to Part II, paragraph 41 of the Protocol.

38. The requesting State Party shall present the on-site inspection request to the Executive Council and at the same time to the Director-General for the latter to begin immediate processing.

Follow–up After Submission of an On-Site Inspection Request

39. The Executive Council shall begin its consideration immediately upon receipt of the on-site inspection request.

40. The Director-General, after receiving the on-site inspection request, shall acknowledge receipt of the request to the requesting State Party within two hours and communicate the request to the State Party sought to be inspected within six hours. The Director-General shall ascertain that the request meets the requirements specified in Part II, paragraph 41 of the Protocol, and, if necessary, shall assist the requesting State Party in filing the request accordingly, and shall communicate the request to the Executive Council and to all other States Parties within 24 hours.

41. When the on-site inspection request fulfils the requirements, the Technical Secretariat shall begin preparations for the on-site inspection without delay.

42. The Director-General, upon receipt of an on–site inspection request referring to an inspection area under the jurisdiction or control of a State Party, shall immediately seek clarification from the State Party sought to be inspected in order to clarify and resolve the concern raised in the request.

43. A State Party that receives a request for clarification pursuant to paragraph 42 shall provide the Director-General with explanations and with other relevant information

available as soon as possible, but no later than 72 hours after receipt of the request for clarification.

44. The Director-General, before the Executive Council takes a decision on the on-site inspection request, shall transmit immediately to the Executive Council any additional information available from the International Monitoring System or provided by any State Party on the event specified in the request, including any clarification provided pursuant to paragraphs 42 and 43, as well as any other information from within the Technical Secretariat that the Director-General deems relevant or that is requested by the Executive Council.

45. Unless the requesting State Party considers the concern raised in the on-site inspection request to be resolved and withdraws the request, the Executive Council shall take a decision on the request in accordance with paragraph 46.

Executive Council Decisions

46. The Executive Council shall take a decision on the on-site inspection request no later than 96 hours after receipt of the request from the requesting State Party. The decision to approve the on-site inspection shall be made by at least 30 affirmative votes of members of the Executive Council. If the Executive Council does not approve the inspection, preparations shall be stopped and no further action on the request shall be taken.

47. No later than 25 days after the approval of the on-site inspection in accordance with paragraph 46, the inspection team shall transmit to the Executive Council, through the Director-General, a progress inspection report. The continuation of the inspection shall be considered approved unless the Executive Council, no later than 72 hours after receipt of the progress inspection report, decides by a majority of all its members not to continue the inspection. If the Executive Council decides not to continue the inspection, the inspection shall be terminated, and the inspection team shall leave the inspection area and the territory of the inspected State Party as soon as possible in accordance with Part II, paragraphs 109 and 110 of the Protocol.

48. In the course of the on-site inspection, the inspection team may submit to the Executive Council, through the Director-General, a proposal to conduct drilling. The Executive Council shall take a decision on such a proposal no later than 72 hours after receipt of the proposal. The decision to approve drilling shall be made by a majority of all members of the Executive Council.

49. The inspection team may request the Executive Council, through the Director-General, to extend the inspection duration by a maximum of 70 days beyond the 60-day time-frame specified in Part II, paragraph 4 of the Protocol, if the inspection team considers such an extension essential to enable it to fulfil its mandate. The inspection team shall indicate in its request which of the activities and techniques listed in Part II, paragraph 69 of the Protocol it intends to carry out during the extension period. The Executive Council shall take a decision on the extension request no later than 72 hours after receipt of the request. The decision to approve an extension of the inspection duration shall be made by a majority of all members of the Executive Council.

50. Any time following the approval of the continuation of the on-site inspection in accordance with paragraph 47, the inspection team may submit to the Executive Council, through the Director-General, a recommendation to terminate the inspection. Such a

recommendation shall be considered approved unless the Executive Council, no later than 72 hours after receipt of the recommendation, decides by a two-thirds majority of all its members not to approve the termination of the inspection. In case of termination of the inspection, the inspection team shall leave the inspection area and the territory of the inspected State Party as soon as possible in accordance with Part II, paragraphs 109 and 110 of the Protocol.

51. The requesting State Party and the State Party sought to be inspected may participate in the deliberations of the Executive Council on the on-site inspection request without voting. The requesting State Party and the inspected State Party may also participate without voting in any subsequent deliberations of the Executive Council related to the inspection.

52. The Director-General shall notify all States Parties within 24 hours about any decision by and reports, proposals, requests and recommendations to the Executive Council pursuant to paragraphs 46 to 50.

Follow-up After Executive Council Approval of an On-Site Inspection

53. An on-site inspection approved by the Executive Council shall be conducted without delay by an inspection team designated by the Director-General and in accordance with the provisions of this Treaty and the Protocol. The inspection team shall arrive at the point of entry no later than six days following the receipt by the Executive Council of the on-site inspection request from the requesting State Party.

54. The Director-General shall issue an inspection mandate for the conduct of the on-site inspection. The inspection mandate shall contain the information specified in Part II, paragraph 42 of the Protocol.

55. The Director-General shall notify the inspected State Party of the inspection no less than 24 hours before the planned arrival of the inspection team at the point of entry, in accordance with Part II, paragraph 43 of the Protocol.

The Conduct of an On-Site Inspection

56. Each State Party shall permit the Organization to conduct an on-site inspection on its territory or at places under its jurisdiction or control in accordance with the provisions of this Treaty and the Protocol. However, no State Party shall have to accept simultaneous on-site inspections on its territory or at places under its jurisdiction or control.

57. In accordance with the provisions of this Treaty and the Protocol, the inspected State Party shall have:

(a) The right and the obligation to make every reasonable effort to demonstrate its compliance with this Treaty and, to this end, to enable the inspection team to fulfil its mandate;

(b) The right to take measures it deems necessary to protect national security interests and to prevent disclosure of confidential information not related to the purpose of the inspection;

(c) The obligation to provide access within the inspection area for the sole purpose of determining facts relevant to the purpose of the inspection, taking into account sub–

paragraph (b) and any constitutional obligations it may have with regard to proprietary rights or searches and seizures;

(d) The obligation not to invoke this paragraph or Part II, paragraph 88 of the Protocol to conceal any violation of its obligations under Article I; and

(e) The obligation not to impede the ability of the inspection team to move within the inspection area and to carry out inspection activities in accordance with this Treaty and the Protocol.

Access, in the context of an on-site inspection, means both the physical access of the inspection team and the inspection equipment to, and the conduct of inspection activities within, the inspection area.

58. The on-site inspection shall be conducted in the least intrusive manner possible, consistent with the efficient and timely accomplishment of the inspection mandate, and in accordance with the procedures set forth in the Protocol. Wherever possible, the inspection team shall begin with the least intrusive procedures and then proceed to more intrusive procedures only as it deems necessary to collect sufficient information to clarify the concern about possible non-compliance with this Treaty. The inspectors shall seek only the information and data necessary for the purpose of the inspection and shall seek to minimize interference with normal operations of the inspected State Party.

59. The inspected State Party shall assist the inspection team throughout the on–site inspection and facilitate its task.

60. If the inspected State Party, acting in accordance with Part II, paragraphs 86 to 96 of the Protocol, restricts access within the inspection area, it shall make every reasonable effort in consultations with the inspection team to demonstrate through alternative means its compliance with this Treaty.

Observer

61. With regard to an observer, the following shall apply:

(a) The requesting State Party, subject to the agreement of the inspected State Party, may send a representative, who shall be a national either of the requesting State Party or of a third State Party, to observe the conduct of the on-site inspection;

(b) The inspected State Party shall notify its acceptance or non–acceptance of the proposed observer to the Director-General within 12 hours after approval of the on-site inspection by the Executive Council;

(c) In case of acceptance, the inspected State Party shall grant access to the observer in accordance with the Protocol;

(d) The inspected State Party shall, as a rule, accept the proposed observer, but if the inspected State Party exercises a refusal, that fact shall be recorded in the inspection report.

There shall be no more than three observers from an aggregate of requesting States Parties.

Reports of an On-Site Inspection

62. Inspection reports shall contain:

(a) A description of the activities conducted by the inspection team;

(b) The factual findings of the inspection team relevant to the purpose of the inspection;

(c) An account of the cooperation granted during the on-site inspection;

(d) A factual description of the extent of the access granted, including the alternative means provided to the team, during the on-site inspection; and

(e) Any other details relevant to the purpose of the inspection.

Differing observations made by inspectors may be attached to the report.

63. The Director-General shall make draft inspection reports available to the inspected State Party. The inspected State Party shall have the right to provide the Director-General within 48 hours with its comments and explanations, and to identify any information and data which, in its view, are not related to the purpose of the inspection and should not be circulated outside the Technical Secretariat. The Director-General shall consider the proposals for changes to the draft inspection report made by the inspected State Party and shall wherever possible incorporate them. The Director-General shall also annex the comments and explanations provided by the inspected State Party to the inspection report.

64. The Director-General shall promptly transmit the inspection report to the requesting State Party, the inspected State Party, the Executive Council and to all other States Parties. The Director-General shall further transmit promptly to the Executive Council and to all other States Parties any results of sample analysis in designated laboratories in accordance with Part II, paragraph 104 of the Protocol, relevant data from the International Monitoring System, the assessments of the requesting and inspected States Parties, as well as any other information that the Director-General deems relevant. In the case of the progress inspection report referred to in paragraph 47, the Director-General shall transmit the report to the Executive Council within the time-frame specified in that paragraph.

65. The Executive Council, in accordance with its powers and functions, shall review the inspection report and any material provided pursuant to paragraph 64, and shall address any concerns as to:

(a) Whether any non-compliance with this Treaty has occurred; and

(b) Whether the right to request an on-site inspection has been abused.

66. If the Executive Council reaches the conclusion, in keeping with its powers and functions, that further action may be necessary with regard to paragraph 65, it shall take the appropriate measures in accordance with Article V.

Frivolous or Abusive On-Site Inspection Requests

67. If the Executive Council does not approve the on-site inspection on the basis that the on-site inspection request is frivolous or abusive, or if the inspection is terminated for

the same reasons, the Executive Council shall consider and decide on whether to implement appropriate measures to redress the situation, including the following:

(a) Requiring the requesting State Party to pay for the cost of any preparations made by the Technical Secretariat;

(b) Suspending the right of the requesting State Party to request an on-site inspection for a period of time, as determined by the Executive Council; and

(c) Suspending the right of the requesting State Party to serve on the Executive Council for a period of time.

E. Confidence-building measures

68. In order to:

(a) Contribute to the timely resolution of any compliance concerns arising from possible misinterpretation of verification data relating to chemical explosions; and

(b) Assist in the calibration of the stations that are part of the component networks of the International Monitoring System,

each State Party undertakes to cooperate with the Organization and with other States Parties in implementing relevant measures as set out in Part III of the Protocol.

Article V - Measures to redress a situation and to ensure compliance, including sanctions

1. The Conference, taking into account, inter alia, the recommendations of the Executive Council, shall take the necessary measures, as set forth in paragraphs 2 and 3, to ensure compliance with this Treaty and to redress and remedy any situation which contravenes the provisions of this Treaty.

2. In cases where a State Party has been requested by the Conference or the Executive Council to redress a situation raising problems with regard to its compliance and fails to fulfil the request within the specified time, the Conference may, inter alia, decide to restrict or suspend the State Party from the exercise of its rights and privileges under this Treaty until the Conference decides otherwise.

3. In cases where damage to the object and purpose of this Treaty may result from non-compliance with the basic obligations of this Treaty, the Conference may recommend to States Parties collective measures which are in conformity with international law.

4. The Conference, or alternatively, if the case is urgent, the Executive Council, may bring the issue, including relevant information and conclusions, to the attention of the United Nations.

Article VI - Settlement of disputes

1. Disputes that may arise concerning the application or the interpretation of this Treaty shall be settled in accordance with the relevant provisions of this Treaty and in conformity with the provisions of the Charter of the United Nations.

2. When a dispute arises between two or more States Parties, or between one or more States Parties and the Organization, relating to the application or interpretation of this Treaty, the parties concerned shall consult together with a view to the expeditious settlement of the dispute by negotiation or by other peaceful means of the parties' choice, including recourse to appropriate organs of this Treaty and, by mutual consent, referral to the International Court of Justice in conformity with the Statute of the Court. The parties involved shall keep the Executive Council informed of actions being taken.

3. The Executive Council may contribute to the settlement of a dispute that may arise concerning the application or interpretation of this Treaty by whatever means it deems appropriate, including offering its good offices, calling upon the States Parties to a dispute to seek a settlement through a process of their own choice, bringing the matter to the attention of the Conference and recommending a time-limit for any agreed procedure.

4. The Conference shall consider questions related to disputes raised by States Parties or brought to its attention by the Executive Council. The Conference shall, as it finds necessary, establish or entrust organs with tasks related to the settlement of these disputes in conformity with Article II, paragraph 26 (j).

5. The Conference and the Executive Council are separately empowered, subject to authorization from the General Assembly of the United Nations, to request the International Court of Justice to give an advisory opinion on any legal question arising within the scope of the activities of the Organization. An agreement between the Organization and the United Nations shall be concluded for this purpose in accordance with Article II, paragraph 38 (h).

6. This Article is without prejudice to Articles IV and V.

Article VII - Amendments

1. At any time after the entry into force of this Treaty, any State Party may propose amendments to this Treaty, the Protocol, or the Annexes to the Protocol. Any State Party may also propose changes, in accordance with paragraph 7, to the Protocol or the Annexes thereto. Proposals for amendments shall be subject to the procedures in paragraphs 2 to 6. Proposals for changes, in accordance with paragraph 7, shall be subject to the procedures in paragraph 8.

2. The proposed amendment shall be considered and adopted only by an Amendment Conference.

3. Any proposal for an amendment shall be communicated to the Director-General, who shall circulate it to all States Parties and the Depositary and seek the views of the States Parties on whether an Amendment Conference should be convened to consider the proposal. If a majority of the States Parties notify the Director-General no later than 30 days after its circulation that they support further consideration of the proposal, the Director-General shall convene an Amendment Conference to which all States Parties shall be invited.

4. The Amendment Conference shall be held immediately following a regular session of the Conference unless all States Parties that support the convening of an Amendment

Conference request that it be held earlier. In no case shall an Amendment Conference be held less than 60 days after the circulation of the proposed amendment.

5. Amendments shall be adopted by the Amendment Conference by a positive vote of a majority of the States Parties with no State Party casting a negative vote.

6. Amendments shall enter into force for all States Parties 30 days after deposit of the instruments of ratification or acceptance by all those States Parties casting a positive vote at the Amendment Conference.

7. In order to ensure the viability and effectiveness of this Treaty, Parts I and III of the Protocol and Annexes 1 and 2 to the Protocol shall be subject to changes in accordance with paragraph 8, if the proposed changes are related only to matters of an administrative or technical nature. All other provisions of the Protocol and the Annexes thereto shall not be subject to changes in accordance with paragraph 8.

8. Proposed changes referred to in paragraph 7 shall be made in accordance with the following procedures:

(a) The text of the proposed changes shall be transmitted together with the necessary information to the Director-General. Additional information for the evaluation of the proposal may be provided by any State Party and the Director-General. The Director-General shall promptly communicate any such proposals and information to all States Parties, the Executive Council and the Depositary;

(b) No later than 60 days after its receipt, the Director-General shall evaluate the proposal to determine all its possible consequences for the provisions of this Treaty and its implementation and shall communicate any such information to all States Parties and the Executive Council;

(c) The Executive Council shall examine the proposal in the light of all information available to it, including whether the proposal fulfils the requirements of paragraph 7. No later than 90 days after its receipt, the Executive Council shall notify its recommendation, with appropriate explanations, to all States Parties for consideration. States Parties shall acknowledge receipt within 10 days;

(d) If the Executive Council recommends to all States Parties that the proposal be adopted, it shall be considered approved if no State Party objects to it within 90 days after receipt of the recommendation. If the Executive Council recommends that the proposal be rejected, it shall be considered rejected if no State Party objects to the rejection within 90 days after receipt of the recommendation;

(e) If a recommendation of the Executive Council does not meet with the acceptance required under sub-paragraph (d), a decision on the proposal, including whether it fulfils the requirements of paragraph 7, shall be taken as a matter of substance by the Conference at its next session;

(f) The Director-General shall notify all States Parties and the Depositary of any decision under this paragraph;

(g) Changes approved under this procedure shall enter into force for all States Parties 180 days after the date of notification by the Director-General of their approval unless another time period is recommended by the Executive Council or decided by the Conference.

Article VIII - Review of the Treaty

1. Unless otherwise decided by a majority of the States Parties, ten years after the entry into force of this Treaty a Conference of the States Parties shall be held to review the operation and effectiveness of this Treaty, with a view to assuring itself that the objectives and purposes in the Preamble and the provisions of the Treaty are being realized. Such review shall take into account any new scientific and technological developments relevant to this Treaty. On the basis of a request by any State Party, the Review Conference shall consider the possibility of permitting the conduct of underground nuclear explosions for peaceful purposes. If the Review Conference decides by consensus that such nuclear explosions may be permitted, it shall commence work without delay, with a view to recommending to States Parties an appropriate amendment to this Treaty that shall preclude any military benefits of such nuclear explosions. Any such proposed amendment shall be communicated to the Director-General by any State Party and shall be dealt with in accordance with the provisions of Article VII.

2. At intervals of ten years thereafter, further Review Conferences may be convened with the same objective, if the Conference so decides as a matter of procedure in the preceding year. Such Conferences may be convened after an interval of less than ten years if so decided by the Conference as a matter of substance.

3. Normally, any Review Conference shall be held immediately following the regular annual session of the Conference provided for in Article II.

Article IX - Duration and withdrawal

1. This Treaty shall be of unlimited duration.

2. Each State Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests.

3. Withdrawal shall be effected by giving notice six months in advance to all other States Parties, the Executive Council, the Depositary and the United Nations Security Council. Notice of withdrawal shall include a statement of the extraordinary event or events which a State Party regards as jeopardizing its supreme interests.

Article X - Status of the Protocol and the Annexes

The Annexes to this Treaty, the Protocol, and the Annexes to the Protocol form an integral part of the Treaty. Any reference to this Treaty includes the Annexes to this Treaty, the Protocol and the Annexes to the Protocol.

Article XI - Signature

This Treaty shall be open to all States for signature before its entry into force.

Article XII - Ratification

This Treaty shall be subject to ratification by States Signatories according to their respective constitutional processes.

Article XIII - Accession

Any State which does not sign this Treaty before its entry into force may accede to it at any time thereafter.

Article XIV - Entry into force

1. This Treaty shall enter into force 180 days after the date of deposit of the instruments of ratification by all States listed in Annex 2 to this Treaty, but in no case earlier than two years after its opening for signature.

2. If this Treaty has not entered into force three years after the date of the anniversary of its opening for signature, the Depositary shall convene a Conference of the States that have already deposited their instruments of ratification upon the request of a majority of those States. That Conference shall examine the extent to which the requirement set out in paragraph 1 has been met and shall consider and decide by consensus what measures consistent with international law may be undertaken to accelerate the ratification process in order to facilitate the early entry into force of this Treaty.

3. Unless otherwise decided by the Conference referred to in paragraph 2 or other such conferences, this process shall be repeated at subsequent anniversaries of the opening for signature of this Treaty, until its entry into force.

4. All States Signatories shall be invited to attend the Conference referred to in paragraph 2 and any subsequent conferences as referred to in paragraph 3, as observers.

5. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the 30th day following the date of deposit of their instruments of ratification or accession.

Article XV - Reservations

The Articles of and the Annexes to this Treaty shall not be subject to reservations. The provisions of the Protocol to this Treaty and the Annexes to the Protocol shall not be subject to reservations incompatible with the object and purpose of this Treaty.

Article XVI - Depositary

1. The Secretary-General of the United Nations shall be the Depositary of this Treaty and shall receive signatures, instruments of ratification and instruments of accession.

2. The Depositary shall promptly inform all States Signatories and acceding States of the date of each signature, the date of deposit of each instrument of ratification or accession, the date of the entry into force of this Treaty and of any amendments and changes thereto, and the receipt of other notices.

3. The Depositary shall send duly certified copies of this Treaty to the Governments of the States Signatories and acceding States.

4. This Treaty shall be registered by the Depositary pursuant to Article 102 of the Charter of the United Nations.

Article XVII - Authentic Texts

This Treaty, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

Annex 1 to the Treaty: List of States pursuant to Article II, paragraph 28

Africa:

Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea–Bissau, Kenya, Lesotho, Liberia, Libyan Arab Jamahiriya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome & Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Togo, Tunisia, Uganda, United Republic of Tanzania, Zaire, Zambia, Zimbabwe.

Eastern Europe:

Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Slovenia, The former Yugoslav Republic of Macedonia, Ukraine, Yugoslavia.

Latin America and the Caribbean

Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela.

Middle East and South Asia:

Afghanistan, Bahrain, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakstan, Kuwait, Kyrgyzstan, Lebanon, Maldives, Nepal, Oman, Pakistan, Qatar, Saudi Arabia, Sri Lanka, Syrian Arab Republic, Tajikistan, Turkmenistan, United Arab Emirates, Uzbekistan, Yemen.

North America and Western Europe:

Andorra, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Holy See, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco,

Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, Turkey, United Kingdom of Great Britain and Northern Ireland, United States of America.

South East Asia, the Pacific and the Far East:

Australia, Brunei Darussalam, Cambodia, China, Cook Islands, Democratic People's Republic of Korea, Fiji, Indonesia, Japan, Kiribati, Lao People's Democratic Republic, Malaysia, Marshall Islands, Micronesia (Federated States of), Mongolia, Myanmar, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Philippines, Republic of Korea, Samoa, Singapore, Solomon Islands, Thailand, Tonga, Tuvalu, Vanuatu, Viet Nam.

Annex 2 to the Treaty: List of States pursuant to Article XIV

List of States members of the Conference on Disarmament as at 18 June 1996 which formally participated in the work of the 1996 session of the Conference and which appear in Table 1 of the International Atomic Energy Agency's April 1996 edition of "Nuclear Power Reactors in the World", and of States members of the Conference on Disarmament as at 18 June 1996 which formally participated in the work of the 1996 session of the Conference and which appear in Table 1 of the International Atomic Energy Agency's December 1995 edition of "Nuclear Research Reactors in the World":

Algeria, Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Democratic People's Republic of Korea, Egypt, Finland, France, Germany, Hungary, India, Indonesia, Iran (Islamic Republic of), Israel, Italy, Japan, Mexico, Netherlands, Norway, Pakistan, Peru, Poland, Romania, Republic of Korea, Russian Federation, Slovakia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Viet Nam, Zaire.

Protocol to the Comprehensive Nuclear Test-ban Treaty

Part I: The International Monitoring System and International Data Centre Functions

A. General provisions

1. The International Monitoring System shall comprise monitoring facilities as set out in Article IV, paragraph 16, and respective means of communication.

2. The monitoring facilities incorporated into the International Monitoring System shall consist of those facilities specified in Annex 1 to this Protocol. The International Monitoring System shall fulfil the technical and operational requirements specified in the relevant operational manuals.

3. The Organization, in accordance with Article II, shall, in cooperation and consultation with the States Parties, with other States, and with international organizations as appropriate, establish and coordinate the operation and maintenance, and any future agreed modification or development of the International Monitoring System.

4. In accordance with appropriate agreements or arrangements and procedures, a State Party or other State hosting or otherwise taking responsibility for International Monitor-

ing System facilities and the Technical Secretariat shall agree and cooperate in establishing, operating, upgrading, financing, and maintaining monitoring facilities, related certified laboratories and respective means of communication within areas under its jurisdiction or control or elsewhere in conformity with international law. Such cooperation shall be in accordance with the security and authentication requirements and technical specifications contained in the relevant operational manuals. Such a State shall give the Technical Secretariat authority to access a monitoring facility for checking equipment and communication links, and shall agree to make the necessary changes in the equipment and the operational procedures to meet agreed requirements. The Technical Secretariat shall provide to such States appropriate technical assistance as is deemed by the Executive Council to be required for the proper functioning of the facility as part of the International Monitoring System.

5. Modalities for such cooperation between the Organization and States Parties or States hosting or otherwise taking responsibility for facilities of the International Monitoring System shall be set out in agreements or arrangements as appropriate in each case.

B. Seismological monitoring

6. Each State Party undertakes to cooperate in an international exchange of seismological data to assist in the verification of compliance with this Treaty. This cooperation shall include the establishment and operation of a global network of primary and auxiliary seismological monitoring stations. These stations shall provide data in accordance with agreed procedures to the International Data Centre.

7. The network of primary stations shall consist of the 50 stations specified in Table 1-A of Annex 1 to this Protocol. These stations shall fulfil the technical and operational requirements specified in the Operational Manual for Seismological Monitoring and the International Exchange of Seismological Data. Uninterrupted data from the primary stations shall be transmitted, directly or through a national data centre, on-line to the International Data Centre.

8. To supplement the primary network, an auxiliary network of 120 stations shall provide information, directly or through a national data centre, to the International Data Centre upon request. The auxiliary stations to be used are listed in Table 1-B of Annex 1 to this Protocol. The auxiliary stations shall fulfil the technical and operational requirements specified in the Operational Manual for Seismological Monitoring and the International Exchange of Seismological Data. Data from the auxiliary stations may at any time be requested by the International Data Centre and shall be immediately available through on-line computer connections.

C. Radionuclide monitoring

9. Each State Party undertakes to cooperate in an international exchange of data on radionuclides in the atmosphere to assist in the verification of compliance with this Treaty. This cooperation shall include the establishment and operation of a global network of radionuclide monitoring stations and certified laboratories. The network shall provide data in accordance with agreed procedures to the International Data Centre.

10. The network of stations to measure radionuclides in the atmosphere shall comprise an overall network of 80 stations, as specified in Table 2-A of Annex 1 to this Protocol.

All stations shall be capable of monitoring for the presence of relevant particulate matter in the atmosphere. Forty of these stations shall also be capable of monitoring for the presence of relevant noble gases upon the entry into force of this Treaty. For this purpose the Conference, at its initial session, shall approve a recommendation by the Preparatory Commission as to which 40 stations from Table 2-A of Annex 1 to this Protocol shall be capable of noble gas monitoring. At its first regular annual session, the Conference shall consider and decide on a plan for implementing noble gas monitoring capability throughout the network. The Director–General shall prepare a report to the Conference on the modalities for such implementation. All monitoring stations shall fulfil the technical and operational requirements specified in the Operational Manual for Radionuclide Monitoring and the International Exchange of Radionuclide Data.

11. The network of radionuclide monitoring stations shall be supported by laboratories, which shall be certified by the Technical Secretariat in accordance with the relevant operational manual for the performance, on contract to the Organization and on a fee-for-service basis, of the analysis of samples from radionuclide monitoring stations. Laboratories specified in Table 2-B of Annex 1 to this Protocol, and appropriately equipped, shall, as required, also be drawn upon by the Technical Secretariat to perform additional analysis of samples from radionuclide monitoring stations. With the agreement of the Executive Council, further laboratories may be certified by the Technical Secretariat to perform the routine analysis of samples from manual monitoring stations where necessary. All certified laboratories shall provide the results of such analysis to the International Data Centre, and in so doing shall fulfil the technical and operational requirements specified in the Operational Manual on Radionuclide Monitoring and the International Exchange of Radionuclide Data.

D. Hydroacoustic monitoring

12. Each State Party undertakes to cooperate in an international exchange of hydroacoustic data to assist in the verification of compliance with this Treaty. This cooperation shall include the establishment and operation of a global network of hydroacoustic monitoring stations. These stations shall provide data in accordance with agreed procedures to the International Data Centre.

13. The network of hydroacoustic stations shall consist of the stations specified in Table 3 of Annex 1 to this Protocol, and shall comprise an overall network of six hydrophone and five T-phase stations. These stations shall fulfil the technical and operational requirements specified in the Operational Manual for Hydroacoustic Monitoring and the International Exchange of Hydroacoustic Data.

E. Infrasound monitoring

14. Each State Party undertakes to cooperate in an international exchange of infrasound data to assist in the verification of compliance with this Treaty. This cooperation shall include the establishment and operation of a global network of infrasound monitoring stations. These stations shall provide data in accordance with agreed procedures to the International Data Centre.

15. The network of infrasound stations shall consist of the stations specified in Table 4 of Annex 1 to this Protocol, and shall comprise an overall network of 60 stations. These stations shall fulfil the technical and operational requirements specified in the Opera-

tional Manual for Infrasound Monitoring and the International Exchange of Infrasound Data.

F. International Data Centre functions

16. The International Data Centre shall receive, collect, process, analyse, report on and archive data from International Monitoring System facilities, including the results of analysis conducted at certified laboratories.

17. The procedures and standard event screening criteria to be used by the International Data Centre in carrying out its agreed functions, in particular for the production of standard reporting products and for the performance of a standard range of services for States Parties, shall be elaborated in the Operational Manual for the International Data Centre and shall be progressively developed. The procedures and criteria developed initially by the Preparatory Commission shall be approved by the Conference at its initial session.

International Data Centre Standard Products

18. The International Data Centre shall apply on a routine basis automatic processing methods and interactive human analysis to raw International Monitoring System data in order to produce and archive standard International Data Centre products on behalf of all States Parties. These products shall be provided at no cost to States Parties and shall be without prejudice to final judgements with regard to the nature of any event, which shall remain the responsibility of States Parties, and shall include:

(a) Integrated lists of all signals detected by the International Monitoring System, as well as standard event lists and bulletins, including the values and associated uncertainties calculated for each event located by the International Data Centre, based on a set of standard parameters;

(b) Standard screened event bulletins that result from the application to each event by the International Data Centre of standard event screening criteria, making use of the characterization parameters specified in Annex 2 to this Protocol, with the objective of characterizing, highlighting in the standard event bulletin, and thereby screening out, events considered to be consistent with natural phenomena or non-nuclear, man-made phenomena. The standard event bulletin shall indicate numerically for each event the degree to which that event meets or does not meet the event screening criteria. In applying standard event screening, the International Data Centre shall use both global and supplementary screening criteria to take account of regional variations where applicable. The International Data Centre shall progressively enhance its technical capabilities as experience is gained in the operation of the International Monitoring System;

(c) Executive summaries, which summarise the data acquired and archived by the International Data Centre, the products of the International Data Centre, and the performance and operational status of the International Monitoring System and International Data Centre; and

(d) Extracts or subsets of the standard International Data Centre products specified in sub-paragraphs (a) to (c), selected according to the request of an individual State Party.

19. The International Data Centre shall carry out, at no cost to States Parties, special studies to provide in-depth, technical review by expert analysis of data from the Interna-

tional Monitoring System, if requested by the Organization or by a State Party, to improve the estimated values for the standard signal and event parameters.

International Data Centre Services to States Parties

20. The International Data Centre shall provide States Parties with open, equal, timely and convenient access to all International Monitoring System data, raw or processed, all International Data Centre products, and all other International Monitoring System data in the archive of the International Data Centre or, through the International Data Centre, of International Monitoring System facilities. The methods for supporting data access and the provision of data shall include the following services:

(a) Automatic and regular forwarding to a State Party of the products of the International Data Centre or the selection by the State Party thereof, and, as requested, the selection by the State Party of International Monitoring System data;

(b) The provision of the data or products generated in response to ad hoc requests by States Parties for the retrieval from the International Data Centre and International Monitoring System facility archives of data and products, including interactive electronic access to the International Data Centre data base; and

(c) Assisting individual States Parties, at their request and at no cost for reasonable efforts, with expert technical analysis of International Monitoring System data and other relevant data provided by the requesting State Party, in order to help the State Party concerned to identify the source of specific events. The output of any such technical analysis shall be considered a product of the requesting State Party, but shall be available to all States Parties.

The International Data Centre services specified in sub-paragraphs (a) and (b) shall be made available at no cost to each State Party. The volumes and formats of data shall be set out in the Operational Manual for the International Data Centre.

National Event Screening

21. The International Data Centre shall, if requested by a State Party, apply to any of its standard products, on a regular and automatic basis, national event screening criteria established by that State Party, and provide the results of such analysis to that State Party. This service shall be undertaken at no cost to the requesting State Party. The output of such national event screening processes shall be considered a product of the requesting State Party.

Technical Assistance

22. The International Data Centre shall, where required, provide technical assistance to individual States Parties:

(a) In formulating their requirements for selection and screening of data and products;

(b) By installing at the International Data Centre, at no cost to a requesting State Party for reasonable efforts, computer algorithms or software provided by that State Party to compute new signal and event parameters that are not included in the Operational Manual for the International Data Centre, the output being considered products of the requesting State Party; and

(c) By assisting States Parties to develop the capability to receive, process and analyse International Monitoring System data at a national data centre.

23. The International Data Centre shall continuously monitor and report on the operational status of the International Monitoring System facilities, of communications links, and of its own processing systems. It shall provide immediate notification to those responsible should the operational performance of any component fail to meet agreed levels set out in the relevant operational manual.

Part II: On-site inspections

A. General provisions

1. The procedures in this Part shall be implemented pursuant to the provisions for on-site inspections set out in Article IV.

2. The on-site inspection shall be carried out in the area where the event that triggered the on-site inspection request occurred.

3. The area of an on-site inspection shall be continuous and its size shall not exceed 1000 square kilometres. There shall be no linear distance greater than 50 kilometres in any direction.

4. The duration of an on-site inspection shall not exceed 60 days from the date of the approval of the on-site inspection request in accordance with Article IV, paragraph 46, but may be extended by a maximum of 70 days in accordance with Article IV, paragraph 49.

5. If the inspection area specified in the inspection mandate extends to the territory or other place under the jurisdiction or control of more than one State Party, the provisions on on-site inspections shall, as appropriate, apply to each of the States Parties to which the inspection area extends.

6. In cases where the inspection area is under the jurisdiction or control of the inspected State Party but is located on the territory of another State Party or where the access from the point of entry to the inspection area requires transit through the territory of a State Party other than the inspected State Party, the inspected State Party shall exercise the rights and fulfil the obligations concerning such inspections in accordance with this Protocol. In such a case, the State Party on whose territory the inspection area is located shall facilitate the inspection and shall provide for the necessary support to enable the inspection team to carry out its tasks in a timely and effective manner. States Parties through whose territory transit is required to reach the inspection area shall facilitate such transit.

7. In cases where the inspection area is under the jurisdiction or control of the inspected State Party but is located on the territory of a State not Party to this Treaty, the inspected State Party shall take all necessary measures to ensure that the inspection can be carried out in accordance with this Protocol. A State Party that has under its jurisdiction or control one or more areas on the territory of a State not Party to this Treaty shall take all necessary measures to ensure acceptance by the State on whose territory the inspection area is located of inspectors and inspection assistants designated to that State Party. If an

inspected State Party is unable to ensure access, it shall demonstrate that it took all necessary measures to ensure access.

8. In cases where the inspection area is located on the territory of a State Party but is under the jurisdiction or control of a State not Party to this Treaty, the State Party shall take all necessary measures required of an inspected State Party and a State Party on whose territory the inspection area is located, without prejudice to the rules and practices of international law, to ensure that the on-site inspection can be carried out in accordance with this Protocol. If the State Party is unable to ensure access to the inspection area, it shall demonstrate that it took all necessary measures to ensure access, without prejudice to the rules and practices of international law.

9. The size of the inspection team shall be kept to the minimum necessary for the proper fulfilment of the inspection mandate. The total number of members of the inspection team present on the territory of the inspected State Party at any given time, except during the conduct of drilling, shall not exceed 40 persons. No national of the requesting State Party or the inspected State Party shall be a member of the inspection team.

10. The Director-General shall determine the size of the inspection team and select its members from the list of inspectors and inspection assistants, taking into account the circumstances of a particular request.

11. The inspected State Party shall provide for or arrange the amenities necessary for the inspection team, such as communication means, interpretation services, transportation, working space, lodging, meals, and medical care.

12. The inspected State Party shall be reimbursed by the Organization, in a reasonably short period of time after conclusion of the inspection, for all expenses, including those mentioned in paragraphs 11 and 49, related to the stay and functional activities of the inspection team on the territory of the inspected State Party.

13. Procedures for the implementation of on-site inspections shall be detailed in the Operational Manual for On-Site Inspections.

B. Standing arrangements

Designation of Inspectors and Inspection Assistants

14. An inspection team may consist of inspectors and inspection assistants. An on-site inspection shall only be carried out by qualified inspectors specially designated for this function. They may be assisted by specially designated inspection assistants, such as technical and administrative personnel, aircrew and interpreters.

15. Inspectors and inspection assistants shall be nominated for designation by the States Parties or, in the case of staff of the Technical Secretariat, by the Director-General, on the basis of their expertise and experience relevant to the purpose and functions of on-site inspections. The nominees shall be approved in advance by the States Parties in accordance with paragraph 18.

16. Each State Party, no later than 30 days after the entry into force of this Treaty for it, shall notify the Director-General of the names, dates of birth, sex, ranks, qualifications and professional experience of the persons proposed by the State Party for designation as inspectors and inspection assistants.

17. No later than 60 days after the entry into force of this Treaty, the Technical Secretariat shall communicate in writing to all States Parties an initial list of the names, nationalities, dates of birth, sex and ranks of the inspectors and inspection assistants proposed for designation by the Director-General and the States Parties, as well as a description of their qualifications and professional experience.

18. Each State Party shall immediately acknowledge receipt of the initial list of inspectors and inspection assistants proposed for designation. Any inspector or inspection assistant included in this list shall be regarded as accepted unless a State Party, no later than 30 days after acknowledgment of receipt of the list, declares its non-acceptance in writing. The State Party may include the reason for the objection. In the case of non-acceptance, the proposed inspector or inspection assistant shall not undertake or participate in on-site inspection activities on the territory or in any other place under the jurisdiction or control of the State Party that has declared its non-acceptance. The Technical Secretariat shall immediately confirm receipt of the notification of objection.

19. Whenever additions or changes to the list of inspectors and inspection assistants are proposed by the Director-General or a State Party, replacement inspectors and inspection assistants shall be designated in the same manner as set forth with respect to the initial list. Each State Party shall promptly notify the Technical Secretariat if an inspector or inspection assistant nominated by it can no longer fulfil the duties of an inspector or inspection assistant.

20. The Technical Secretariat shall keep the list of inspectors and inspection assistants up to date and notify all States Parties of any additions or changes to the list.

21. A State Party requesting an on-site inspection may propose that an inspector from the list of inspectors and inspection assistants serve as its observer in accordance with Article IV, paragraph 61.

22. Subject to paragraph 23, a State Party shall have the right at any time to object to an inspector or inspection assistant who has already been accepted. It shall notify the Technical Secretariat of its objection in writing and may include the reason for the objection. Such objection shall come into effect 30 days after receipt of the notification by the Technical Secretariat. The Technical Secretariat shall immediately confirm receipt of the notification of the objection and inform the objecting and nominating States Parties of the date on which the inspector or inspection assistant shall cease to be designated for that State Party.

23. A State Party that has been notified of an inspection shall not seek the removal from the inspection team of any of the inspectors or inspection assistants named in the inspection mandate.

24. The number of inspectors and inspection assistants accepted by a State Party must be sufficient to allow for availability of appropriate numbers of inspectors and inspection assistants. If, in the opinion of the Director-General, the -acceptance by a State Party of proposed inspectors or inspection assistants impedes the designation of a sufficient number of inspectors and inspection assistants or otherwise hampers the effective fulfilment of the purposes of an on-site inspection, the Director-General shall refer the issue to the Executive Council.

25. Each inspector included in the list of inspectors and inspection assistants shall receive relevant training. Such training shall be provided by the Technical Secretariat pursuant to the procedures specified in the Operational Manual for On-Site Inspections. The Technical Secretariat shall co-ordinate, in agreement with the States Parties, a schedule of training for the inspectors.

Privileges and Immunities

26. Following acceptance of the initial list of inspectors and inspection assistants as provided for in paragraph 18 or as subsequently altered in accordance with paragraph 19, each State Party shall be obliged to issue, in accordance with its national procedures and upon application by an inspector or inspection assistant, multiple entry/exit and/or transit visas and other relevant documents to enable each inspector and inspection assistant to enter and to remain on the territory of that State Party for the sole purpose of carrying out inspection activities. Each State Party shall issue the necessary visa or travel documents for this purpose no later than 48 hours after receipt of the application or immediately upon arrival of the inspection team at the point of entry on the territory of the State Party. Such documents shall be valid for as long as is necessary to enable the inspector or inspection assistant to remain on the territory of the inspected State Party for the sole purpose of carrying out the inspection activities.

27. To exercise their functions effectively, members of the inspection team shall be accorded privileges and immunities as set forth in sub-paragraphs (a) to (i). Privileges and immunities shall be granted to members of the inspection team for the sake of this Treaty and not for the personal benefit of the individuals themselves. Such privileges and immunities shall be accorded to them for the entire period between arrival on and departure from the territory of the inspected State Party, and thereafter with respect to acts previously performed in the exercise of their official functions.

(a) The members of the inspection team shall be accorded the inviolability enjoyed by diplomatic agents pursuant to Article 29 of the Vienna Convention on Diplomatic Relations of 18 April 1961;

(b) The living quarters and office premises occupied by the inspection team carrying out inspection activities pursuant to this Treaty shall be accorded the inviolability and protection accorded to the premises of diplomatic agents pursuant to Article 30, paragraph 1, of the Vienna Convention on Diplomatic Relations;

(c) The papers and correspondence, including records, of the inspection team shall enjoy the inviolability accorded to all papers and correspondence of diplomatic agents pursuant to Article 30, paragraph 2, of the Vienna Convention on Diplomatic Relations. The inspection team shall have the right to use codes for their communications with the Technical Secretariat;

(d) Samples and approved equipment carried by members of the inspection team shall be inviolable subject to provisions contained in this Treaty and exempt from all customs duties. Hazardous samples shall be transported in accordance with relevant regulations;

(e) The members of the inspection team shall be accorded the immunities accorded to diplomatic agents pursuant to Article 31, paragraphs 1, 2 and 3, of the Vienna Convention on Diplomatic Relations;

(f) The members of the inspection team carrying out prescribed activities pursuant to this Treaty shall be accorded the exemption from dues and taxes accorded to diplomatic agents pursuant to Article 34 of the Vienna Convention on Diplomatic Relations;

(g) The members of the inspection team shall be permitted to bring into the territory of the inspected State Party, without payment of any customs duties or related charges, articles for personal use, with the exception of articles the import or export of which is prohibited by law or controlled by quarantine regulations;

(h) The members of the inspection team shall be accorded the same currency and exchange facilities as are accorded to representatives of foreign Governments on temporary official missions; and

(i) The members of the inspection team shall not engage in any professional or commercial activity for personal profit on the territory of the inspected State Party.

28. When transiting the territory of States Parties other than the inspected State Party, the members of the inspection team shall be accorded the privileges and immunities enjoyed by diplomatic agents pursuant to Article 40, paragraph 1, of the Vienna Convention on Diplomatic Relations. Papers and correspondence, including records, and samples and approved equipment carried by them, shall be accorded the privileges and immunities set forth in paragraph 27 (c) and (d).

29. Without prejudice to their privileges and immunities the members of the inspection team shall be obliged to respect the laws and regulations of the inspected State Party and, to the extent that is consistent with the inspection mandate, shall be obliged not to interfere in the internal affairs of that State. If the inspected State Party considers that there has been an abuse of privileges and immunities specified in this Protocol, consultations shall be held between the State Party and the Director-General to determine whether such an abuse has occurred and, if so determined, to prevent a repetition of such an abuse.

30. The immunity from jurisdiction of members of the inspection team may be waived by the Director-General in those cases when the Director-General is of the opinion that immunity would impede the course of justice and that it can be waived without prejudice to the implementation of the provisions of this Treaty. Waiver must always be express.

31. Observers shall be accorded the same privileges and immunities accorded to members of the inspection team pursuant to this section, except for those accorded pursuant to paragraph 27 (d).

Points of Entry

32. Each State Party shall designate its points of entry and shall supply the required information to the Technical Secretariat no later than 30 days after this Treaty enters into force for it. These points of entry shall be such that the inspection team can reach any inspection area from at least one point of entry within 24 hours. Locations of points of entry shall be provided to all States Parties by the Technical Secretariat. Points of entry may also serve as points of exit.

33. Each State Party may change its points of entry by giving notice of such change to the Technical Secretariat. Changes shall become effective 30 days after the Technical Secretariat receives such notification, to allow appropriate notification to all States Parties.

34. If the Technical Secretariat considers that there are insufficient points of entry for the timely conduct of inspections or that changes to the points of entry proposed by a State Party would hamper such timely conduct of inspections, it shall enter into consultations with the State Party concerned to resolve the problem.

Arrangements for Use of Non-Scheduled Aircraft

35. Where timely travel to the point of entry is not feasible using scheduled commercial flights, an inspection team may utilize non–scheduled aircraft. No later than 30 days after this Treaty enters into force for it, each State Party shall inform the Technical Secretariat of the standing diplomatic clearance number for non–scheduled aircraft transporting an inspection team and equipment necessary for inspection. Aircraft routings shall be along established international airways that are agreed upon between the State Party and the Technical Secretariat as the basis for such diplomatic clearance.

Approved Inspection Equipment

36. The Conference, at its initial session, shall consider and approve a list of equipment for use during on-site inspections. Each State Party may submit proposals for the inclusion of equipment in the list. Specifications for the use of the equipment, as detailed in the Operational Manual for On-Site Inspections, shall take account of safety and confidentiality considerations where such equipment is likely to be used.

37. The equipment for use during on-site inspections shall consist of core equipment for the inspection activities and techniques specified in paragraph 69 and auxiliary equipment necessary for the effective and timely conduct of on-site inspections.

38. The Technical Secretariat shall ensure that all types of approved equipment are available for on-site inspections when required. When required for an on-site inspection, the Technical Secretariat shall duly certify that the equipment has been calibrated, maintained and protected. To facilitate the checking of the equipment at the point of entry by the inspected State Party, the Technical Secretariat shall provide documentation and attach seals to authenticate the certification.

39. Any permanently held equipment shall be in the custody of the Technical Secretariat. The Technical Secretariat shall be responsible for the maintenance and calibration of such equipment.

40. As appropriate, the Technical Secretariat shall make arrangements with States Parties to provide equipment mentioned in the list. Such States Parties shall be responsible for the maintenance and calibration of such equipment.

C. On-site inspection Request, Inspection Mandate and Notification of Inspection

On-Site Inspection Request

41. Pursuant to Article IV, paragraph 37, the on-site inspection request shall contain at least the following information:

(a) The estimated geographical and vertical co-ordinates of the location of the event that triggered the request with an indication of the possible margin of error;

(b) The proposed boundaries of the area to be inspected, specified on a map and in accordance with paragraphs 2 and 3;

(c) The State Party or States Parties to be inspected or an indication that the area to be inspected or part thereof is beyond the jurisdiction or control of any State;

(d) The probable environment of the event that triggered the request;

(e) The estimated time of the event that triggered the request, with an indication of the possible margin of error;

(f) All data upon which the request is based;

(g) The personal details of the proposed observer, if any; and

(h) The results of a consultation and clarification process in accordance with Article IV, or an explanation, if relevant, of the reasons why such a consultation and clarification process has not been carried out.

Inspection Mandate

42. The mandate for an on-site inspection shall contain:

(a) The decision of the Executive Council on the on-site inspection request;

(b) The name of the State Party or States Parties to be inspected or an indication that the inspection area or part thereof is beyond the jurisdiction or control of any State;

(c) The location and boundaries of the inspection area specified on a map, taking into account all information on which the request was based and all other available technical information, in consultation with the requesting State Party;

(d) The planned types of activity of the inspection team in the inspection area;

(e) The point of entry to be used by the inspection team;

(f) Any transit or basing points, as appropriate;

(g) The name of the head of the inspection team;

(h) The names of members of the inspection team;

(i) The name of the proposed observer, if any; and

(j) The list of equipment to be used in the inspection area.

If a decision by the Executive Council pursuant to Article IV, paragraphs 46 to 49, necessitates a modification of the inspection mandate, the Director-General may update the mandate with respect to sub-paragraphs (d), (h) and (j), as appropriate. The Director-General shall immediately notify the inspected State Party of any such modification.

Notification of Inspection

43. The notification made by the Director-General pursuant to Article IV, paragraph 55 shall include the following information:

(a) The inspection mandate;

(b) The date and estimated time of arrival of the inspection team at the point of entry;

(c) The means of arrival at the point of entry;

(d) If appropriate, the standing diplomatic clearance number for non–scheduled aircraft; and

(e) A list of any equipment which the Director-General requests the inspected State Party to make available to the inspection team for use in the inspection area.

44. The inspected State Party shall acknowledge receipt of the notification by the Director-General no later than 12 hours after having received the notification.

D. Pre–inspection activities

Entry Into the Territory of the Inspected State Party, Activities at the Point of Entry and Transfer to the Inspection Area

45. The inspected State Party that has been notified of the arrival of the inspection team shall ensure the immediate entry of the inspection team into its territory.

46. When a non-scheduled aircraft is used for travel to the point of entry, the Technical Secretariat shall provide the inspected State Party with a flight plan, through the National Authority, for the flight of the aircraft from the last airfield prior to entering the airspace of that State Party to the point of entry, no less than six hours before the scheduled departure time from that airfield. Such a plan shall be filed in accordance with the procedures of the International Civil Aviation Organization applicable to civil aircraft. The Technical Secretariat shall include in the remarks section of the flight plan the standing diplomatic clearance number and the appropriate notation identifying the aircraft as an inspection aircraft. If a military aircraft is used, the Technical Secretariat shall request prior authorization from the inspected State Party to enter its airspace.

47. No less than three hours before the scheduled departure of the inspection team from the last airfield prior to entering the airspace of the inspected State Party, the inspected State Party shall ensure that the flight plan filed in accordance with paragraph 46 is approved, so that the inspection team may arrive at the point of entry by the estimated arrival time.

48. Where necessary, the head of the inspection team and the representative of the inspected State Party shall agree on a basing point and a flight plan from the point of entry to the basing point and, if necessary, to the inspection area.

49. The inspected State Party shall provide for or arrange parking, security protection, servicing and fuel as required by the Technical Secretariat for the aircraft of the inspection team at the point of entry and, where necessary, at the basing point and at the inspection area. Such aircraft shall not be liable for landing fees, departure tax, and similar charges. This paragraph shall also apply to aircraft used for overflight during the on-site inspection.

50. Subject to paragraph 51, there shall be no restriction by the inspected State Party on the inspection team bringing approved equipment that is in conformity with the inspection mandate into the territory of that State Party, or on its use in accordance with the provisions of the Treaty and this Protocol.

51. The inspected State Party shall have the right, without prejudice to the time-frame specified in paragraph 54, to check in the presence of inspection team members at the point of entry that the equipment has been approved and certified in accordance with paragraph 38. The inspected State Party may exclude equipment that is not in confor-

mity with the inspection mandate or that has not been approved and certified in accordance with paragraph 38.

52. Immediately upon arrival at the point of entry and without prejudice to the time-frame specified in paragraph 54, the head of the inspection team shall present to the representative of the inspected State Party the inspection mandate and an initial inspection plan prepared by the inspection team specifying the activities to be carried out by it. The inspection team shall be briefed by representatives of the inspected State Party with the aid of maps and other documentation as appropriate. The briefing shall include relevant natural terrain features, safety and confidentiality issues, and logistical arrangements for the inspection. The inspected State Party may indicate locations within the inspection area that, in its view, are not related to the purpose of the inspection.

53. After the pre-inspection briefing, the inspection team shall, as appropriate, modify the initial inspection plan, taking into account any comments by the inspected State Party. The modified inspection plan shall be made available to the representative of the inspected State Party.

54. The inspected State Party shall do everything in its power to provide assistance and to ensure the safe conduct of the inspection team, the approved equipment specified in paragraphs 50 and 51 and baggage from the point of entry to the inspection area no later than 36 hours after arrival at the point of entry, if no other timing has been agreed upon within the time-frame specified in paragraph 57.

55. To confirm that the area to which the inspection team has been transported corresponds to the inspection area specified in the inspection mandate, the inspection team shall have the right to use approved location-finding equipment. The inspected State Party shall assist the inspection team in this task.

E. Conduct of inspections

General Rules

56. The inspection team shall discharge its functions in accordance with the provisions of the Treaty and this Protocol.

57. The inspection team shall begin its inspection activities in the inspection area as soon as possible, but in no case later than 72 hours after arrival at the point of entry.

58. The activities of the inspection team shall be so arranged as to ensure the timely and effective discharge of its functions and the least possible inconvenience to the inspected State Party and disturbance to the inspection area.

59. In cases where the inspected State Party has been requested, pursuant to paragraph 43 (e) or in the course of the inspection, to make available any equipment for use by the inspection team in the inspection area, the inspected State Party shall comply with the request to the extent it can.

60. During the on-site inspection the inspection team shall have, inter alia:

(a) The right to determine how the inspection will proceed, consistent with the inspection mandate and taking into account any steps taken by the inspected State Party consistent with the provisions on managed access;

(b) The right to modify the inspection plan, as necessary, to ensure the effective execution of the inspection;

(c) The obligation to take into account the recommendations and suggested modifications by the inspected State Party to the inspection plan;

(d) The right to request clarifications in connection with ambiguities that may arise during the inspection;

(e) The obligation to use only those techniques specified in paragraph 69 and to refrain from activities that are not relevant to the purpose of the inspection. The team shall collect and document such facts as are related to the purpose of the inspection, but shall neither seek nor document information that is clearly unrelated thereto. Any material collected and subsequently found not to be relevant shall be returned to the inspected State Party;

(f) The obligation to take into account and include in its report data and explanations on the nature of the event that triggered the request, provided by the inspected State Party from the national monitoring networks of the inspected State Party and from other sources;

(g) The obligation to provide the inspected State Party, at its request, with copies of the information and data collected in the inspection area; and

(h) The obligation to respect the confidentiality and the safety and health regulations of the inspected State Party.

61. During the on-site inspection the inspected State Party shall have, inter alia:

(a) The right to make recommendations at any time to the inspection team regarding possible modification of the inspection plan;

(b) The right and the obligation to provide a representative to liaise with the inspection team;

(c) The right to have representatives accompany the inspection team during the performance of its duties and observe all inspection activities carried out by the inspection team. This shall not delay or otherwise hinder the inspection team in the exercise of its functions;

(d) The right to provide additional information and to request the collection and documentation of additional facts it believes are relevant to the inspection;

(e) The right to examine all photographic and measurement products as well as samples and to retain any photographs or parts thereof showing sensitive sites not related to the purpose of the inspection. The inspected State Party shall have the right to receive duplicate copies of all photographic and measurement products. The inspected State Party shall have the right to retain photographic originals and first-generation photographic products and to put photographs or parts thereof under joint seal within its territory. The inspected State Party shall have the right to provide its own camera operator to take still/video photographs as requested by the inspection team. Otherwise, these functions shall be performed by members of the inspection team;

(f) The right to provide the inspection team, from its national monitoring networks and from other sources, with data and explanations on the nature of the event that triggered the request; and

(g) The obligation to provide the inspection team with such clarification as may be necessary to resolve any ambiguities that arise during the inspection.

Communications

62. The members of the inspection team shall have the right at all times during the on-site inspection to communicate with each other and with the Technical Secretariat. For this purpose they may use their own duly approved and certified equipment with the consent of the inspected State Party, to the extent that the inspected State Party does not provide them with access to other telecommunications.

Observer

63. In accordance with Article IV, paragraph 61, the requesting State Party shall liaise with the Technical Secretariat to co-ordinate the arrival of the observer at the same point of entry or basing point as the inspection team within a reasonable period of the arrival of the inspection team.

64. The observer shall have the right throughout the inspection to be in communication with the embassy of the requesting State Party located in the inspected State Party or, in the case of absence of an embassy, with the requesting State Party itself.

65. The observer shall have the right to arrive at the inspection area and to have access to and within the inspection area as granted by the inspected State Party.

66. The observer shall have the right to make recommendations to the inspection team throughout the inspection.

67. Throughout the inspection, the inspection team shall keep the observer informed about the conduct of the inspection and the findings.

68. Throughout the inspection, the inspected State Party shall provide or arrange for the amenities necessary for the observer similar to those enjoyed by the inspection team as described in paragraph 11. All costs in connection with the stay of the observer on the territory of the inspected State Party shall be borne by the requesting State Party.

Inspection Activities and Techniques

69. The following inspection activities may be conducted and techniques used, in accordance with the provisions on managed access, on collection, handling and analysis of samples, and on overflights:

(a) Position finding from the air and at the surface to confirm the boundaries of the inspection area and establish co-ordinates of locations therein, in support of the inspection activities;

(b) Visual observation, video and still photography and multi-spectral imaging, including infrared measurements, at and below the surface, and from the air, to search for anomalies or artifacts;

(c) Measurement of levels of radioactivity above, at and below the surface, using gamma radiation monitoring and energy resolution analysis from the air, and at or under the surface, to search for and identify radiation anomalies;

(d) Environmental sampling and analysis of solids, liquids and gases from above, at and below the surface to detect anomalies;

(e) Passive seismological monitoring for aftershocks to localize the search area and facilitate determination of the nature of an event;

(f) Resonance seismometry and active seismic surveys to search for and locate underground anomalies, including cavities and rubble zones;

(g) Magnetic and gravitational field mapping, ground penetrating radar and electrical conductivity measurements at the surface and from the air, as appropriate, to detect anomalies or artifacts; and

(h) Drilling to obtain radioactive samples.

70. Up to 25 days after the approval of the on–site inspection in accordance with Article IV, paragraph 46, the inspection team shall have the right to conduct any of the activities and use any of the techniques listed in paragraph 69 (a) to (e). Following the approval of the continuation of the inspection in accordance with Article IV, paragraph 47, the inspection team shall have the right to conduct any of the activities and use any of the techniques listed in paragraph 69 (a) to (g). The inspection team shall only conduct drilling after the approval of the Executive Council in accordance with Article IV, paragraph 48. If the inspection team requests an extension of the inspection duration in accordance with Article IV, paragraph 49, it shall indicate in its request which of the activities and techniques listed in paragraph 69 it intends to carry out in order to be able to fulfil its mandate.

Overflights

71. The inspection team shall have the right to conduct an overflight over the inspection area during the on-site inspection for the purposes of providing the inspection team with a general orientation of the inspection area, narrowing down and optimizing the locations for ground-based inspection and facilitating the collection of factual evidence, using equipment specified in paragraph 79.

72. The overflight shall be conducted as soon as practically possible. The total duration of the overflight over the inspection area shall be no more than 12 hours.

73. Additional overflights using equipment specified in paragraphs 79 and 80 may be conducted subject to the agreement of the inspected State Party.

74. The area to be covered by overflights shall not extend beyond the inspection area.

75. The inspected State Party shall have the right to impose restrictions or, in exceptional cases and with reasonable justification, prohibitions on the overflight of sensitive sites not related to the purpose of the inspection. Restrictions may relate to the flight altitude, the number of passes and circling, the duration of hovering, the type of aircraft, the number of inspectors on board, and the type of measurements or observations. If the inspection team considers that the restrictions or prohibitions on the overflight of sensitive sites may impede the fulfilment of its mandate, the inspected State Party shall make every reasonable effort to provide alternative means of inspection.

76. Overflights shall be conducted according to a flight plan duly filed and approved in accordance with aviation rules and regulations of the inspected State Party. Flight safety regulations of the inspected State Party shall be strictly observed throughout all flying operations.

77. During overflights landing should normally be authorized only for purposes of staging or refuelling.

78. Overflights shall be conducted at altitudes as requested by the inspection team consistent with the activities to be conducted, visibility conditions, as well as the aviation and the safety regulations of the inspected State Party and its right to protect sensitive information not related to the purposes of the inspection. Overflights shall be conducted up to a maximum altitude of 1500 metres above the surface.

79. For the overflight conducted pursuant to paragraphs 71 and 72, the following equipment may be used on board the aircraft:

(a) Field glasses;

(b) Passive location-finding equipment;

(c) Video cameras; and

(d) Hand-held still cameras.

80. For any additional overflights conducted pursuant to paragraph 73, inspectors on board the aircraft may also use portable, easily installed equipment for:

(a) Multi-spectral (including infrared) imagery;

(b) Gamma spectroscopy; and

(c) Magnetic field mapping.

81. Overflights shall be conducted with a relatively slow fixed or rotary wing aircraft. The aircraft shall afford a broad, unobstructed view of the surface below.

82. The inspected State Party shall have the right to provide its own aircraft, pre-equipped as appropriate in accordance with the technical requirements of the relevant operational manual, and crew. Otherwise, the aircraft shall be provided or rented by the Technical Secretariat.

83. If the aircraft is provided or rented by the Technical Secretariat, the inspected State Party shall have the right to check the aircraft to ensure that it is equipped with approved inspection equipment. Such checking shall be completed within the time-frame specified in paragraph 57.

84. Personnel on board the aircraft shall consist of:

(a) The minimum number of flight crew consistent with the safe operation of the aircraft;

(b) Up to four members of the inspection team;

(c) Up to two representatives of the inspected State Party;

(d) An observer, if any, subject to the agreement of the inspected State Party; and

(e) An interpreter, if necessary.

85. Procedures for the implementation of overflights shall be detailed in the Operational Manual for On-Site Inspections.

Managed Access

86. The inspection team shall have the right to access the inspection area in accordance with the provisions of the Treaty and this Protocol.

87. The inspected State Party shall provide access within the inspection area in accordance with the time-frame specified in paragraph 57.

88. Pursuant to Article IV, paragraph 57 and paragraph 86 above, the rights and obligations of the inspected State Party shall include:

(a) The right to take measures to protect sensitive installations and locations in accordance with this Protocol;

(b) The obligation, when access is restricted within the inspection area, to make every reasonable effort to satisfy the requirements of the inspection mandate through alternative means. Resolving any questions regarding one or more aspects of the inspection shall not delay or interfere with the conduct of the inspection team of other aspects of the inspection; and

(c) The right to make the final decision regarding any access of the inspection team, taking into account its obligations under this Treaty and the provisions on managed access.

89. Pursuant to Article IV, paragraph 57 (b) and paragraph 88 (a) above, the inspected State Party shall have the right throughout the inspection area to take measures to protect sensitive installations and locations and to prevent disclosure of confidential information not related to the purpose of the inspection. Such measures may include, inter alia:

(a) Shrouding of sensitive displays, stores, and equipment;

(b) Restricting measurements of radionuclide activity and nuclear radiation to determining the presence or absence of those types and energies of radiation relevant to the purpose of the inspection;

(c) Restricting the taking of or analysing of samples to determining the presence or absence of radioactive or other products relevant to the purpose of the inspection;

(d) Managing access to buildings and other structures in accordance with paragraphs 90 and 91; and

(e) Declaring restricted-access sites in accordance with paragraphs 92 to 96.

90. Access to buildings and other structures shall be deferred until after the approval of the continuation of the on-site inspection in accordance with Article IV, paragraph 47, except for access to buildings and other structures housing the entrance to a mine, other excavations, or caverns of large volume not otherwise accessible. For such buildings and structures, the inspection team shall have the right only of transit, as directed by the inspected State Party, in order to enter such mines, caverns or other excavations.

91. If, following the approval of the continuation of the inspection in accordance with Article IV, paragraph 47, the inspection team demonstrates credibly to the inspected State Party that access to buildings and other structures is necessary to fulfil the inspec-

tion mandate and that the necessary activities authorized in the mandate could not be carried out from the outside, the inspection team shall have the right to gain access to such buildings or other structures. The head of the inspection team shall request access to a specific building or structure indicating the purpose of such access, the specific number of inspectors, as well as the intended activities. The modalities for access shall be subject to negotiation between the inspection team and the inspected State Party. The inspected State Party shall have the right to impose restrictions or, in exceptional cases and with reasonable justification, prohibitions, on the access to buildings and other structures.

92. When restricted-access sites are declared pursuant to paragraph 89 (e), each such site shall be no larger than four square kilometres. The inspected State Party has the right to declare up to 50 square kilometres of restricted-access sites. If more than one restricted-access site is declared, each such site shall be separated from any other such site by a minimum distance of 20 metres. Each restricted-access site shall have clearly defined and accessible boundaries.

93. The size, location, and boundaries of restricted-access sites shall be presented to the head of the inspection team no later than the time that the inspection team seeks access to a location that contains all or part of such a site.

94. The inspection team shall have the right to place equipment and take other steps necessary to conduct its inspection up to the boundary of a restricted--access site.

95. The inspection team shall be permitted to observe visually all open places within the restricted-access site from the boundary of the site.

96. The inspection team shall make every reasonable effort to fulfil the inspection mandate outside the declared restricted-access sites prior to requesting access to such sites. If at any time the inspection team demonstrates credibly to the inspected State Party that the necessary activities authorized in the mandate could not be carried out from the outside and that access to a restricted-access site is necessary to fulfil the mandate, some members of the inspection team shall be granted access to accomplish specific tasks within the site. The inspected State Party shall have the right to shroud or otherwise protect sensitive equipment, objects and materials not related to the purpose of the inspection. The number of inspectors shall be kept to the minimum necessary to complete the tasks related to the inspection. The modalities for such access shall be subject to negotiation between the inspection team and the inspected State Party.

Collection, Handling and Analysis of Samples

97. Subject to paragraphs 86 to 96 and 98 to 100, the inspection team shall have the right to collect and remove relevant samples from the inspection area.

98. Whenever possible, the inspection team shall analyse samples on-site. Representatives of the inspected State Party shall have the right to be present when samples are analysed on-site. At the request of the inspection team, the inspected State Party shall, in accordance with agreed procedures, provide assistance for the analysis of samples on-site. The inspection team shall have the right to transfer samples for off-site analysis at laboratories designated by the Organization only if it demonstrates that the necessary sample analysis can not be performed on-site.

99. The inspected State Party shall have the right to retain portions of all samples collected when these samples are analysed and may take duplicate samples.

100. The inspected State Party shall have the right to request that any unused samples or portions thereof be returned.

101. The designated laboratories shall conduct chemical and physical analysis of the samples transferred for off-site analysis. Details of such analysis shall be elaborated in the Operational Manual for On-Site Inspections.

102. The Director-General shall have the primary responsibility for the security, integrity and preservation of samples and for ensuring that the confidentiality of samples transferred for off–site analysis is protected. The Director-General shall do so in accordance with procedures contained in the Operational Manual for On-Site Inspections. The Director-General shall, in any case:

(a) Establish a stringent regime governing the collection, handling, transport and analysis of samples;

(b) Certify the laboratories designated to perform different types of analysis;

(c) Oversee the standardization of equipment and procedures at these designated laboratories and of mobile analytical equipment and procedures;

(d) Monitor quality control and overall standards in relation to the certification of these laboratories and in relation to mobile equipment and procedures; and

(e) Select from among the designated laboratories those which shall perform analytical or other functions in relation to specific investigations.

103. When off-site analysis is to be performed, samples shall be analysed in at least two designated laboratories. The Technical Secretariat shall ensure the expeditious processing of the analysis. The samples shall be accounted for by the Technical Secretariat and any unused samples or portions thereof shall be returned to the Technical Secretariat.

104. The Technical Secretariat shall compile the results of the laboratory analysis of samples relevant to the purpose of the inspection. Pursuant to Article IV, paragraph 63, the Director-General shall transmit any such results promptly to the inspected State Party for comments and thereafter to the Executive Council and to all other States Parties and shall include detailed information concerning the equipment and methodology employed by the designated laboratories.

Conduct of Inspections in Areas beyond the Jurisdiction or Control of any State

105. In case of an on-site inspection in an area beyond the jurisdiction or control of any State, the Director-General shall consult with the appropriate States Parties and agree on any transit or basing points to facilitate a speedy arrival of the inspection team in the inspection area.

106. The States Parties on whose territory transit or basing points are located shall, as far as possible, assist in facilitating the inspection, including transporting the inspection team, its baggage and equipment to the inspection area, as well as providing the relevant amenities specified in paragraph 11. The Organization shall reimburse assisting States Parties for all costs incurred.

107. Subject to the approval of the Executive Council, the Director-General may negotiate standing arrangements with States Parties to facilitate assistance in the event of an on-site inspection in an area beyond the jurisdiction or control of any State.

108. In cases where one or more States Parties have conducted an investigation of an ambiguous event in an area beyond the jurisdiction or control of any State before a request is made for an on-site inspection in that area, any results of such investigation may be taken into account by the Executive Council in its deliberations pursuant to Article IV.

Post-Inspection Procedures

109. Upon conclusion of the inspection, the inspection team shall meet with the representative of the inspected State Party to review the preliminary findings of the inspection team and to clarify any ambiguities. The inspection team shall provide the representative of the inspected State Party with its preliminary findings in written form according to a standardized format, together with a list of any samples and other material taken from the inspection area pursuant to paragraph 98. The document shall be signed by the head of the inspection team. In order to indicate that he or she has taken notice of the contents of the document, the representative of the inspected State Party shall countersign the document. The meeting shall be completed no later than 24 hours after the conclusion of the inspection.

Departure

110. Upon completion of the post-inspection procedures, the inspection team and the observer shall leave, as soon as possible, the territory of the inspected State Party. The inspected State Party shall do everything in its power to provide assistance and to ensure the safe conduct of the inspection team, equipment and baggage to the point of exit. Unless agreed otherwise by the inspected State Party and the inspection team, the point of exit used shall be the same as the point of entry.

Part III: Confidence–building measures

1. Pursuant to Article IV, paragraph 68, each State Party shall, on a voluntary basis, provide the Technical Secretariat with notification of any chemical explosion using 300 tonnes or greater of TNT-equivalent blasting material detonated as a single explosion anywhere on its territory, or at any place under its jurisdiction or control. If possible, such notification shall be provided in advance. Such notification shall include details on location, time, quantity and type of explosive used, as well as on the configuration and intended purpose of the blast.

2. Each State Party shall, on a voluntary basis, as soon as possible after the entry into force of this Treaty provide to the Technical Secretariat, and at annual intervals thereafter update, information related to its national use of all other chemical explosions greater than 300 tonnes TNT-equivalent. In particular, the State Party shall seek to advise:

(a) The geographic locations of sites where the explosions originate;

(b) The nature of activities producing them and the general profile and frequency of such explosions;

(c) Any other relevant detail, if available; and

to assist the Technical Secretariat in clarifying the origins of any such event detected by the International Monitoring System.

3. A State Party may, on a voluntary and mutually-acceptable basis, invite representatives of the Technical Secretariat or of other States Parties to visit sites within its territory referred to in paragraphs 1 and 2.

4. For the purpose of calibrating the International Monitoring System, States Parties may liaise with the Technical Secretariat to carry out chemical calibration explosions or to provide relevant information on chemical explosions planned for other purposes.

Annex 1 to the Protocol

Table 1-A: List of Seismological Stations Comprising the Primary Network

	State responsible for station	**Location**	**Latitude**	**Longitude**	**Type**
1	Argentina	PLCA Paso Flores	40.7 S	70.6 W	3–C
2	Australia	WRA Warramunga, NT	19.9 S	134.3 E	array
3	Australia	ASAR Alice Springs, NT	23.7 S	133.9 E	array
4	Australia	STKA Stephens Creek, SA	31.9 S	141.6 E	3–C
5	Australia	MAW Mawson, Antarctica	67.6 S	62.9 E	3–C
6	Bolivia	LPAZ La Paz	16.3 S	68.1 W	3–C
7	Brazil	BDFB Brasilia	15.6 S	48.0 W	3–C
8	Canada	ULMC Lac du Bonnet, Man.	50.2 N	95.9 W	3–C
9	Canada	YKAC Yellowknife, N.W.T.	62.5 N	114.6 W	array
10	Canada	SCH Schefferville, Quebec	54.8 N	66.8 W	3–C
11	Central African Republic	BGCA Bangui	05.2 N	18.4 E	3–C
12	China	HAI Hailar	49.3 N	119.7 E	3–C > array
13	China	LZH Lanzhou	36.1 N	103.8 E	3–C > array

14	Colombia	XSA El Rosal	04.9 N	74.3 W	3–C
15	Côte d'Ivoire	DBIC Dimbroko	06.7 N	04.9 W	3–C
16	Egypt	LXEG Luxor	26.0 N	33.0 E	array
17	Finland	FINES Lahti	61.4 N	26.1 E	array
18	France	PPT Tahiti	17.6 S	149.6 W	3–C
19	Germany	GEC2 Freyung	48.9 N	13.7 E	array
20	To be determined	To be determined	To be determined	To be determined	To be determined
21	Iran (Islamic Rep. of)	THR Tehran	35.8 N	51.4 E	3–C
22	Japan	MJAR Matsushiro	36.5 N	138.2 E	array
23	Kazakstan	MAK Makanchi	46.8 N	82.0 E	array
24	Kenya	KMBO Kilimambogo	01.1 S	37.2 E	3–C
25	Mongolia	JAVM Javhlant	48.0 N	106.8 E	3–C > array
26	Niger	New Site	to be determined	to be determined	3–C > array
27	Norway	NAO Hamar	60.8 N	10.8 E	array
28	Norway	ARAO Karasjok	69.5 N	25.5 E	array
29	Pakistan	PRPK Pari	33.7 N	73.3 E	array
30	Paraguay	CPUP Villa Florida	26.3 S	57.3 W	3–C
31	Republic of Korea	KSRS Wonju	37.5 N	127.9 E	array
32	Russian Federation	KBZ Khabaz	43.7 N	42.9 E	3–C
33	Russian Federation	ZAL Zalesovo	53.9 N	84.8 E	3–C > array
34	Russian Federation	NRI Norilsk	69.0 N	88.0 E	3–C
35	Russian Federation	PDY Peleduy	59.6 N	112.6 E	3–C > array
36	Russian Federation	PET Petropavlovsk Kamchatskiy	53.1 N	157.8 E	3–C > array

37	Russian Federation	USK Ussuriysk	44.2 N	132.0 E	3–C > array
38	Saudi Arabia	New Site	to be determined	to be determined	array
39	South Africa	BOSA Boshof	28.6 S	25.6 E	3–C
40	Spain	ESDC Sonseca	39.7 N	04.0 W	array
41	Thailand	CMTO Chiang Mai	18.8 N	99.0 E	array
42	Tunisia	THA Thala	35.6 N	08.7 E	3–C
43	Turkey	BRTR Belbashi, The array is subject to relocation at Keskin	39.9 N	32.8 E	array
44	Turkmenistan	GEYT Alibeck	37.9 N	58.1 E	array
45	Ukraine	AKASG Malin	50.4 N	29.1 E	array
46	United States of America	LJTX Lajitas, TX	29.3 N	103.7 W	array
47	United States of America	MNV Mina, NV	38.4 N	118.2 W	array
48	United States of America	PIWY Pinedale, WY	42.8 N	109.6 W	array
49	United States of America	ELAK Eielson, AK	64.8 N	146.9 W	array
50	United States of America	VNDA Vanda, Antarctica	77.5 S	161.9 E	3–C

Key: 3–C > array: Indicates that the site could start operations in the International Monitoring System as a three–component station and be upgraded to an array at a later time.

Table 1–B: List of Seismological Stations Comprising the Auxiliary Network

	State responsible for station	**Location**	**Latitude**	**Longitude**	**Type**
1	Argentina	CFA Coronel Fontana	31.6 S	68.2 W	3–C
2	Argentina	USHA Ushuaia	55.0 S	68.0 W	3–C
3	Armenia	GNI Garni	40.1 N	44.7 E	3–C
4	Australia	CTA Chart. Tow. QLD	20.1 S	146.3 E	3–C

5	Australia	FITZ Fitzroy Crossing, WA	18.1 S	125.6 E	3–C
6	Australia	NWAO Narrogin, WA	32.9 S	117.2 E	3–C
7	Bangladesh	CHT Chittagong	22.4 N	91.8 E	3–C
8	Bolivia	SIV San Ignacio	16.0 S	61.1 W	3–C
9	Botswana	LBTB Lobatse	25.0 S	25.6 E	3–C
10	Brazil	PTGA Pitinga	0.7 S	60.0 W	3–C
11	Brazil	RGNB Rio Grande do Norte	6.9 S	37.0 W	3–C
12	Canada	FRB Iqaluit, N.W.T.	63.7 N	68.5 W	3–C
13	Canada	DLBC Dease Lake, B.C.	58.4 N	130.0 W	3–C
14	Canada	SADO Sadowa, Ont.	44.8 N	79.1 W	3–C
15	Canada	BBB Bella Bella, B.C.	52.2 N	128.1 W	3–C
16	Canada	MBC Mould Bay, N.W.T.	76.2 N	119.4 W	3–C
17	Canada	INK Inuvik, N.W.T.	68.3 N	133.5 W	3–C
18	Chile	RPN Easter Island	27.2 S	109.4 W	3–C
19	Chile	LVC Limon Verde	22.6 S	68.9 W	3–C
20	China	BJT Baijiatuan	40.0 N	116.2 E	3–C
21	China	KMI Kunming	25.2 N	102.8 E	3–C
22	China	SSE Sheshan	31.1 N	121.2 E	3–C
23	China	XAN Xi'an	34.0 N	108.9 E	3–C
24	Cook Islands	RAR Rarotonga	21.2 S	159.8 W	3–C
25	Costa Rica	JTS Las Juntas de Abangares	10.3 N	85.0 W	3–C

26	Czech Republic	VRAC Vranov	49.3 N	16.6 E	3–C
27	Denmark	SFJ Søndre Strømfjord Greenland	67.0 N	50.6 W	3–C
28	Djibouti	ATD Arta Tunnel	11.5 N	42.9 E	3–C
29	Egypt	KEG Kottamya	29.9 N	31.8 E	3–C
30	Ethiopia	FURI Furi	8.9 N	38.7 E	3–C
31	Fiji	MSVF Monasavu, Viti Levu	17.8 S	178.1 E	3–C
32	France	NOUC Port Laguerre, New Caledonia	22.1 S	166.3 E	3–C
33	France	KOG Kourou, Fr.Guiana	5.2 N	52.7 W	3–C
34	Gabon	BAMB Bambay	1.7 S	13.6 E	3–C
35	Germany/ South Africa	—— SANAE Station, Antarctica	71.7 S	2.9 W	3–C
36	Greece	IDI Anogia, Crete	35.3 N	24.9 E	3–C
37	Guatemala	RDG Rabir	15.0 N	90.5 W	3–C
38	Iceland	BORG Borgarnes	64.8 N	21.3 W	3–C
39	To be determined	To be determined	To be determined	To be determined	To be determined
40	Indonesia	PACI Cibinong, Jawa Barat	6.5 S	107.0 E	3–C
41	Indonesia	JAY Jayapura, Irian Jaya	2.5 S	140.7 E	3–C
42	Indonesia	SWI Sorong, Irian Jaya	0.9 S	131.3 E	3–C
43	Indonesia	PSI Parapat, Sumatera	2.7 N	98.9 E	3–C
44	Indonesia	KAPI Kappang, Sulawe-si Selatan	5.0 S	119.8 E	3–C
45	Indonesia	KUG Kupang, Nusa-tenggara Timur	10.2 S	123.6 E	3–C

46	Iran (Islamic Republic of)	KRM Kerman	30.3 N	57.1 E	3–C
47	Iran (Islamic Republic of)	MSN Masjed–e–Soleyman	31.9 N	49.3 E	3–C
48	Israel	MBH Eilath	29.8 N	34.9 E	3–C
49	Israel	PARD Parod	32.6 N	35.3 E	array
50	Italy	ENAS Enna, Sicily	37.5 N	14.3 E	3–C
51	Japan	JNU Ohita, Kyushu	33.1 N	130.9 E	3–C
52	Japan	JOW Kunigami, Oki-nawa	26.8 N	128.3 E	3–C
53	Japan	JHJ Hachijojima, Izu Islands	33.1 N	139.8 E	3–C
54	Japan	JKA Kamikawa–asahi, Hokkaido	44.1 N	142.6 E	3–C
55	Japan	JCJ Chichijima, Ogasawara	27.1 N	142.2 E	3–C
56	Jordan	—— Ashqof	32.5 N	37.6 E	3–C
57	Kazakstan	BRVK Borovoye	53.1 N	70.3 E	array
58	Kazakstan	KURK Kurchatov	50.7 N	78.6 E	array
59	Kazakstan	AKTO Aktyubinsk	50.4 N	58.0 E	3–C
60	Kyrgyzstan	AAK Ala–Archa	42.6 N	74.5 E	3–C
61	Madagascar	TAN Antananarivo	18.9 S	47.6 E	3–C
62	Mali	KOWA Kowa	14.5 N	4.0 W	3–C
63	Mexico	TEYM Tepich, Yucatan	20.2 N	88.3 W	3–C
64	Mexico	TUVM Tuzandepeti, Veracruz	18.0 N	94.4 W	3–C
65	Mexico	LPBM La Paz, Baja California Sur	24.2 N	110.2 W	3–C

66	Morocco	MDT Midelt	32.8 N	4.6 W	3–C
67	Namibia	TSUM Tsumeb	19.1 S	17.4 E	3–C
68	Nepal	EVN Everest	28.0 N	86.8 E	3–C
69	New Zealand	EWZ Erewhon, South Island	43.5 S	170.9 E	3–C
70	New Zealand	RAO Raoul Island	29.2 S	177.9 W	3–C
71	New Zealand	URZ Urewera, North Island	38.3 S	177.1 E	3–C
72	Norway	SPITS Spitsbergen	78.2 N	16.4 E	array
73	Norway	JMI Jan Mayen	70.9 N	8.7 W	3–C
74	Oman	WSAR Wadi Sarin	23.0 N	58.0 E	3–C
75	Papua New Guinea	PMG Port Moresby	9.4 S	147.2 E	3–C
76	Papua New Guinea	BIAL Bialla	5.3 S	151.1 E	3–C
77	Peru	CAJP Cajamarca	7.0 S	78.0 W	3–C
78	Peru	NNA Nana	12.0 S	76.8 W	3–C
79	Philippines	DAV Davao, Mindanao	7.1 N	125.6 E	3–C
80	Philippines	TGY Tagaytay, Luzon	14.1 N	120.9 E	3–C
81	Romania	MLR Muntele Rosu	45.5 N	25.9 E	3–C
82	Russian Federation	KIRV Kirov	58.6 N	49.4 E	3–C
83	Russian Federation	KIVO Kislovodsk	44.0 N	42.7 E	array
84	Russian Federation	OBN Obninsk	55.1 N	36.6 E	3–C
85	Russian Federation	ARU Arti	56.4 N	58.6 E	3–C
86	Russian Federation	SEY Seymchan	62.9 N	152.4 E	3–C
87	Russian Federation	TLY Talaya	51.7 N	103.6 E	3–C

88	Russian Federation	YAK Yakutsk	62.0N	129.7 E	3–C
89	Russian Federation	URG Urgal	51.1N	132.3 E	3–C
90	Russian Federation	BIL Bilibino	68.0 N	166.4 E	3–C
91	Russian Federation	TIXI Tiksi	71.6 N	128.9 E	3–C
92	Russian Federation	YSS Yuzhno–Sakhalinsk	47.0 N	142.8 E	3–C
93	Russian Federation	MA2 Magadan	59.6 N	150.8 E	3–C
94	Russian Federation	ZIL Zilim	53.9 N	57.0 E	3–C
95	Samoa	AFI Afiamalu	13.9 S	171.8 W	3–C
96	Saudi Arabia	RAYN Ar Rayn	23.6 N	45.6 E	3–C
97	Senegal	MBO Mbour	14.4 N	17.0 W	3–C
98	Solomon Islands	HNR Honiara, Guadalcanal	9.4 S	160.0 E	3–C
99	South Africa	SUR Sutherland	32.4 S	20.8 E	3–C
100	Sri Lanka	COC Colombo	6.9 N	79.9 E	3–C
101	Sweden	HFS Hagfors	60.1 N	13.7 E	array
102	Switzerland	DAVOS Davos	46.8 N	9.8 E	3–C
103	Uganda	MBRU Mbarara	0.4 S	30.4 E	3–C
104	United Kingdom	EKA Eskdalemuir	55.3 N	3.2 W	array
105	United States of America	GUMO Guam, Marianas Islands	13.6 N	144.9 E	3–C
106	United States of America	PMSA Palmer Station, Antarctica	64.8 S	64.1 W	3–C
107	United States of America	TKL Tuckaleechee Caverns, TN	35.7 N	83.8 W	3–C

108	United States of America	PFCA Piñon Flat, CA	33.6 N	116.5 W	3–C
109	United States of America	YBH Yreka, CA	41.7 N	122.7 W	3–C
110	United States of America	KDC Kodiak Island, AK	57.8 N	152.5 W	3–C
111	United States of America	ALQ Albuquerque, NM	35.0 N	106.5 W	3–C
112	United States of America	ATTU Attu Island, AK	52.8 N	172.7 E	3–C
113	United States of America	ELK Elko, NV	40.7 N	115.2 W	3–C
114	United States of America	SPA South Pole, Antarctica	90.0 S	– –	3–C
115	United States of America	NEW Newport, WA	48.3 N	117.1 W	3–C
116	United States of America	SJG San Juan, PR	18.1 N	66.2 W	3–C
117	Venezuela	SDV Santo Domingo	8.9 N	70.6 W	3–C
118	Venezuela	PCRV Puerto la Cruz	10.2 N	64.6 W	3–C
119	Zambia	LSZ Lusaka	15.3 S	28.2 E	3–C
120	Zimbabwe	BUL Bulawayo	to be advised	to be advised	3–C

Table 2–A: List of Radionuclide Stations

	State responsible for station	**Location**	**Latitude**	**Longitude**
1	Argentina	Buenos Aires	34.0 S	58.0W
2	Argentina	Salta	24.0 S	65.0 W
3	Argentina	Bariloche	41.1 S	71.3 W
4	Australia	Melbourne, VIC	37.5 S	144.6 E
5	Australia	Mawson, Antarctica	67.6 S	62.5 E
6	Australia	Townsville, QLD	19.2 S	146.8 E
7	Australia	Macquarie Island	54.0 S	159.0 E
8	Australia	Cocos Islands	12.0 S	97.0 E
9	Australia	Darwin, NT	12.4 S	130.7 E
10	Australia	Perth, WA	31.9 S	116.0 E
11	Brazil	Rio de Janeiro	22.5 S	43.1 W

12	Brazil	Recife	8.0 S	35.0 W
13	Cameroon	Douala	4.2 N	9.9 E
14	Canada	Vancouver, B.C.	49.3 N	123.2 W
15	Canada	Resolute, N.W.T.	74.7 N	94.9 W
16	Canada	Yellowknife, N.W.T.	62.5 N	114.5 W
17	Canada	St. John's, N.L.	47.0 N	53.0 W
18	Chile	Punta Arenas	53.1 S	70.6 W
19	Chile	Hanga Roa, Easter Island	27.1 S	108.4 W
20	China	Beijing	39.8 N	116.2 E
21	China	Lanzhou	35.8 N	103.3 E
22	China	Guangzhou	23.0 N	113.3 E
23	Cook Islands	Rarotonga	21.2 S	159.8 W
24	Ecuador	Isla San Cristóbal, Galápagos Islands	1.0 S	89.2 W
25	Ethiopia	Filtu	5.5 N	42.7 E
26	Fiji	Nadi	18.0 S	177.5 E
27	France	Papeete, Tahiti	17.0 S	150.0 W
28	France	Pointe–à–Pitre, Guadeloupe	17.0 N	62.0 W
29	France	Réunion	21.1 S	55.6 E
30	France	Port–aux–Français, Kerguelen	49.0 S	70.0 E
31	France	Cayenne, French Guiana	5.0 N	52.0 W
32	France	Dumont d'Urville, Antarctica	66.0 S	140.0 E
33	Germany	Schauinsland/ Freiburg	47.9 N	7.9 E
34	Iceland	Reykjavik	64.4 N	21.9 W
35	To be determined	To be determined	To be determined	To be determined
36	Iran (Islamic Republic of)	Tehran	35.0 N	52.0 E
37	Japan	Okinawa	26.5 N	127.9 E
38	Japan	Takasaki, Gunma	36.3 N	139.0 E
39	Kiribati	Kiritimati	2.0 N	157.0 W
40	Kuwait	Kuwait City	29.0 N	48.0 E
41	Libya	Misratah	32.5 N	15.0 E
42	Malaysia	Kuala Lumpur	2.6 N	101.5 E
43	Mauritania	Nouakchott	18.0 N	17.0 W
44	Mexico	Baja California	28.0 N	113.0 W
45	Mongolia	Ulaanbaatar	47.5 N	107.0 E
46	New Zealand	Chatham Island	44.0 S	176.5 W

47	New Zealand	Kaitaia	35.1 S	173.3 E
48	Niger	Bilma	18.0 N	13.0 E
49	Norway	Spitsbergen	78.2 N	16.4 E
50	Panama	Panama City	8.9 N	79.6 W
51	Papua New Guinea	New Hanover	3.0 S	150.0 E
52	Philippines	Quezon City	14.5 N	121.0 E
53	Portugal	Ponta Delgada, São Miguel, Azores	37.4 N	25.4 W
54	Russian Federation	Kirov	58.6 N	49.4 E
55	Russian Federation	Norilsk	69.0 N	88.0E
56	Russian Federation	Peleduy	59.6 N	112.6 E
57	Russian Federation	Bilibino	68.0 N	166.4 E
58	Russian Federation	Ussuriysk	43.7 N	131.9 E
59	Russian Federation	Zalesovo	53.9 N	84.8 E
60	Russian Federation	Petropavlovsk–Kamchatskiy	53.1 N	158.8 E
61	Russian Federation	Dubna	56.7 N	37.3 E
62	South Africa	Marion Island	46.5 S	37.0 E
63	Sweden	Stockholm	59.4 N	18.0 E
64	Tanzania	Dar es Salaam	6.0 S	39.0 E
65	Thailand	Bangkok	13.8 N	100.5 E
66	United Kingdom	BIOT/Chagos Archipelago	7.0 S	72.0 E
67	United Kingdom	St. Helena	16.0 S	6.0 W
68	United Kingdom	Tristan da Cunha	37.0 S	12.3 W
69	United Kingdom	Halley, Antarctica	76.0 S	28.0 W
70	United States of America	Sacramento, CA	38.7 N	121.4 W
71	United States of America	Sand Point, AK	55.0 N	160.0 W
72	United States of America	Melbourne, FL	28.3 N	80.6 W
73	United States of America	Palmer Station, Antarctica	64.5 S	64.0 W
74	United States of America	Ashland, KS	37.2 N	99.8 W

75	United States of America	Charlottesville, VA	38.0 N	78.0 W
76	United States of America	Salchaket, AK	64.4 N	147.1 W
77	United States of America	Wake Island	19.3 N	166.6 E
78	United States of America	Midway Islands	28.0 N	177.0 W
79	United States of America	Oahu, HI	21.5 N	158.0 W
80	United States of America	Upi, Guam	13.7 N	144.9 E

Table 2–B: List of Radionuclide Laboratories

	State responsible for laboratory	**Name and place of laboratory**
1	Argentina	National Board of Nuclear Regulation Buenos Aires
2	Australia	Australian Radiation Laboratory Melbourne, VIC
3	Austria	Austrian Research Center Seibersdorf
4	Brazil	Institute of Radiation Protection and Dosimetry Rio de Janeiro
5	Canada	Health Canada Ottawa, Ont.
6	China	Beijing
7	Finland	Centre for Radiation and Nuclear Safety Helsinki
8	France	Atomic Energy Commission Montlhéry
9	Israel	Soreq Nuclear Research Centre Yavne
10	Italy	Laboratory of the National Agency for the Protection of the Environment Rome
11	Japan	Japan Atomic Energy Research Institute Tokai, Ibaraki
12	New Zealand	National Radiation Laboratory Christchurch
13	Russian Federation	Central Radiation Control Laboratory, Ministry of Defence Special Verification Service Moscow

14	South Africa	Atomic Energy Corporation Pelindaba
15	United Kingdom	AWE Blacknest Chilton
16	United States of America	McClellan Central Laboratories Sacramento, CA

Table 3: List of Hydroacoustic Stations

	State responsible for station	**Location**	**Latitude**	**Longitude**	**Type**
1	Australia	Cape Leeuwin, WA	34.4 S	115.1 E	Hydrophone
2	Canada	Queen Charlotte Islands, B.C.	53.3 N	132.5 W	T–phase
3	Chile	Juan Fernández Island	33.7 S	78.8 W	Hydrophone
4	France	Crozet Islands	46.5 S	52.2 E	Hydrophone
5	France	Guadeloupe	16.3 N	61.1 W	T–phase
6	Mexico	Clarión Island	18.2 N	114.6 W	T–phase
7	Portugal	Flores	39.3 N	31.3 W	T–phase
8	United Kingdom	BIOT/Chagos Archipelago	7.3 S	72.4 E	Hydrophone
9	United Kingdom	Tristan da Cunha	37.2 S	12.5 W	T–phase
10	United States of America	Ascension	8.0 S	14.4 W	Hydrophone
11	United States of America	Wake Island	19.3 N	166.6 E	Hydrophone

Table 4: List of Infrasound Stations

	State responsible for station	**Location**	**Latitude**	**Longitude**
1	Argentina	Paso Flores	40.7 S	70.6 W
2	Argentina	Ushuaia	55.0 S	68.0 W
3	Australia	Davis Base, Antarctica	68.4 S	77.6 E
4	Australia	Narrogin, WA	32.9 S	117.2 E
5	Australia	Hobart, TAS	42.1 S	147.2 E
6	Australia	Cocos Islands	12.3 S	97.0 E
7	Australia	Warramunga, NT	19.9 S	134.3 E
8	Bolivia	La Paz	16.3 S	68.1 W
9	Brazil	Brasilia	15.6 S	48.0 W
10	Canada	Lac du Bonnet, Man.	50.2 N	95.9 W

11	Cape Verde	Cape Verde Islands	16.0 N	24.0 W
12	Central African Republic	Bangui	5.2 N	18.4 E
13	Chile	Easter Island	27.0 S	109.2 W
14	Chile	Juan Fernández Island	33.8 S	80.7 W
15	China	Beijing	40.0 N	116.0 E
16	China	Kunming	25.0 N	102.8 E
17	Côte d'Ivoire	Dimbokro	6.7 N	4.9 W
18	Denmark	Dundas, Greenland	76.5 N	68.7 W
19	Djibouti	Djibouti	11.3 N	43.5 E
20	Ecuador	Galápagos Islands	0.0 N	91.7 W
21	France	Marquesas Islands	10.0 S	140.0 W
22	France	Port LaGuerre, New Caledonia	22.1 S	166.3 E
23	France	Kerguelen	49.2 S	69.1 E
24	France	Tahiti	17.6 S	149.6 W
25	France	Kourou, French Guiana	5.2 N	52.7 W
26	Germany	Freyung	48.9 N	13.7 E
27	Germany	Georg von Neumayer, Antarctica	70.6 S	8.4 W
28	To be determined	To be determined	To be determined	To be determined
29	Iran (Islamic Republic of)	Tehran	35.7 N	51.4 E
30	Japan	Tsukuba	36.0 N	140.1 E
31	Kazakstan	Aktyubinsk	50.4 N	58.0 E
32	Kenya	Kilimanbogo	1.3 S	36.8 E
33	Madagascar	Antananarivo	18.8 S	47.5 E
34	Mongolia	Javhlant	48.0 N	106.8 E
35	Namibia	Tsumeb	19.1 S	17.4 E
36	New Zealand	Chatham Island	44.0 S	176.5 W
37	Norway	Karasjok	69.5 N	25.5 E
38	Pakistan	Rahimyar Khan	28.2 N	70.3 E
39	Palau	Palau	7.5 N	134.5 E
40	Papua New Guinea	Rabaul	4.1 S	152.1 E
41	Paraguay	Villa Florida	26.3 S	57.3 W
42	Portugal	Azores	37.8 N	25.5 W
43	Russian Federation	Dubna	56.7 N	37.3 E
44	Russian Federation	Petropavlovsk– Kamchatskiy	53.1 N	158.8 E

45	Russian Federation	Ussuriysk	43.7 N	131.9 E
46	Russian Federation	Zalesovo	53.9 N	84.8 E
47	South Africa	Boshof	28.6 S	25.4 E
48	Tunisia	Thala	35.6 N	8.7 E
49	United Kingdom	Tristan da Cunha	37.0 S	12.3 W
50	United Kingdom	Ascension	8.0 S	14.3 W
51	United Kingdom	Bermuda	32.0 N	64.5 W
52	United Kingdom	BIOT/Chagos Archipelago	5.0 S	72.0 E
53	United States of America	Eielson, AK	64.8 N	146.9 W
54	United States of America	Siple Station, Antarctica	75.5 S	83.6 W
55	United States of America	Windless Bight, Antarctica	77.5 S	161.8 E
56	United States of America	Newport, WA	48.3 N	117.1 W
57	United States of America	Piñon Flat, CA	33.6 N	116.5 W
58	United States of America	Midway Islands	28.1N	177.2 W
59	United States of America	Hawaii, HI	19.6 N	155.3 W
60	United States of America	Wake Island	19.3 N	166.6 E

Annex 2 to the Protocol: List of Characterization Parameters for International Data Centre Standard Event Screening

1. The International Data Centre standard event screening criteria shall be based on the standard event characterization parameters determined during the combined processing of data from all the monitoring technologies in the International Monitoring System. Standard event screening shall make use of both global and supplementary screening criteria to take account of regional variations where applicable.

2. For events detected by the International Monitoring System seismic component, the following parameters, inter alia, may be used:

– location of the event;

– depth of the event;

– ratio of the magnitude of surface waves to body waves;

– signal frequency content;

– spectral ratios of phases;

– spectral scalloping;

– first motion of the P-wave;

– focal mechanism;

– relative excitation of seismic phases;

– comparative measures to other events and groups of events; and

– regional discriminants where applicable.

3. For events detected by the International Monitoring System hydroacoustic component, the following parameters, inter alia, may be used:

– signal frequency content including corner frequency, wide-band energy, and mean centre frequency and bandwidth;

– frequency-dependent duration of signals;

– spectral ratio; and

– indications of bubble-pulse signals and bubble-pulse delay.

4. For events detected by the International Monitoring System infrasound component, the following parameters, inter alia, may be used:

– signal frequency content and dispersion;

– signal duration; and

– peak amplitude.

5. For events detected by the International Monitoring System radionuclide component, the following parameters, inter alia, may be used:

– concentration of background natural and man-made radionuclides;

– concentration of specific fission and activation products outside normal observations; and – ratios of one specific fission and activation product to another.

Legal Status of the CTBT

Opened for signature at New York: 24 September 1996; not yet in force; Depositary: Secretary-General of the United Nations

Signatories: 176, deposits: 135

State	**Signature**	**Deposit of ratification**
Afghanistan	24 September 2003	24 September 2003
Albania	27 September 1996	23 April 2003
Algeria	15 October 1996	11 July 2003
Andorra	24 September 1996	12 July 2006
Angola	27 September 1996	
Antigua and Barbuda	16 April 1997	11 January 2006
Argentina	24 September 1996	4 December 1998
Armenia	1 October 1996	12 July 2006
Australia	24 September 1996	9 July 1998
Austria	24 September 1996	13 March 1998
Azerbaijan	28 July 1997	2 February 1999
Bahamas	4 February 2005	
Bahrain	24 September 1996	12 April 2004
Bangladesh	24 October 1996	8 March 2000
Belarus	24 September 1996	13 September 2000
Belgium	24 September 1996	29 June 1999
Belize	14 November 2001	26 March 2004
Benin	27 September 1996	6 March 2001
Bolivia	24 September 1996	4 October 1999
Bosnia and Herzegovina	24 September 1996	
Botswana	16 September 2002	28 October 2002
Brazil	24 September 1996	24 July 1998
Brunei Darussalam	22 January 1997	
Bulgaria	24 September 1996	29 September 1999
Burkina Faso	27 September 1996	17 April 2002
Burundi	24 September 1996	
Cambodia	26 September 1996	10 November 2000
Cameroon	16 November 2001	6 February 2006
Canada	24 September 1996	18 December 1998
Cape Verde	1 October 1996	1 March 2006

Central African Republic	19 December 2001	
Chad	8 October 1996	
Chile	24 September 1996	12 July 2000
China	24 September 1996*	
Colombia	24 September 1996	
Comoros	12 December 1996	
Congo	11 February 1997	
Cook Islands	5 December 1997	6 September 2005
Costa Rica	24 September 1996	25 September 2001
Côte d'Ivoire	25 September 1996	11 March 2003
Croatia	24 September 1996	2 March 2001
Cyprus	24 September 1996	18 July 2003
Czech Republic	12 November 1996	11 September 1997
Democr. Rep. of the Congo	4 October 1996	28 September 2004
Denmark	24 September 1996	21 December 1998
Djibouti	21 October 1996	15 July 2005
Dominican Republic	3 October 1996	
Ecuador	24 September 1996	12 November 2001
Egypt	14 October 1996	
El Salvador	24 September 1996	11 September 1998
Equatorial Guinea	9 October 1996	
Eritrea	11 November 2003	11 November 2003
Estonia	20 November 1996	13 August 1999
Ethiopia	25 September 1996	8 August 2006
Fiji	24 September 1996	10 October 1996
Finland	24 September 1996	15 January 1999
France	24 September 1996	6 April 1998
Gabon	7 October 1996	20 September 2000
Gambia	9 April 2003	
Georgia	24 September 1996	27 September 2002
Germany	24 September 1996	20 August 1998
Ghana	3 October 1996	
Greece	24 September 1996	21 April 1999
Grenada	10 October 1996	19 August 1998
Guatemala	20 September 1999	
Guinea	3 October 1996	
Guinea-Bissau	11 April 1996	

Guyana	7 September 2000	7 March 2001
Haiti	24 September 1996	1 December 2005
Holy See	24 September 1996*	18 July 2001
Honduras	25 September 1996	30 October 2003 (a)
Hungary	25 September 1996	13 July 1999
Iceland	24 September 1996	26 June 2000
Indonesia	24 September 1996	
Iran (Islamic Republic of)	24 September 1996*	
Ireland	24 September 1996	15 July 1999
Israel	25 September 1996	
Italy	24 September 1996	1 February 1999
Jamaica	11 November 1996	13 November 2001
Japan	24 September 1996	8 July 1997
Jordan	26 September 1996	25 August 1998
Kazakhstan	30 September 1996	14 May 2002
Kenya	14 November 1996	30 November 2000
Kiribati	7 September 2000	7 September 2000
Kuwait	24 September 1996	6 May 2003
Kyrgyzstan	8 October 1996	2 October 2003
Lao People's Democ. Rep.	30 July 1997	5 October 2000
Latvia	24 September 1996	20 November 2001
Lebanon	16 September 2005	
Lesotho	30 September 1996	14 September 1999
Liberia	1 October 1996	
Libyan Arab Jamahiriya	13 November 2001	6 January 2004
Liechtenstein	27 September 1996	21 September 2004
Lithuania	7 October 1996	7 February 2000
Luxembourg	24 September 1996	26 May 1999
Madagascar	9 October 1996	15 September 2005
Malawi	9 October 1996	
Malaysia	23 July 1998	
Maldives	1 October 1997	7 September 2000
Mali	18 February 1997	4 August 1999
Malta	24 September 1996	23 July 2001
Marshall Islands	24 September 1996	
Mauritania	24 September 1996	30 April 2003
Mexico	24 September 1996	5 October 1999

Micronesia (Fed. States of)	24 September 1996	25 July 1997
Monaco	1 October 1996	18 December 1998
Mongolia	1 October 1996	8 August 1997
Morocco	24 September 1996	17 April 2000
Mozambique	26 September 1996	
Myanmar	25 November 1996	
Namibia	24 September 1996	29 June 2001
Nauru	8 September 2000	12 November 2001
Nepal	8 October 1996	
Netherlands	24 September 1996	23 March 1999
New Zealand	27 September 1996	19 March 1999
Nicaragua	24 September 1996	5 December 2000
Niger	3 October 1996	9 September 2002
Nigeria	8 September 2000	27 September 2001
Norway	24 September 1996	15 July 1999
Oman	23 September 1999	13 June 2003
Palau	12 August 2003	
Panama	24 September 1996	23 March 1999
Papua New Guinea	25 September 1996	
Paraguay	25 September 1996	4 October 2001
Peru	25 September 1996	12 November 1997
Philippines	24 September 1996	23 February 2001
Poland	24 September 1996	25 May 1999
Portugal	24 September 1996	26 June 2000
Qatar	24 September 1996	3 March 1997
Republic of Korea	24 September 1996	24 September 1999
Republic of Moldova	24 September 1997	
Romania	24 September 1996	5 October 1999
Russian Federation	24 September 1996	30 June 2000
Rwanda	30 November 2004	30 November 2004
Saint Kitts and Nevis	23 March 2004	27 April 2005
Saint Lucia	4 October 1996	5 April 2001
Samoa	9 October 1996	27 September 2002
San Marino	7 October 1996	12 March 2002
Sao Tome and Principe	26 September 1996	
Senegal	26 September 1996	9 June 1999
Serbia and Montenegro	8 June 2001	19 May 2004

Seychelles	24 September 1996	13 April 2004
Sierra Leone	8 September 2000	17 September 2001
Singapore	14 January 1999	10 November 2001
Slovakia	30 September 1996	3 March 1998
Slovenia	24 September 1996	31 August 1999
Solomon Islands	3 October 1996	
South Africa	24 September 1996	30 March 1999
Spain	24 September 1996	31 July 1998
Sri Lanka	24 October 1996	
Sudan	10 June 2004	10 June 2004
Suriname	14 January 1997	7 February 2006
Swaziland	24 September 1996	
Sweden	24 September 1996	2 December 1998
Switzerland	24 September 1996	1 October 1999
Tajikistan	7 October 1996	10 June 1998
Thailand	12 November 1996	
the former Yugoslav Republic of Macedonia	29 October 1998	14 March 2000
Togo	2 October 1996	2 July 2004
Tunisia	16 October 1996	23 September 2004
Turkey	24 September 1996	16 February 2000
Turkmenistan	24 September 1996	20 February 1998
Uganda	7 November 1996	14 March 2001
Ukraine	27 September 1996	23 February 2001
United Arab Emirates	25 September 1996	18 September 2000
United Kingdom of Great Britain and Northern Ireland	24 September 1996	6 April 1998
United Republic of Tansania	30 September 2004	30 September 2004
United States of America	24 September 1996	
Uruguay	24 September 1996	21 September 2001
Uzbekistan	3 October 1996	29 May 1997
Vanuatu	24 September 1996	16 September 2005
Venezuela	3 October 1996	13 May 2002
Viet Nam	24 September 1996	10 March 2006
Yemen	30 September 1996	
Zambia	3 December 1996	23 February 2006
Zimbabwe	13 October 1999	

4. Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof (11 February 1971)

The States Parties to this Treaty,

Recognizing the common interest of mankind in the progress of the exploration and use of the sea-bed and the ocean floor for peaceful purposes,

Considering that the prevention of a nuclear arms race on the sea-bed and the ocean floor serves the interests of maintaining world peace, reduces international tensions and strengthens friendly relations among States,

Convinced that this Treaty constitutes a step towards the exclusion of the sea-bed, the ocean floor and the subsoil thereof from the arms race,

Convinced that this Treaty constitutes a step towards a treaty on general and complete disarmament under strict and effective international control, and determined to continue negotiations to this end,

Convinced that this Treaty will further the purposes and principles of the Charter of the United Nations, in a manner consistent with the principles of international law and without infringing the freedoms of the high seas,

Have agreed as follows:

Article I

1. The States Parties to this Treaty undertake not to emplant or emplace on the seabed and the ocean floor and in the subsoil thereof beyond the outer limit of a sea-bed zone, as defined in article II, any nuclear weapons or any other types of weapons of mass destruction as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons.

2. The undertakings of paragraph 1 of this article shall also apply to the sea-bed zone referred to in the same paragraph, except that within such sea-bed zone, they shall not apply either to the coastal State or to the sea-bed beneath its territorial waters.

3. The States Parties to this Treaty undertake not to assist, encourage or induce any State to carry out activities referred to in paragraph 1 of this article and not to participate in any other way in such actions.

Article II

For the purpose of this Treaty, the outer limit of the sea-bed zone referred to in article I shall be coterminous with the twelve-mile outer limit of the zone referred to in part II of the Convention on the Territorial Sea and the Contiguous Zone, signed at Geneva on April 29, 1958, and shall be measured in accordance with the provisions of part I, section II, of that Convention and in accordance with international law.

Article III

1. In order to promote the objectives of and ensure compliance with the provisions of this Treaty, each State Party to the Treaty shall have the right to verify through observations the activities of other States Parties to the Treaty on the sea-bed and the ocean floor and in the subsoil thereof beyond the zone referred to in article I, provided that observation does not interfere with such activities.

2. If after such observation reasonable doubts remain concerning the fulfillment of the obligations assumed under the Treaty, the State Party having such doubts and the State Party that is responsible for the activities giving rise to the doubts shall consult with a view to removing the doubts. If the doubts persist, the State Party having such doubts shall notify the other States Parties, and the Parties concerned shall cooperate on such further procedures for verification as may be agreed, including appropriate inspection of objects, structures, installations or other facilities that reasonably may be expected to be of a kind described in article I. The Parties in the region of the activities, including any coastal State, and any other Party so requesting, shall be entitled to participate in such consultation and cooperation. After completion of the further procedures for verification, an appropriate report shall be circulated to other Parties by the Party that initiated such procedures.

3. If the State responsible for the activities giving rise to the reasonable doubts is not identifiable by observation of the object, structure, installation or other facility, the State Party having such doubts shall notify and make appropriate inquiries of States Parties in the region of the activities and of any other State Party. If it is ascertained through these inquiries that a particular State Party is responsible for the activities, that State Party shall consult and cooperate with other Parties as provided in paragraph 2 of this article. If the identity of the State responsible for the activities cannot be ascertained through these inquiries, then further verification procedures, including inspection, may be undertaken by the inquiring State Party, which shall invite the participation of the Parties in the region of the activities, including any coastal State, and of any other Party desiring to cooperate.

4. If consultation and cooperation pursuant to paragraphs 2 and 3 of this article have not removed the doubts concerning the activities and there remains a serious question concerning fulfillment of the obligations assumed under this Treaty, a State Party may, in accordance with the provisions of the Charter of the United Nations, refer the matter to the Security Council, which may take action in accordance with the Charter.

5. Verification pursuant to this article may be undertaken by any State Party using its own means, or with the full or partial assistance of any other State Party, or through appropriate international procedures within the framework of the United Nations and in accordance with its Charter.

6. Verification activities pursuant to this Treaty shall not interfere with activities of other States Parties and shall be conducted with due regard for rights recognized under international law, including the freedoms of the high seas and the rights of coastal States with respect to the exploration and exploitation of their continental shelves.

Article IV

Nothing in this Treaty shall be interpreted as supporting or prejudicing the position of any State Party with respect to existing international conventions, including the 1958 Convention on the Territorial Sea and the Contiguous Zone, or with respect to rights or claims which such State Party may assert, or with respect to recognition or non-recognition of rights or claims asserted by any other State, related to waters off its coasts, including, *inter alia*, territorial seas and contiguous zones, or to the sea-bed and the ocean floor, including continental shelves.

Article V

The Parties to this Treaty undertake to continue negotiations in good faith concerning further measures in the field of disarmament for the prevention of an arms race on the sea-bed, the ocean floor and the subsoil thereof.

Article VI

Any State Party may propose amendments to this Treaty. Amendments shall enter into force for each State Party accepting the amendments upon their acceptance by a majority of the States Parties to the Treaty and, thereafter, for each remaining State Party on the date of acceptance by it.

Article VII

Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held at Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the preamble and the provisions of the Treaty are being realized. Such review shall take into account any relevant technological developments. The review conference shall determine, in accordance with the views of a majority of those Parties attending, whether and when an additional review conference shall be convened.

Article VIII

Each State Party to this Treaty shall in exercising its national sovereignty have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject-matter of this Treaty have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other States Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it considers to have jeopardized its supreme interests.

Article IX

The provisions of this Treaty shall in no way affect the obligations assumed by States Parties to the Treaty under international instruments establishing zones free from nuclear weapons.

Article X

1. This Treaty shall be open for signature to all States. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and of accession shall be deposited with the Governments of the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America, which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after the deposit of instruments of ratification by twenty-two Governments, including the Governments designated as Depositary Governments of this Treaty.

4. For states whose instruments of ratification or accession are deposited after the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform the Governments of all signatory and acceding States of the date of each signature, of the date of deposit of each instrument of ratification or of accession, of the date of the entry into force of this Treaty, and of the receipt of other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article XI

This Treaty, the Chinese, English, French, Russian and Spanish texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the States signatory and acceding thereto.

IN WITNESS WHEREOF the undersigned, being duly authorized thereto, have signed this Treaty.

DONE in triplicate, at the cities of London, Moscow and Washington, this seventh day of February, one thousand nine hundred seventy-one.

The Legal Status of the Seabed Treaty

Opened for signature at London (L), Moscow (M) and Washington (W): 11 February 1971, Entered into force: 18 May 1972, Depositary Governments: Russian Federation, United Kingdom of Great Britain and Northern Ireland and United States of America

Signatories: 86; ratifications: 95

State	**Signature**	**Deposit of ratification**
Afghanistan	11 February 1971	22 April 1971
Algeria		27 January 1992(a)
Antigua and Barbuda		16 November 1988(s)*
Argentina	3 September 1971*	21 March 1983**
Australia	11 February 1971	23 January 1973
Austria	11 February 1971	10 August 1972
Bahamas		7 June 1989(a)
Belarus	3 March 1971	14 September 1971
Belgium	11 February 1971	20 November 1972
Benin	18 March 1971	19 June 1986
Bolivia	11 February 1971	
Bosnia and Herzegovina		15 August 1994(s)
Botswana	11 February 1971	10 November 1972
Brazil	3 September 1971*	4 April 1988*
Bulgaria	11 February 1971	16 April 1971
Burundi	11 February 1971	
Cambodia	11 February 1971	
Cameroon	11 November 1971	
Canada	11 February 1971	17 May 1972*
Cape Verde		24 October 1979(a)
Central African Republic	11 February 1971	9 July 1981
China		28 February 1991(a)*
Colombia	11 February 1971	
Congo; Peoples Repub. Of		23 October 1978(a)
Costa Rica	11 February 1971	
Côte d'Ivoire		14 January 1972(a)
Croatia		8 October 1991 (a)
Cuba		3 June 1977(a)*
Cyprus	11 February 1971	17 November 1971

Czech Republic		1 January 1993(s)**
Denmark	11 February 1971	15 June 1971
Dominican Republic	11 February 1971	11 February 1972
Equatorial Guinea	4 June 1971	
Ethiopia	11 February 1971	12 July 1977
Fiji	18 July 1971	
Finland	11 February 1971	8 June 1971
Gambia	18 May 1971	
Germany	8 June 1971**	18 November 1975***
Ghana	11 February 1971	9 August 1972
Greece	11 February 1971	28 May 1985
Guatemala	11 February 19791	1 April 1996
Guinea	11 February 1971	
Guinea-Bissau		20 August 1976(a)
Honduras	11 February 1971	
Hungary	11 February 1971	13 August 1971
Iceland	11 February 1971	30 May 1972
India		20 July 1973(a)*
Iran (Islamic Republic of)	11 February 1971	26 August 1971
Iraq	22 February 1971	13 September 1972*
Ireland	11 February 1971	19 August 1971
Italy	11 February 1971	3 September 1974*
Jamaica	11 October 1971	30 July 1986
Japan	11 February 1971	21 June 1971
Jordan	11 February 1971	17 August 1971
Lao People's Democratic Republic	11 February 1971	19 October 1971
Latvia		24 June 1992(a)
Lebanon	11 February 1971	
Lesotho	8 September 1971	3 April 1973
Liberia	11 February 1971	
Libyan Arab Jamahiriya		6 July 1990(a)
Liechtenstein		30 May 1991(a)
Luxembourg	11 February 1971	11 November 1982
Madagascar	14 September 1971	
Malaysia	20 May 1971	21 June 1972
Mali	11 February 1971	

Malta	11 February 1971	4 May 1971
Mauritius	11 February 1971	23 April 1971
Mexico		23 March 1984(a)*
Mongolia	11 February 1971	8 October 1971
Morocco	11 February 1971	26 July 1971
Myanmar	11 February 1971	
Nepal	11 February 1971	6 July 1971
Netherlands	11 February 1971	14 January 1976*, **
New Zealand	11 February 1971	24 February 1972
Nicaragua	11 February 1971	7 February 1973
Niger	11 February 1971	9 August 1971
Norway	11 February 1971	29 June 1971
Panama	11 February 1971	20 March 1974
Paraguay	23 February 1971	
Philippines		5 November 1993(a)
Poland	11 February 1971	15 November 1971
Portugal		24 June 1975(a)
Qatar		12 November 1974(a)
Republic of Korea	11 February 1971*	25 June 1987
Romania	11 February 1971	10 July 1972
Russian Federation	11 February 1971	18 May 1972
Rwanda	11 February 1971	20 May 1975
Saint Christopher and Nevis		19 September 1983 (a)
Saint Lucia		22 February 1979 (a)
Saint Vincent and the Grena-dines		13 May 1999 (s)
Sao Tome and Principe		24 August 1979(a)
Saudi Arabia	7 January 1972	23 June 1972
Senegal	17 March 1971	
Serbia and Montenegro	2 March 1971	25 October 1973*
Seychelles		12 March 1985(a)
Sierra Leone	11 February 1971	
Singapore	5 May 1971	10 September 1976
Slovakia		1 January 1993(s) *
Slovenia		7 April 1992(s)
Solomon Islands		17 June 1981(s)*
South Africa	11 February 1971	26 November 1973

Spain		15 July 1987(a)
Sudan	11 February 1971	
Swaziland	11 February 1971	9 August 1971
Sweden	11 February 1971	28 April 1972
Switzerland	11 February 1971	4 May 1976
Togo	2 April 1971	18 June 1971
Tunisia	11 February 1971	22 October 1971
Turkey	25 February 1971	19 October 1972
Ukraine	3 March 1971	3 September 1971
United Kingdom of Great Britain and Northern Ireland	11 February 1971	18 May 1972**
United Republic of Tanzania	11 February 1971	
United States of America	11 February 1971	18 May 1972
Uruguay	11 February 1971	
Viet Nam		20 June 1980(a)
Yemen	23 February 1971	1 June 1979
Zambia		9 October 1972(a)

On 22 February 1972 Taiwan deposited an instrument of ratification in the name of the Republic of China. The government of Taiwan considers itself to be bound by the Treaty.
(a): accession
(s): accession by state succession
Dates given are the earliest dates on which states signed the agreement or deposited their ratifications or accessions
* declaration made on the occasion of signature or deposit
** additional statement made on the occasion of signature or deposit
*** reservation made on the occasion of signature or deposit

5. Negative Nuclear Security Guarantees Issued by the Five Nuclear Weapons States in April 1995

1. Statement Issued on 5 April by the Hon. Warren Christopher, Secretary of State, Regarding a Declaration by the President on Security Assurances for Non-Nuclear-Weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

„The United States of America believes that universal adherence to and compliance with international conventions and treaties seeking to prevent the proliferation of weapons of mass destruction is a cornerstone of global security. The Treaty on the Non-Proliferation of Nuclear Weapons is a central element of this regime. 5 March 1995 was the twenty-fifth anniversary of its entry into force, an event commemorated by President Clinton in a speech in Washington, D.C., on 1 March 1995. A conference to decide on the extension of the Treaty will begin in New York on 17 April 1995. The United States considers the indefinite extension of the Treaty on the Non-Proliferation of Nuclear Weapons without conditions as a matter of the highest national priority and will continue to pursue all appropriate efforts to achieve that outcome.

It is important that all parties to the Treaty on the Non-Proliferation of Nuclear Weapons fulfill their obligations under the Treaty. In that regard, consistent with generally recognized principles of international law, parties to the Treaty on the Non-Proliferation of Nuclear Weapons must be in compliance with these undertakings in order to be eligible for any benefits of adherence to the Treaty.

The United States reaffirms that it will not use nuclear weapons against non-nuclear-weapon State Parties to the Treaty on the Non-Proliferation of Nuclear Weapons except in the case of an invasion or any other attack on the United States, its territories, its armed forces or other troops, its allies, or on a State towards which it has a security commitment, carried out or sustained by such a non-nuclear-weapon State in association or alliance with a nuclear-weapon State.

Aggression with nuclear weapons, or the threat of such aggression, against a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons would create a qualitatively new situation in which the nuclear-weapon-State permanent members of the United Nations Security Council would have to act immediately through the Security Council, in accordance with the Charter of the United Nations, to take measures to counter such aggression or to remove the threat of aggression. Any State which commits aggression accompanied by the use of nuclear weapons or which threatens such aggression must be aware that its actions are to be countered effectively by measures to be taken in accordance with the Charter to suppress the aggression or remove the threat of aggression.

Non-nuclear-weapon States Parties to the Treaty on the Non-proliferation of Nuclear Weapons have a legitimate desire for assurances that the United Nations Security Council, and above all its nuclear-weapon-State permanent members, would act immediately in accordance with the Charter, in the event such non-nuclear-weapon States are the

victim of an act of, or object of a threat of aggression in which nuclear weapons are used.

The United States affirms its intention to provide or support immediate assistance, in accordance with the Charter, to any non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act of, or an object of a threat of, aggression in which nuclear weapons are used.

Among the means available to the Security Council for assisting such a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons would be an investigation into the situation and appropriate measures to settle the dispute and to restore international peace and security.

United Nations Member States should take appropriate measures in response to a request for technical, medical, scientific or humanitarian assistance from a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act of aggression with nuclear weapons, and the Security Council should consider what measures are needed in this regard in the event of such an act of aggression.

The Security Council should recommend appropriate procedures, in response to any request from a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is the victim of such an act of aggression, regarding compensation under international law from the aggressor for loss, damage or injury sustained as a result of the aggression.

The United State reaffirms the inherent right, recognized under Article 51 of the Charter, of individual and collective self-defence if an armed attack, including a nuclear attack, occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

2. Statement dated 5 April 1995 by the Representative of the Ministry of Foreign Affairs of the Russian Federation

Recognizing the fundamental importance of the Treaty on the Non-Proliferation of Nuclear Weapons, respecting the legitimate desire of non-nuclear-weapon States parties to that Treaty to receive assurances that nuclear weapons will not be used against them, based on the provisions of the military doctrine of the Russian Federation, the Ministry of Foreign Affairs of the Russia Federation is authorized to make the following statement (see annex).

It should be pointed out, furthermore, that as the President of the Russian Federation proposed at the forty-ninth session of the General Assembly, work on a further United Nations Security Council resolution on security assurances for non-nuclear-weapons states has been harmonized. The draft resolution, prepared with the participation of Russian representatives, is being submitted to the Security Council for its consideration. The main provisions of the draft resolution are as follows:

In the event of aggression involving the use of nuclear weapons or the threat of such aggression against a non-nuclear-weapon State party to the treaty on the Non-Proliferation of Nuclear Weapons, the nuclear Powers which are permanent members of the Security Council will immediately bring the matter to the attention of the Council and will seek to ensure that they provide, in accordance with the Charter, necessary

assistance to the State that is a victim of such an act of aggression or that is threatened by such aggression.

The draft resolution provides, further on, for the possibility of taking appropriate measures in response to a request from the victim of such an act of aggression for technical, medical, scientific or humanitarian assistance and for payment of compensation by the aggressor for loss, damage, or injury sustained as the result of the aggression.

We believe the adoption by the Security Council of this draft resolution would be welcomed by the non-nuclear-weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons and would help strengthen the non-proliferation regime, international solidarity and world stability.

Annex: Statement of the Ministry of Foreign Affairs of the Russian Federation from 5 April 1995

The Russian Federation will not use nuclear weapons against non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, except in the case of an invasion or any other attack on the Russian Federation, its territory, its armed forces or other troops, its allies or on a State towards which it has a security commitment, carried out or sustained by such a non-nuclear-weapon State in association or alliance with a nuclear-weapon State.

3. Statement on Security Assurances Issued on 5 April 1995 by the People's Republic of China

For the purpose of enhancing international peace, security and stability and facilitating the realization of the goal of complete prohibition and thorough destruction of nuclear weapons, China hereby declares its position on security assurances as follows:

1. China undertakes not to be the first to use nuclear weapons at any time or under any circumstances.

2. China undertakes not to use or threaten to use nuclear weapons against non-nuclear-weapon States of nuclear-weapon-free zones at any time or under any circumstances. This commitment naturally applies to non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons or non-nuclear-weapon States that have entered into any comparable internationally-binding commitment not to manufacture or acquire nuclear explosive devices.

3. China has always held that, pending the complete prohibition and thorough destruction of nuclear weapons, all nuclear-weapon States should undertake not to be the first to use nuclear weapons and not to use or threaten to use such weapons against non-nuclear-weapon States and nuclear-weapons-free zones at any time or under any circumstances. China strongly calls for the early conclusion of an international convention on no-first-use of nuclear weapons as well as an international legal instrument assuring the non-nuclear-weapon States and nuclear-weapon-free zones against the use or threat of use of nuclear weapons.

4. China, as a permanent member of the Security Council of the United Nations, undertakes to take action within the Council to ensure that the Council takes appropriate measures to provide, in accordance with the Charter of the United Nations, necessary

assistance to any non-nuclear-weapon States that comes under attack with nuclear weapons, and imposes strict and effective sanctions on the attacking State. This commitment naturally applies to any non-nuclear-weapon State party to the Treaty on the Non-Proliferation of Nuclear Weapons or any non-nuclear-weapons State that has entered into any comparable internationally binding commitment not to manufacture or acquire nuclear explosive devices, in the event of an aggression with nuclear weapons or the threat of such aggression against such State.

5. The positive security assurances provided by China, as contained in paragraph 4, does not in any way compromise China's position as contained in paragraph 3 and shall not in any way be construed as endorsing the use of nuclear weapons.

4. Statement Concerning Security Assurances to Non-Nuclear-Weapon States Made by the Permanent Representative of France to the Conference on Disarmament on 6 April 1995

The issue of security assurances given by the nuclear Powers to the non-nuclear-weapon states is, for my delegation, an important one: firstly, because it corresponds to a real expectation on the part of the non-nuclear weapons States, particularly those which have renounced atomic weapons by signing the Treaty on the Non-Proliferation of Nuclear Weapons; secondly, because it involves our particular responsibilities as a nuclear Power; finally, because it has acquired new meaning since the end of the Cold War, with the growing awareness of the threat which the proliferation of nuclear weapons represents for everyone.

It is in order to meet that expectation, to assume its responsibilities and to make its contribution to efforts to combat the proliferation of nuclear weapons that France has decided to take the following steps: firstly, it reaffirms, and clarifies, the negative security assurances which it gave in 1982, specifically: France reaffirms that it will not use nuclear weapons against non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, except in the case of an invasion or any other attack on France, its territory, its armed forces or other troops, or against its allies or a State towards which it has a security commitment, carried out or sustained by such a State in alliance or association with a nuclear-weapon state.

It seems to us natural that it is the signatory countries to the Treaty on the Non-Proliferation of Nuclear Weapons - that is to say, the overwhelming majority of countries in the world - who should benefit from these assurances, since they have made a formal non-proliferation commitment. Furthermore, in order to respond to the request of a great many countries, France has sought as much as possible to harmonize the content of its negative assurances with those of the other nuclear Powers. We are pleased that this effort has been successful. The content of the declarations concerning the negative security assurances of France, the United States of America, the Russian Federation and the United Kingdom of Great Britain and Northern Ireland are henceforth practically identical.

Secondly, and for the first time, France has decided to give positive security assurances to all non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. Its accession to the Treaty made this decision both possible and desirable. Accordingly, France considers that any aggression which is accompanied by the

use of nuclear weapons would threaten international peace and security. France recognizes that the non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons are entitled to an assurance that, should they be attacked with nuclear weapons or threatened with such an attack, the international community and, first and foremost, the United Nations Security Council, would react immediately in accordance with the obligations set forth in the Charter.

Having regard to these considerations, France makes the following declaration: France, as a Permanent Member of the Security Council, pledges that, in the event of attack with nuclear weapons or the threat of such attack against a non-nuclear-weapon State party to the Treaty on the Non-Proliferation of Nuclear Weapons, France will immediately inform the Security Council and act within the Council to ensure that the latter takes immediate steps to provide, in accordance with the Charter, necessary assistance to a State which is the victim of such an act or threat of aggression.

France reaffirms in particular the inherent right, recognized in Article 51 of the Charter, of individual or collective self-defence if an armed attack, including an attack with use of nuclear weapons, occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

In this area also, we are pleased that the content of these positive assurances has been the subject of close consultations with the other nuclear Powers.

Thirdly, France, with the four other nuclear Powers, has decided to submit to the United Nations Security Council a draft resolution which constitutes a first in many respects, and which reflects our intention to meet the expectations of the international community globally, collectively and specifically: Globally: for the first time, a draft resolution deals with both negative and positive assurances; Collectively: for the first time, a resolution of the Security Council specifies the measures which the Security Council could take in the event of aggression, in the areas of the settlement of disputes, humanitarian assistance and compensation to the victims.

The draft resolution solemnly reaffirms the need for all States parties to the Treaty on the Non-Proliferation of Nuclear Weapons to fully respect their obligations. That is not a case of *petitio principii*, but a reminder of a fundamental rule. The draft resolution also emphasizes the desirable nature of universal accession to the Treaty.

The decisions which I have just announced correspond to our intention to consolidate the non-proliferation regime and particularly the Treaty on the Non-Proliferation of Nuclear Weapons, which is the cornerstone of that regime. It is our hope and firm conviction that the initiatives we have just taken will contribute thereto.

5. Statement Concerning Security Assurances to Non-Nuclear-Weapon States Made by the United Kingdom of Great Britain and Northern Ireland at the Conference on Disarmament on 6 April 1995

The Government of the United Kingdom believes that universal adherence to and compliance with international agreements seeking to prevent the proliferation of weapons of mass destruction are vital to the maintenance of world security. We note with appreciation that 175 States have become parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

We believe that the Treaty on the Non-Proliferation of Nuclear Weapons is the cornerstone of the international non-proliferation regime which has made an invaluable contribution to international peace and security. We are convinced that the Treaty should be extended indefinitely and without conditions.

We will continue to urge all States that have not done so to become parties to the Treaty.

The Government of the United Kingdom recognise that States which have renounced nuclear weapons are entitled to look for assurances that nuclear weapons will not be used against them. In 1978 we gave such an assurance. Assurances have also been given by the other nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

Recognising the continued concern of non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons that the assurances given by nuclear-weapon States should be in similar terms, and following consultation with the other nuclear-weapon States, I accordingly give the following undertaking on behalf of my Government:

The United Kingdom will not use nuclear weapons against non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons except in the case of an invasion or any other attack on the United Kingdom, its dependent territories, its armed forces or other troops, its allies or on a State towards which it has a security commitment, carried out or sustained by such a non-nuclear-weapon State in association or alliance with a nuclear-weapon State.

In giving this assurance the United Kingdom emphasises the need not only for universal adherence to, but also for compliance with the Treaty on the Non-Proliferation of Nuclear Weapons. In this context I wish to make clear that Her Majesty's Government do not regard their assurance as applicable if any beneficiary is in material breach of its own non-proliferation obligations under the Treaty on the Non-Proliferation of Nuclear Weapons.

In 1968 the United Kingdom declared that aggression with nuclear weapons, or the threat of such aggression, against a non-nuclear-weapon State would create a qualitatively new situation in which the nuclear-weapon States which are Permanent Members of the United Nations Security Council would have to act immediately through the Security Council to take the measures necessary to counter such aggression or to remove the threat of aggression in accordance with the United Nations Charter, which calls for taking ‘effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace’. Therefore, any State which commits aggression accompanied by the use of nuclear weapons or which threatens such aggression must be aware that its actions are to be countered effectively by measures to be taken in accordance with the United Nations Charter to suppress the aggression or remove the threat of aggression.

I, therefore, recall and reaffirm the intention of the United Kingdom, as a Permanent Member of the United Nations Security Council, to seek immediate Security Council action to provide assistance, in accordance with the Charter, to any non-nuclear-weapon State party to the Treaty on the Non-Proliferation of Nuclear Weapons, that is a victim of an act of aggression or an object of a threat of aggression in which nuclear weapons are used.

This Security Council assistance could include measures to settle the dispute and restore international peace and security, and appropriate procedures, in response to any request from the victim of such an act of aggression, regarding compensation under international law from the aggressor for loss, damage or injury sustained as a result of the aggression.

If a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons is a victim of an act of aggression with nuclear weapons, the United Kingdom would also be prepared to take appropriate measures in response to a request from the victim for technical, medical, scientific, or humanitarian assistance.

The United Kingdom reaffirms in particular the inherent right, recognised under Article 51 of the Charter, of individual and collective self-defence if an armed attack, including a nuclear attack, occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

6. Resolution 984 (1995) on Negative Security Assurances, Adopted by the Security Council at its 3514th meeting, on 11 April 1995

The Security Council,

Convinced that every effort must be made to avoid and avert the danger of nuclear war, to prevent the spread of nuclear weapons, to facilitate international cooperation in the peaceful uses of nuclear energy with particular emphasis on the needs of developing countries, and reaffirming the crucial importance of the Treaty on the Non-Proliferation of Nuclear Weapons to these efforts,

Recognizing the legitimate interest of non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to receive security assurances,

Welcoming the fact that more than 170 States have become Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and stressing the desirability of universal adherence to it,

Reaffirming the need for all States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to comply fully with all their obligations, Taking into consideration the legitimate concern of non-nuclear-weapon States that, in conjunction with their adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, further appropriate measures be undertaken to safeguard their security,

Considering that the present resolution constitutes a step in this direction,

Considering further that, in accordance with the relevant provisions of the Charter of the United Nations, any aggression with the use of nuclear weapons would endanger international peace and security,

1. Takes note with appreciation of the statements made by each of the nuclear-weapon States (S/1995/261, S/1995/262, S/1995/263, S/1995/264, S/1995/265), in which they give security assurances against the use of nuclear weapons to non-nuclear-weapon States that are Parties to the Treaty on the Non-Proliferation of Nuclear Weapons;

2. Recognizes the legitimate interest of non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to receive assurances that the Security Council, and above all its nuclear-weapon State permanent members, will act immediately in accordance with the relevant provisions of the Charter of the United Nations, in

the event that such States are the victim of an act of, or object of a threat of, aggression in which nuclear weapons are used;

3. Recognizes further that, in case of aggression with nuclear weapons or the threat of such aggression against a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons, any State may bring the matter immediately to the attention of the Security Council to enable the Council to take urgent action to provide assistance, in accordance with the Charter, to the State victim of an act of, or object of a threat of, such aggression; and recognizes also that the nuclear-weapon State permanent members of the Security Council will bring the matter immediately to the attention of the Council and seek Council action to provide, in accordance with the Charter, the necessary assistance to the State victim;

4. Notes the means available to it for assisting such a non-nuclearweapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons, including an investigation into the situation and appropriate measures to settle the dispute and restore international peace and security;

5. Invites Member States, individually or collectively, if any non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons is a victim of an act of aggression with nuclear weapons, to take appropriate measures in response to a request from the victim for technical, medical, scientific or humanitarian assistance, and affirms its readiness to consider what measures are needed in this regard in the event of such an act of aggression;

6. Expresses its intention to recommend appropriate procedures, in response to any request from a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is the victim of such an act of aggression, regarding compensation under international law from the aggressor for loss, damage or injury sustained as a result of the aggression;

7. Welcomes the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act of, or an object of a threat of, aggression in which nuclear weapons are used;

8. Urges all States, as provided for in Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons, to pursue negotiations in good faith on effective measures relating to nuclear disarmament and on a treaty on general and complete disarmament under strict and effective international control which remains a universal goal;

9. Reaffirms the inherent right, recognized under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security;

10. Underlines that the issues raised in this resolution remain of continuing concern to the Council.

6. Decisions and Resolution adopted by the 1995 NPT Review and Extension Conference (17 April - 12 May 1995)

Decision 1: Strengthening the Review Process of the Treaty

1. The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons examined the implementation of article VIII, paragraph 3, of the Treaty and agreed to strengthen the review process for the operation of the Treaty with a view to assuring that the purposes of the Preamble and the provision of the Treaty are being realized.

2. The States party to the Treaty participating in the Conference decided, in accordance with article VIII, paragraph 3, that Review Conferences should continue to be held every five year and that, accordingly, the next Review Conference should be held in the year 2000.

3. The Conference decided that, beginning in 1997, the Preparatory Committee should hold, normally for a duration of 10 working days, a meeting in each of the three years prior to the Review Conference. If necessary, a fourth preparatory meeting may be held in the year of the Conference.

4. The purpose of the Preparatory Committee meetings would be to consider principles, objectives and ways in order to promote the full implementation of the Treaty, as well as its universality, and to make recommendations thereon to the Review Conference. These include those identified in the Decision on principles and objectives for nuclear non-proliferation and disarmament, adopted on 11 May 1995. These meetings should also make the procedural preparations for the next Review Conference.

5. The Conference also concluded that the present structure of three main Committees should continue and the question of an overlap of issues being discussed in more than one Committee should be resolved in the General Committee, which would coordinate the work of the Committees so that the substantive responsibility for the preparation of the report with respect to each specific issue is undertaken in only one Committee.

6. It was also agreed that subsidiary bodies could be established within the respective Main Committees for specific issues relevant to the Treaty, so as to provide for a focused consideration of such issues. The establishment of such subsidiary bodies would be recommended by the Preparatory Committee for each Review Conference in relation to the specific objectives of the Review Conference.

7. The Conference agreed further that Review Conferences should look forward as well as back. They should evaluate the results of the period they are reviewing, including the implementation of undertakings of the States parties under the Treaty, and identify the areas in which, and the means through which, further progress should be sought in the future. Review Conferences should also address specifically what might be done to strengthen the implementation of the Treaty and to achieve its universality.

Decision 2: Principles and Objectives for Nuclear Non-Proliferation and Disarmament

The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Reaffirming the preamble and articles of the Treaty on the Non-Proliferation of Nuclear Weapons,

Welcoming the end of the cold war, the ensuing easing of international tension and the strengthening of trust between States,

Desiring a set of principles and objectives in accordance with which nuclear non-proliferation, nuclear disarmament and international cooperation in the peaceful uses of nuclear energy should be vigorously pursued and progress, achievements and shortcomings evaluated periodically within the review process provided for in article VIII, paragraph 3, of the Treaty, the enhancement and strengthening of which is welcomed,

Reiterating the ultimate goals of the complete elimination of nuclear weapons and a treaty on general and complete disarmament under strict and effective international control,

The Conference affirms the need to continue to move with determination towards the full realization and effective implementation of the provisions of the Treaty, and accordingly adopts the following principles and objectives:

Universality

1. Universal adherence to the Treaty on the Non-Proliferation of Nuclear weapons is an urgent priority. All States not yet party to the Treaty are called upon to accede to the Treaty at the earliest date, particularly those States that operate unsafeguarded nuclear facilities. Every effort should be made by all States parties to achieve this objective.

Non-proliferation

2. The proliferation of nuclear weapons would seriously increase the danger of nuclear war. The Treaty on the Non-Proliferation of Nuclear Weapons has a vital role to play in preventing the proliferation of nuclear weapons. Every effort should be made to implement the Treaty in all its aspects to prevent the proliferation of nuclear weapons and other nuclear explosive devices, without hampering the peaceful uses of nuclear energy by States parties to the Treaty.

Nuclear Disarmament

3. Nuclear disarmament is substantially facilitated by the easing of international tension and the strengthening of trust between States which have prevailed following the end of the cold war. The undertakings with regard to nuclear disarmament as set out in the Treaty on the Non-Proliferation of Nuclear Weapons should thus be fulfilled with determination. In this regard, the nuclear-weapons States reaffirm their commitment, as stated in article VI, to pursue in good faith negotiations on effective measures relating to nuclear disarmament.

4. The achievement of the following measures is important in the full realization and effective implementation of article VI, including the program of action as reflected below:

(a) The completion by the Conference on Disarmament of the negotiations on a universal and internationally and effectively verifiable Comprehensive Nuclear-Test Ban Treaty no later than 1996. Pending the entry into force of a Comprehensive Test-Ban Treaty, the nuclear weapon States should exercise utmost restraint;

(b) The immediate commencement and early conclusion of negotiations on a non-discriminatory and universally applicable convention banning the production of fissile material for nuclear weapons or other nuclear explosive devices, in accordance with the statement of the Special Coordinator of the Conference on Disarmament and the mandate contained therein;

(c) The determined pursuit by the nuclear-weapon States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goals of elimination those weapons, and by all States of general and complete disarmament under strict and effective international control.

Nuclear-weapon-free zones

5. The conviction that the establishment of internationally recognized nuclear-weapon-free zones, on the basis of arrangements freely arrived at among the States of the region concerned, enhances global and regional peace and security is reaffirmed.

6. The development of nuclear-weapon-free zones, especially in regions of tension, such as in the Middle East, as well as the establishment of zones free of all weapons of mass destruction, should be encouraged as a matter of priority, taking into account the specific characteristics of each region. The establishment of additional nuclear-weapon-free zones by the time of the Review Conference in the year 2000 would be welcome.

7. The cooperation of all the nuclear-weapons States and their respect and support for the relevant protocols is necessary for the maximum effectiveness of such nuclear-weapon-free zones and the relevant protocols.

Security Assurances

8. Noting United Nations Security Council resolution 984 (1995), which was adopted unanimously on 11 April 1995, as well as the declarations of the nuclear-weapon States concerning both negative and positive security assurances, further steps should be considered to assure non-nuclear-weapon States party to the Treaty against the use or threat or use of nuclear weapons. These steps could take the form of an internationally legally binding instrument.

Safeguards

9. The International Atomic Energy Agency is the competent authority responsible to verify and assure, in accordance with the statute of the Agency and the Agency's safeguard system, compliance with its safeguards agreements with States parties undertaken in fulfillment of their obligations under article III paragraph 1, of the Treaty, with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or

other nuclear explosive devices. Nothing should be done to undermine the authority of the International Atomic Energy Agency in this regard. States parties that have concerns regarding non-compliance with the safeguards agreements of the Treaty by the States parties should direct such concerns, along with supporting evidence and information, to the Agency to consider, investigate, draw conclusions and decide on necessary actions in accordance with its mandate.

10. All States parties required by article III of the Treaty to sign and bring into force comprehensive safeguards agreements and which have not yet done so should do so without delay.

11. International Atomic Energy Agency safeguards should be regularly assessed and evaluated. Decisions adopted by its Board of Governors aimed at further strengthening the effectiveness of Agency safeguards should be supported and implemented and the Agency's capability to detect undeclared nuclear activities should be increased. Also, States not party to the Treaty on Non-Proliferation of Nuclear Weapons should be urged to enter into comprehensive safeguards agreements with the Agency.

12. New supply arrangements for the transfer of source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to non-nuclear-weapon States should require, as a necessary precondition, acceptance of the Agency's full-scope safeguards and internationally legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices.

13. Nuclear fissile material transferred from military use to peaceful nuclear activities should, as soon as practicable, be placed under Agency safeguards in the framework of the voluntary safeguards agreements in place with the nuclear weapons States. Safeguards should be universally applied once the complete elimination of nuclear weapons has been achieved.

Peaceful uses of nuclear energy

14. Particular importance should be attached to ensuring the exercise of the inalienable right of all the parties to the Treaty and to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II as well as III of the Treaty.

15. Undertakings to facilitate participation in the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy should be fully implemented.

16. In all activities designed to promote the peaceful uses of nuclear energy, preferential treatment should be given to the non-nuclear-weapon States party to the Treaty, taking the needs of developing countries particularly into account.

17. Transparency in nuclear-related export controls should be promoted within the framework of dialogue and cooperation among all interested States party to the Treaty.

18. All States should, through rigorous national measures and international cooperation, maintain the highest practicable levels of nuclear safety, including in waste management, and observe standards and guidelines in nuclear materials accounting, physical protection and transport of nuclear materials.

19. Every effort should be made to ensure that the International Atomic Energy Agency has the financial and human resources necessary to meet effectively its responsibilities in the areas of technical cooperation, safeguards and nuclear safety. The Agency should also be encouraged to intensify its efforts aimed at finding ways and means for funding technical assistance through predictable and assured resources.

20. Attacks or threats of attack on nuclear facilities devoted to peaceful purposes jeopardize nuclear safety and raise serious concerns regarding the application of international law on the use of force in such cases, which could warrant appropriate action in accordance with the provisions of the Charter of the United Nations. The Conference requests that the President of the Conference bring the present decision, the decision on strengthening the review process for the Treaty and the decision on the extension of the Treaty on the Non-Proliferation of Nuclear Weapons, to the attention of the heads of State or Government of all States and seek their full cooperation on these documents and in the furtherance of the goals of the Treaty.

Decision 3: Extension of the Treaty on the Non-Proliferation of Nuclear Weapons

The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Having convened in New York from 17 April to 12 May 1995, in accordance with article VIII, paragraph 3, and X, paragraph 2, of the Treaty, on the Non-Proliferation of Nuclear Weapons,

Having reviewed the operation of the Treaty and affirming that there is a need for full compliance with the Treaty, its extension and its universal adherence, which are essential to international peace and security and the attainment of the ultimate goals of the complete elimination of nuclear weapons and a treaty on general and complete disarmament under strict and effective international control,

Having reaffirmed article VIII, paragraph 3, of the Treaty and the need for its continued implementation in a strengthened manner and, to this end, emphasizing the decision on strengthening the review process for the Treaty and the decision on principles and objectives for nuclear non-proliferation and disarmament, also adopted by the Conference,

Having established that the Conference is quorate in accordance with article X, paragraph 2, of the Treaty.

Decides that, as a majority exists among States party to the Treaty for its indefinite extension, in accordance with article X, paragraph 2, the Treaty shall continue in force indefinitely.

Resolution on the Middle East

The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Reaffirming the purpose and provisions of the Treaty on the Non-Proliferation of Nuclear Weapons,

Recognizing that, pursuant to article VII of the Treaty, the establishment of nuclear weapon-free zones contributes to strengthening the international non-proliferation regime,

Recalling that the Security Council, in its statement of 31 January 1992, affirmed that the proliferation of nuclear and all other weapons of mass destruction constituted a threat to international peace and security.

Recalling also General Assembly resolutions adopted by consensus supporting the establishment of a nuclear-weapon-free zone in the Middle East, the latest of which is resolution 49/71 adopted on 15 December 1994,

Recalling further the relevant resolutions adopted by the General Conference of the International Atomic Energy Agency concerning the application of Agency safeguards in the Middle East, the latest of which is GC (XXXVIII)/RES/21/ of 23 September 1994, and noting the danger of nuclear proliferation especially in areas of tensions,

Bearing in mind Security Council Resolution 687 (1991) and particularly paragraph 14 thereof, Noting Security Council resolution 984 (1995) and paragraph 8 of the decision on principles and objectives for nuclear non-proliferation and disarmament adopted by the Conference on 11 May 1995,

Bearing in mind the other decisions adopted by the Conference on 11 May 1995

1. Endorses the aims and objectives of the Middle East peace process and recognizes that efforts in this regard, as well as other efforts, contribute to inter alia, a Middle East zone free of nuclear weapons as well as other weapons of mass destruction;

2. Notes with satisfaction that, in its report (NPT/CONF. 1995/MC.III/1), Main Committee III of the conference recommended that the Conference "call on those remaining States not Parties to the Treaty to accede to it, thereby accepting an international legally binding commitment not to acquire nuclear weapons or nuclear explosive devices and to accept International Atomic Energy Agency safeguard on all their nuclear activities";

3. Notes with concern the continued existence in the Middle East of unsafeguarded nuclear facilities, and reaffirms in this connection the recommendation contained in section VI, paragraph 3, of the report of Main Committee III urging those non-parties to the Treaty on the Non-Proliferation of Nuclear Weapons that operate unsafeguarded nuclear facilities to accept full-scope International Atomic Energy Agency safeguards;

4. Reaffirms the importance of the early realization of universal adherence to the Treaty, and calls upon all States of the Middle East that have not yet done so, without exception, to accede to the Treaty as soon as possible and to place their nuclear facilities under full-scope International Atomic Energy Agency safeguards;

5. Calls upon all States in the Middle East to take practical steps in appropriate forums aimed at making progress towards, inter alia, the establishment of an effectively verifiable Middle East zone free of weapons of mass destruction, nuclear, chemical and biological, and their delivery systems, and to refrain from taking any measures that preclude the achievement of this objective;

6. Calls upon all States party to the Treaty on the Non-Proliferation of Nuclear Weapons, and in particular the nuclear-weapons States, to extend their cooperation and to exert their utmost efforts with a view to ensuring the early establishment by regional parties of a Middle East zone free of nuclear and all other weapons of mass destruction and their delivery systems.

7. The 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Review of the Operation of the Treaty, Taking into Account the Decisions and the Resolution adopted by the 1995 NPT Review and Extension Conference - Improving the effectiveness of the strengthened review process for the Treaty (Final Document Vol. I, Part I)

Article I and II and preambular paragraphs 1 to 3

1. The Conference reaffirms that the full and effective implementation of the Treaty and the regime of non-proliferation in all its aspects has a vital role in promoting international peace and security. The Conference reaffirms that every effort should be made to implement the Treaty in all its aspects and to prevent the proliferation of nuclear weapons and other nuclear explosive devices, without hampering the peaceful uses of nuclear energy by States Parties to the Treaty. The Conference remains convinced that universal adherence to the Treaty and full compliance of all Parties with its provisions are the best way to prevent the spread of nuclear weapons and other nuclear explosive devices.

2. The Conference recalls that the overwhelming majority of States entered into legally binding commitments not to receive, manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices in the context, *inter alia*, of the corresponding legally binding commitments by the nuclear-weapon States to nuclear disarmament in accordance with the Treaty.

3. The Conference notes that the nuclear-weapon States reaffirmed their commitment not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices directly, or indirectly, and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

4. The Conference notes that the non-nuclear-weapon States Parties to the Treaty reaffirmed their commitment not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly, not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

5. The Conference reaffirms that the strict observance of the provisions of the Treaty remains central to achieving the shared objectives of preventing, under any circumstances, the further proliferation of nuclear weapons and preserving the Treaty's vital contribution to peace and security.

6. The Conference expresses its concern with cases of non-compliance of the Treaty by States Parties, and calls on those States non-compliant to move promptly to full compliance with their obligations.

7. The Conference welcomes the accessions of Andorra, Angola, Brazil, Chile, Comoros, Djibouti, Oman, United Arab Emirates and Vanuatu to the Treaty since 1995, bringing the number of States parties to 187, and reaffirms the urgency and importance of achieving the universality of the Treaty.

8. The Conference urges all States not yet party to the Treaty, namely Cuba, India, Israel and Pakistan, to accede to the Treaty as non-nuclear-weapon States, promptly and without condition, particularly those States that operate unsafeguarded nuclear facilities.

9. The Conference deplores the nuclear test explosions carried out by India and then by Pakistan in 1998. The Conference declares that such actions do not in any way confer a nuclear-weapon State status or any special status whatsoever. The Conference calls upon both States to undertake the measures set out in the United Nations Security Council resolution 1172 (1998).

10. The Conference also calls upon all State Parties to refrain from any action that may contravene or undermine the objectives of the Treaty as well as of the United Nations Security Council resolution 1172 (1998).

11. The Conference notes that the two States concerned have declared moratoriums on further testing and their willingness to enter into legal commitments not to conduct any further nuclear tests by signing and ratifying the Comprehensive Nuclear-Test-Ban Treaty. The Conference regrets that the signing and ratifying has not yet taken place despite their pledges to do so.

12. The Conference reiterates the call on those States that operate unsafeguarded nuclear facilities and that have not yet acceded to the Treaty on the Non-Proliferation of Nuclear Weapons to reverse clearly and urgently any policies to pursue any nuclear-weapon development or deployment and to refrain from any action which could undermine regional and international peace and security and the efforts of the international community towards nuclear disarmament and the prevention of nuclear weapons proliferation.

Article III and preambular paragraphs 4 and 5, especially in their relationship to article IV and preambular paragraphs 6 and 7

1. The Conference recalls and reaffirms the decision of the1995 Review and Extension Conference entitled “Principles and objectives for nuclear non-proliferation and disarmament”, noting paragraph 1 of the principles and objectives and the elements relevant to article III of the Treaty, in particular paragraphs 9-13 and 17-19, and to article VII of the Treaty, in particular paragraphs 5-7. It also recalls and reaffirms the Resolution on the Middle East adopted by that Conference.

2. The Conference notes that recommendations made at previous Conferences for the future implementation of article III provide a helpful basis for States parties to the Treaty on the Non-Proliferation of Nuclear Weapons and the International Atomic Energy Agency (IAEA) to strengthen the non-proliferation regime and provide assurance of compliance with non-proliferation undertakings.

3. The States parties urge the international community to enhance cooperation in the field of non-proliferation issues and to seek solutions to all concerns or issues related to non-proliferation in accordance with the obligations, procedures and mechanisms established by the relevant international legal instruments.

4. The Conference reaffirms that the Treaty on the Non-Proliferation of Nuclear Weapons is vital in preventing the proliferation of nuclear weapons and in providing significant security benefits. The Conference remains convinced that universal adherence to the Treaty can achieve this goal, and they urge all four States not parties to the Treaty, Cuba, India, Israel and Pakistan, to accede to it without delay and without conditions, and to bring into force the required comprehensive safeguards agreements, together with Additional Protocols consistent with the Model contained in INFCIRC/540 (Corrected).

5. The Conference reaffirms the fundamental importance of full compliance with the provisions of the Treaty and the relevant safeguards agreements.

6. The Conference recognizes that IAEA safeguards are a fundamental pillar of the nuclear non-proliferation regime, play an indispensable role in the implementation of the Treaty and help to create an environment conducive to nuclear disarmament and to nuclear cooperation.

7. The Conference reaffirms that IAEA is the competent authority responsible for verifying and assuring, in accordance with the Statute of the IAEA and the IAEA safeguards system, compliance with its safeguards agreements with States parties undertaken in fulfilment of their obligations under article III, paragraph 1, of the Treaty, with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. It is the conviction of the Conference that nothing should be done to undermine the authority of IAEA in this regard. States parties that have concerns regarding non-compliance with the safeguards agreements of the Treaty by the States parties should direct such concerns, along with supporting evidence and information, to IAEA to consider, investigate, draw conclusions and decide on necessary actions in accordance with its mandate.

8. The Conference emphasizes that measures should be taken to ensure that the rights of all States Parties under the provisions of the preamble and the articles of the Treaty are fully protected and that no State Party is limited in the exercise of these rights in accordance with the Treaty.

9. The Conference emphasizes the importance of access to the Security Council and General Assembly by IAEA, including its Director General, in accordance with article XII.C. of the Statute of IAEA and paragraph 19 of INFCIRC/153 (Corr.), and the role of the Security Council and the General Assembly, in accordance with the Charter of the United Nations, in upholding compliance with IAEA safeguards agreements and ensuring compliance with safeguards obligations by taking appropriate measures in the case of any violations notified to it by the IAEA.

10. The Conference considers that IAEA safeguards provide assurance that States are complying with their undertakings under relevant safeguards agreements and assist States to demonstrate this compliance.

11. The Conference stresses that the non-proliferation and safeguards commitments in the Treaty are also essential for peaceful nuclear commerce and cooperation and that IAEA safeguards make a vital contribution to the environment for peaceful nuclear development and international cooperation in the peaceful uses of nuclear energy.

12. The Conference stresses that comprehensive safeguards and additional protocols should be universally applied once the complete elimination of nuclear weapons has

been achieved. In the meantime, the Conference calls for the wider application of safeguards to peaceful nuclear facilities in the nuclear-weapon States under the relevant voluntary-offer safeguards agreements in the most economic and practical way possible, taking into account the availability of IAEA resources.

13. The Conference reiterates the call by previous conferences of the States parties for the application of IAEA safeguards to all source or special fissionable material in all peaceful nuclear activities in the States parties in accordance with the provisions of Article III of the Treaty. The Conference notes with satisfaction that, since 1995, 28 States have concluded safeguards agreements with IAEA in compliance with article III, paragraph 4, of the Treaty, 25 of which have brought the agreements into force.1[1]

14. The Conference notes with concern that IAEA continues to be unable to verify the correctness and completeness of the initial declaration of nuclear material made by the Democratic People's Republic of Korea (DPRK), and is therefore unable to conclude that there has been no diversion of nuclear material in that country.

15. The Conference looks forward to the Democratic People's Republic of Korea (DPRK) fulfilling its stated intention to come into full compliance with its Treaty safeguards agreement with IAEA, which remains binding and in force. The Conference emphasizes the importance of the Democratic People's Republic of Korea preserving and making available to IAEA all information needed to verify its initial declaration.

16. The Conference reaffirms that IAEA safeguards should regularly be assessed and evaluated. Decisions adopted by the IAEA Board of Governors aimed at further strengthening the effectiveness and improving the efficiency of IAEA safeguards should be supported and implemented.

17. The Conference reaffirms that the implementation of comprehensive safeguards agreements pursuant to article III, paragraph 1, of the Treaty should be designed to provide for verification by IAEA of the correctness and completeness of a State's declaration so that there is a credible assurance of the non-diversion of nuclear material from declared activities and of the absence of undeclared nuclear material and activities.

18. The Conference notes the measures endorsed by the IAEA Board of Governors in June 1995 for strengthening and making more efficient the safeguards system and that these measures are being implemented pursuant to the existing legal authority conferred upon IAEA by comprehensive safeguards agreements.

19. The Conference also fully endorses the measures contained in the Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards (INFCIRC/540 (Corrected)), which was approved by the IAEA Board of Governors in May 1997. The safeguards-strengthening measures contained in the Model Additional Protocol will provide IAEA with, *inter alia*, enhanced information about a State's nuclear activities and complementary access to locations within a State.

Algeria, Antigua and Barbuda, Argentina, Azerbaijan, Bahamas, Barbados, Belarus, Belize, Brazil, Cambodia, Chile, Czech Republic, Dominica, Estonia, Ethiopia, Grenada, Guyana, Kazakhstan, Monaco, Namibia, St. Kitts and Nevis, San Marino, Slovenia, Ukraine, and Zimbabwe

20. The Conference recognizes that comprehensive safeguards agreements based on document INFCIRC/153 have been successful in its main focus of providing assurance regarding declared nuclear material and has also provided a limited level of assurance regarding the absence of undeclared nuclear material and activities. The Conference notes that implementation of the measures specified in the Model Additional Protocol will provide, in an effective and efficient manner, increased confidence about the absence of undeclared nuclear material and activities in a State as a whole and that those measures are now being introduced as an integral part of the IAEA's safeguards system. The Conference notes, in particular, the relationship between the additional protocol and the safeguards agreement between IAEA and a State party as set out in article 1 of the Model Additional Protocol. In this regard, it recalls the interpretation provided by IAEA secretariat on 31 January 1997 and set out in document GOV/2914 of 10 April 1997 that, once concluded, the two agreements had to be read and interpreted as one agreement.

21. The Conference notes the high priority that IAEA attaches, in the context of furthering the development of the strengthened safeguards system, to integrating traditional nuclear-material verification activities with the new strengthening measures and looks forward to an expeditious conclusion of this work. It recognizes that the aim of these efforts is to optimize the combination of all safeguards measures available to IAEA in order to meet the Agency's safeguards objectives with maximum effectiveness and efficiency within available resources. Furthermore, the Conference notes that credible assurance of the absence of undeclared nuclear material and activities, notably those related to enrichment and reprocessing, in a State as a whole could permit corresponding reduction in the level of traditional verification efforts with respect to declared nuclear material in that State, which is less sensitive from the point of view of non-proliferation. The Conference notes the important work being undertaken by IAEA in the conceptualization and development of integrated safeguards approaches, and encourages continuing work by IAEA in further developing and implementing these approaches on a high-priority basis.

22. The Conference recognizes that measures to strengthen the effectiveness and improve the efficiency of the safeguards system with a view to providing credible assurance of the non-diversion of nuclear material from declared activities and of the absence of undeclared nuclear material and activities must be implemented by all States parties to the NPT, including the nuclear-weapon States. The Conference also recognizes that the interests of nuclear non-proliferation will be effectively served by the acceptance of IAEA safeguards strengthening measures by States with item-specific safeguards agreements. The Conference welcomes the additional protocol concluded by Cuba and urges it also to bring the protocol into force as soon as possible.

23. The Conference notes that bilateral and regional safeguards play a key role in the promotion of transparency and mutual confidence between neighbouring States, and that they also provide assurances concerning nuclear non-proliferation. The Conference considers that bilateral or regional safeguards could be useful in regions interested in building confidence among its member States and in contributing effectively to the non-proliferation regime.

24. The Conference stresses the need to respect the letter and the spirit of the Treaty with respect to technical cooperation with States not party to the Treaty.

25. The Conference recognizes that nuclear material supplied to the nuclear-weapon States for peaceful purposes should not be diverted for the production of nuclear weapons or other nuclear explosive devices, and should be, as appropriate, subject to IAEA safeguards agreements.

26. The Conference notes that all nuclear-weapon States have now concluded additional protocols to their voluntary-offer safeguards agreements incorporating those measures provided for in the Model Additional Protocol that each nuclear-weapon State has identified as capable of contributing to the non-proliferation and efficiency aims of the Protocol, when implemented with regard to that State, and is consistent with that State's obligations under article I of the Treaty. The Conference invites such States to keep the scope of those additional protocols under review.

27. The Conference commends the IAEA for making its experience in the verification of nuclear non-proliferation available to the Conference on Disarmament in connection with the negotiation of a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.

28. The Conference takes note of the Declaration of the Moscow Nuclear Safety and Security Summit of April 1996, including in relation to the safe and effective management of weapons fissile material designated as no longer required for defence purposes, and the initiatives stemming from it.

29. The Conference underlines the importance of international verification of nuclear material designated by each nuclear-weapon State as no longer required for military purposes that has been irreversibly transferred to peaceful purposes. The Conference supports recent unilateral offers and mutual initiatives to place excess material under appropriate IAEA verification arrangements. Nuclear materials designated by each of the nuclear-weapon States as no longer required for military purposes should as soon as practicable be placed under IAEA or other relevant verification.

30. The Conference notes the considerable increase in the Agency's safeguards responsibilities since 1995. It further notes the financial constraints under which the IAEA safeguards system is functioning and calls upon all States parties, noting their common but differentiated responsibilities, to continue their political, technical, and financial support of IAEA in order to ensure that the Agency is able to meet its safeguards responsibilities.

31. The Conference welcomes the significant contributions by States parties through their support programmes to the development of technology and techniques that facilitate and assist the application of safeguards.

32. The Conference considers that the strengthening of IAEA safeguards should not adversely impact the resources available for technical assistance and cooperation. The allocation of resources should take into account all of the Agency's statutory functions, including that of encouraging and assisting the development and practical application of atomic energy for peaceful uses with adequate technology transfer.

33. The Conference recognizes that the transfer of nuclear-related equipment, information, material and facilities, resources or devices should be consistent with States' obligations under the Treaty.

34. The Conference, recalling the obligations of all States parties under articles I, II and III of the Treaty, calls upon all States parties not to cooperate or give assistance in the nuclear or nuclear-related field to States not party to the Treaty in a manner which assists them to manufacture nuclear weapons or other nuclear explosive devices.

35. The Conference reaffirms that each State party to the Treaty has undertaken not to provide source or special fissionable material or equipment or material especially designed or prepared for the processing, use, or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by article III of the Treaty.

36. The Conference reaffirms paragraph 12 of decision 2 (Principles and objectives for nuclear non-proliferation and disarmament), adopted on 11 May 1995 by the NPT Review and Extension Conference.

37. The Conference recognizes that there are nuclear-related dual-use items of equipment, technology, and materials not identified in article III, paragraph 2, of the Treaty that are relevant to the proliferation of nuclear weapons and therefore to the Treaty as a whole. The Conference calls on all States parties to ensure that their exports of nuclear-related dual-use items to States not party to the Treaty do not assist any nuclear-weapons programme. The Conference reiterates that each State Party should also ensure that any transfer of such items is in full conformity with the Treaty.

38. The Conference recognizes the particular requirement for safeguards on unirradiated direct-use nuclear material, and notes the projections by IAEA that the use of separated plutonium for peaceful purposes is expected to increase over the next several years. The Conference recognizes the non-proliferation benefits of the conversion of civilian research reactors to low-enriched uranium fuel. The Conference notes with appreciation that many research reactors are discontinuing the use of highly enriched uranium fuel in favour of low-enriched uranium fuel as a result of the Reduced Enrichment for Research and Test Reactors Programme. The Conference expresses satisfaction at the considerable work undertaken to ensure the continuing effectiveness of IAEA safeguards in relation to reprocessing, to the storage of separated plutonium and to uranium enrichment.

39. The Conference welcomes the additional transparency on matters pertaining to the management of plutonium resulting from the establishment, in 1997, of Guidelines for the Management of Plutonium (INFCIRC/549), setting out the policies that several States, including the nuclear-weapon States, have decided to adopt.

40. The Conference welcomes the announcement made by some nuclear-weapon States that they have ceased the production of fissile material for use in nuclear weapons or other nuclear explosive devices.

41. The Conference notes the conclusion drawn by the Board of Governors of IAEA that the proliferation risk with regard to neptunium is considerably lower than that with regard to uranium or plutonium and that at present there is practically no proliferation risk with regard to americium. The Conference expresses satisfaction at the recent decisions of the IAEA Board of Governors, which enabled IAEA to enter into exchanges of letters with States, on a voluntary basis, to ensure the regular and timely receipt of information as well as the application of measures required for efficient implementation of certain

monitoring tasks regarding the production and transfer of separated neptunium, and which requested the Director General of IAEA to report to the Board when appropriate with respect to the availability of separated americium, using relevant information available through the conduct of regular IAEA activities and any additional information provided by States on a voluntary basis.

42. The Conference notes the paramount importance of effective physical protection of all nuclear material and calls on all States to maintain the highest possible standards of security and physical protection of nuclear materials. The Conference notes the need for strengthened international cooperation in physical protection. In this regard, the Conference notes that 63 States have become party to the Convention on the Physical Protection of Nuclear Material.

43. Expressing concern about the illicit trafficking of nuclear and other radioactive materials, the Conference urges all States to introduce and enforce appropriate measures and legislation to protect and ensure the security of such material. The Conference welcomes the activities in the fields of prevention, detection and response being undertaken by IAEA in support of efforts against illicit trafficking. The Conference acknowledges the Agency's efforts to assist member States in strengthening their regulatory control on the applications of radioactive materials, including its ongoing work on a registry of sealed sources. It also welcomes the Agency's activities undertaken to provide for the enhanced exchange of information among its Member States, including the continued maintenance of the illicit trafficking database. The Conference recognizes the importance of enhancing cooperation and coordination among States and among international organizations in preventing, detecting and responding to the illegal use of nuclear and other radioactive material.

44. The Conference notes that 51 States parties to the Treaty have yet to bring into force comprehensive safeguards agreements,[1] and urges them to do so as soon as possible. This includes States parties without substantial nuclear activities. The Conference notes that in the case of States without substantial nuclear activities, the conclusion of safeguards agreements involves simplified procedures. The Conference recommends that the Director General of IAEA continue his efforts to further facilitate and assist these States parties in the conclusion and the entry into force of such agreements.

45. The Conference welcomes the fact that since May 1997, the IAEA Board of Governors has approved additional protocols to comprehensive safeguards agreements with 43 States and that 12 of those additional protocols are currently being implemented. The Conference encourages all States parties, in particular those States parties with substantial nuclear programmes, to conclude additional protocols as soon as possible and to bring them into force or provisionally apply them as soon as possible.

46. The Conference urges IAEA to continue implementing strengthened safeguards measures as broadly as possible and further urges all States with safeguards agreements to cooperate fully with IAEA in the implementation of these measures.

[1] Andorra, Angola, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Republic of Congo, Djibouti, Equatorial Guinea, Eritrea, Gabon, Georgia, Guinea, Guinea-Bissau, Haiti, Kenya, Kuwait, Kyrgyzstan, Laos, Liberia, Mali, Marshall Islands, Mauritania, Micronesia, Moldova, Mozambique, Niger, Oman, Palau, Qatar, Rwanda, Sao Tome and Principe, Saudi Arabia, Seychelles, Sierra Leone, Somalia, Tajikistan, Tanzania, The Former Yugoslav Republic of Macedonia, Togo, Turkmenistan, Uganda, United Arab Emirates, Vanuatu, Yemen.

47. The Conference recommends that the Director General of IAEA and the IAEA member States consider ways and means, which could include a possible plan of action, to promote and facilitate the conclusion and entry into force of such safeguards agreements and additional protocols, including, for example, specific measures to assist States with less experience in nuclear activities to implement legal requirements.

48. The Conference calls on all States parties to give their full and continuing support to the IAEA safeguards system.

49. The Conference notes the agreement between the Russian Federation and the United States to convert in Russia 500 tonnes of high enriched uranium (HEU) from Russia's nuclear weapons to low enriched uranium for use in commercial reactors. It welcomes the conversion to date of over 80 tonnes of HEU in the framework of this agreement. The Conference also recognizes the affirmation by Presidents of the Russian Federation and the United States of the intention of each country to remove by stages approximately 50 tonnes of plutonium from their nuclear weapons programmes and convert it so that it can never be used in nuclear weapons.

50. The Conference requests that IAEA continue to identify the financial and human resources needed to meet effectively and efficiently all of its responsibilities, including its safeguards verification responsibilities. It strongly urges all States to ensure that IAEA is provided with these resources.

51. The Conference recognizes that national rules and regulations of States parties are necessary to ensure that the States parties are able to give effect to their commitments with respect to the transfer of nuclear and nuclear-related dual use items to all States taking into account articles I, II and III of the Treaty, and, for States parties, also fully respecting article IV. In this context, the Conference urges States parties that have not yet done so to establish and implement appropriate national rules and regulations.

52. The Conference recommends that the list of items triggering IAEA safeguards and the procedures for implementation, in accordance with article III.2, be reviewed from time to time to take into account advances in technology, the proliferation sensitivity, and changes in procurement practices.

53. The Conference requests that any supplier arrangement should be transparent and should continue to take appropriate measures to ensure that the export guidelines formulated by them do not hamper the development of nuclear energy for peaceful uses by States parties, in conformity with articles I, II, III, and IV of the Treaty.

54. The Conference recommends that transparency in export controls should continue to be promoted within a framework of dialogue and cooperation among all interested States parties to the Treaty.

55. The Conference encourages all other states that separate, hold, process or use separated plutonium in their civil nuclear activities to adopt policies similar to those which have been adopted by the participants in the Plutonium Management Guidelines (INFCIRC/549). Furthermore, the Conference encourages the States concerned to consider similar policies for the management of highly enriched uranium used for peaceful purposes.

56. The Conference urges all States that have not yet done so to adhere to the Convention on the Physical Protection of Nuclear Material on the earliest possible date and to

apply, as appropriate, the recommendations on the physical protection of nuclear material and facilities contained in IAEA document INFCIRC/225/Rev.4 (Corrected) and in other relevant guidelines. It welcomes the ongoing informal discussions among legal and technical experts, under the aegis of IAEA, to discuss whether there is a need to revise the Convention on the Physical Protection of Nuclear Material.

Article IV and preambular paragraph 6 and 7

Treaty on the Non-Proliferation of Nuclear Weapons and the peaceful uses of nuclear energy

1. The Conference affirms that the Treaty fosters the development of the peaceful uses of nuclear energy by providing a framework of confidence and cooperation within which those uses can take place.

2. The Conference reaffirms that nothing in the Treaty shall be interpreted as affecting the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II and III of the Treaty. The Conference recognizes that this right constitutes one of the fundamental objectives of the Treaty. In this connection, the Conference confirms that each country's choices and decisions in the field of peaceful uses of nuclear energy should be respected without jeopardizing its policies or international cooperation agreements and arrangements for peaceful uses of nuclear energy and its fuel-cycle policies.

3. The Conference also reaffirms the undertaking by all parties to the Treaty to facilitate and have the right to participate in, the fullest possible exchange of equipment, material and scientific and technological information for the peaceful uses of nuclear energy among States parties to the Treaty. The Conference notes the contribution that such uses can make to progress in general and to help to overcome the technological and economic disparities between developed and developing countries.

4. The Conference urges that in all activities designed to promote the peaceful uses of nuclear energy, preferential treatment be given to the non-nuclear-weapon States parties to the Treaty, taking the needs of developing countries, in particular, into account.

5. Referring to paragraphs 14 to 20 of the Principles and Objectives decision of 1995, the Conference reasserts the need to continue to enhance the peaceful uses of nuclear energy by all States parties and cooperation among them.

6. The Conference underlines the role of IAEA in assisting developing countries in the peaceful use of nuclear energy through the development of effective programmes aimed at improving their scientific, technological, and regulatory capabilities. In this context, the Conference takes note of the medium-term strategy of IAEA.

7. The Conference affirms that every effort should be made to ensure that IAEA has the financial and human resources necessary to effectively meet its responsibilities as foreseen in article III.A of the Statute of IAEA.

8. The Conference recognizes the importance of the concept of sustainable development as a guiding principle for the peaceful use of nuclear energy. The Conference endorses the role of IAEA in assisting Member States, upon request, in formulating projects that meet the objective of protecting the global environment by applying sustainable devel-

opment approaches. The Conference recommends that IAEA continue taking this objective into account when planning its future activities. It further notes that IAEA regularly reports to the General Assembly on progress made in these fields.

9. The Conference recognizes the importance of safety and non-proliferation features, as well as aspects related to radioactive waste management being addressed in nuclear power development as well as other nuclear activities related to the nuclear fuel cycle at the technological level. The Conference recalls the role of IAEA in the assessment of prospective nuclear power technologies in this respect.

10. The Conference commends IAEA for its efforts to enhance the effectiveness and efficiency of the Agency's Technical Cooperation Programme and to ensure the continuing relevance of the programme to the changing circumstances and needs of recipient Member States. In this context, the Conference welcomes the new strategy for technical cooperation, which seeks to promote socio-economic impact within its core competencies, by integrating its assistance into the national development programme of each country with a view to ensure sustainability through expanding partnerships in development, model project standards and use of country programme frameworks and thematic plans. The Conference recommends that IAEA continue taking this objective and the needs of developing countries, notably least-developed countries, into account when planning its future activities.

11. The Conference acknowledges the need for the parties to the Treaty to discuss regularly and take specific steps towards the implementation of article IV of the Treaty.

Nuclear and radiation safety, safe transport of radioactive materials, radioactive waste and liability

Nuclear and Radiation Safety

1. The Conference affirms that the Treaty on the Non-Proliferation of Nuclear Weapons can help to ensure that international cooperation in nuclear and radiation safety will take place within an appropriate non-proliferation framework. The Conference acknowledges the primary responsibility of individual States for maintaining the safety of nuclear installations within their territories, or under their jurisdiction, and the crucial importance of an adequate national technical, human and regulatory infrastructure in nuclear safety, radiological protection and radioactive waste management.

2. The Conference notes that a demonstrated global record of safety is a key element for the peaceful uses of nuclear energy and that continuous efforts are required to ensure that the technical and human requirements of safety are maintained at the optimal level. Although safety is a national responsibility, international cooperation on all safety-related matters is indispensable. The Conference encourages the efforts of IAEA in the promotion of safety in all its aspects, and encourages all States parties to take the appropriate national, regional and international steps to enhance and foster a safety culture. The Conference welcomes and underlines the intensification of national measures and international cooperation in order to strengthen nuclear safety, radiation protection, the safe transport of radioactive materials and radioactive waste management, including activities conducted in this area by IAEA. In this regard, the Conference recalls that special efforts should be made and sustained to increase the awareness in these fields, through appropriate training.

3. The Conference welcomes the activities of IAEA directed towards the strengthening of nuclear safety in operating power and research reactors. The Conference further endorses the work of IAEA in the organization of international peer review services, the support to the regulatory bodies and other relevant areas of the infrastructure of member States through the Technical Cooperation Programme, the safety standards advisory commission and committees in the preparation of internationally recognized safety standards, the emergency response unit and the continuing work on transport safety matters.

4. The Conference welcomes the entry into force of the Convention on Nuclear Safety, and encourages all States, in particular those operating, constructing or planning nuclear power reactors that have not yet taken the necessary steps to become party to the Convention, to do so. It would also welcome a voluntary application of the related provisions of the Convention to other relevant nuclear installations dedicated to the peaceful uses of nuclear energy. The Conference also expresses its satisfaction with the outcome of the first review meeting under the Convention on Nuclear Safety, and looks forward to the report from the next review meeting, in particular with respect to those areas where the first review meeting found that there was room for safety improvements.

5. The Conference encourages all States that have not yet done so to become parties to the Convention on Early Notification of a Nuclear Accident, the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency and the Convention on Physical Protection of Nuclear Material.

6. The Conference notes the bilateral and multilateral activities that have enhanced the capabilities of the international community to study, minimize and mitigate the consequences of the accident at the Chernobyl nuclear power plant in support of the actions taken by the Governments concerned.

7. The Conference considers that attacks or threats of attack on nuclear facilities devoted to peaceful purposes jeopardize nuclear safety, have dangerous political, economic and environmental implications and raise serious concerns regarding the application of international law on the use of force in such cases, which could warrant appropriate action in accordance with the provisions of the Charter of the United Nations.

8. The Conference notes the importance of openness, transparency and public information concerning the safety of nuclear facilities.

Safe Transport of Radioactive Materials

9. The Conference endorses the IAEA regulations for the safe transport of radioactive materials and urges States to ensure that these standards are maintained. The Conference notes the decision in 1997 by the International Maritime Organization (IMO) to incorporate the Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes in Flasks on Board Ships (INF Code) into the International Convention for the Safety of Life at Sea.

10. The Conference underlines the importance of effective national and international regulations and standards for the protection of States concerned, from the risks of transportation of radioactive materials. The Conference affirms that it is in the interests of all States that any transportation of radioactive materials be conducted in compliance with the relevant international standards of nuclear safety and security and environmental protection, without prejudice to the freedoms, rights and obligations of navigation pro-

vided for in international law. The Conference takes note of the concerns of small island developing States and other coastal States with regard to the transportation of radioactive materials by sea.

11. Recalling resolution GC(43)/Res/11 of the General Conference of IAEA, adopted by consensus in 1999, the Conference invites States shipping radioactive materials to provide, as appropriate, assurances to concerned States, upon their request, that the national regulations of the shipping State take IAEA transport regulations into account and to provide them with relevant information relating to shipments of such materials. The information provided should in no case be contradictory to the measures of physical security and safety.

12. The Conference notes that States parties have been working bilaterally and through international organizations to improve cooperation and exchange of information among the States concerned. In this context, the Conference calls on States parties to continue working bilaterally and through the relevant international organizations to examine and further improve measures and international regulations relevant to international maritime transportation of radioactive material and spent fuel.

Spent Fuel and Radioactive Waste

13. The Conference notes that a major issue in the debate over the use of nuclear technologies is the safety of the management of spent fuel and of radioactive waste. The Conference notes the conclusion of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management and encourages States that have not yet taken the necessary steps to become party to the Convention, to do so. The Conference expresses the hope that this Convention will enter into force at the earliest date possible. The Conference underlines the importance that spent fuel and radioactive waste excluded from this Convention because they are within military or defence programmes in accordance with the objectives stated in this Convention.

14. The Conference commends the efforts of IAEA in radioactive waste management, and calls upon the Agency, in view of the increasing importance of all aspects of radioactive waste management, to strengthen its efforts in this field as resources permit. The Conference recognizes the activities of IAEA in the search for new approaches on radioactive waste management solutions that are both safe and publicly acceptable. It endorses IAEA programmes to assist member States in spent fuel and radioactive waste management through, *inter alia*, safety standards, peer reviews and Technical Cooperation activities.

15. The Conference also notes that the contracting parties to the Convention on the Prevention of Maritime Pollution by Dumping of Wastes and Other Matter (London Convention) have urged all States that have not done so, to accept the 1993 amendment of annex I of the London Convention, which prohibits contracting parties from dumping radioactive wastes or other radioactive matter at sea.

Liability

16. The Conference notes the adoption of the 1997 Protocol to Amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation for Nuclear Damage. The Conference also notes the existence of

various national and international liability mechanisms. Furthermore, the Conference stresses the importance of having effective liability mechanisms in place.

Technical cooperation

1. The Conference reaffirms the undertaking of those parties to the Treaty in a position to do so to cooperate in contributing alone, or together with other States or international organizations, to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States parties to the Treaty, with due consideration for the needs of the developing areas of the world.

2. The Conference recognizes the benefits of the peaceful applications of nuclear energy and nuclear techniques in the fields referred to in articles II and III of the Statute of the IAEA, and their contribution to achieving sustainable development in developing countries and for generally improving the well-being and the quality of life of the peoples of the world.

3. The Conference acknowledges the importance of the work of IAEA as the principal agent for technology transfer among the international organizations referred to in article IV, paragraph 2, of the Treaty, and affirms the importance of the Technical Cooperation activities of IAEA, as well as bilateral and other multilateral cooperation, in fulfilling the obligations set forth in article IV of the Treaty.

4. The Conference recognizes that voluntary resources provided to and received from States parties to the Treaty under the IAEA Technical Cooperation Fund represent the most important contribution to the implementation of its Technical Cooperation Programme, the major instrument for its cooperation with developing countries. The Conference expresses its appreciation to all IAEA member States party to the Treaty, which respect their commitments to the Technical Cooperation Fund by pledging and paying in full their contributions.

5. The Conference notes, however, that there has been a growing gap between the approved target figures for the Technical Cooperation Fund and the actual payments.

6. The Conference stresses that every effort should be made to ensure that the IAEA's financial and human resources necessary for Technical Cooperation activities are assured, predictable and sufficient to meet the objectives mandated in article IV, paragraph 2, of the Treaty and article II of the IAEA Statute. The Conference notes the Resolutions of the General Conference of the IAEA GC(43)/RES/6 and GC(43)/RES/14, and urges member States of IAEA to make every effort to pay in full and on time their voluntary contributions to the Technical Cooperation Fund and reminds them of their obligation to pay their Assessed Programme Costs. It also encourages IAEA to continue to manage its Technical Cooperation activities in an effective and cost-efficient manner, and in accordance with article III.C of the IAEA Statute.

7. The Conference notes the consultation among member States of the IAEA on the target for the Technical Cooperation Fund for the coming years and encourages member States to reach agreement on the Indicative Planning Figures (IPF).

8. The Conference notes that the special needs and priorities of the least developed countries parties to the Treaty should be taken into account in bilateral and multilateral nuclear technical assistance and cooperation programmes. The Conference recommends

that the IAEA continue, through its Technical Cooperation Programme, to give special attention to the needs and priorities of least developed countries.

9. The Conference recognizes that regional cooperative arrangements for the promotion of the peaceful use of nuclear energy can be an effective means of providing assistance and facilitating technology transfer, complementing the Technical Cooperation activities of IAEA in individual countries. It notes the contributions of the African Regional Co-operative Agreement for Research, Development and Training (AFRA), the Regional Cooperative Agreements for the Promotion of Nuclear Science and Technology in Latin America (ARCAL), the Regional Cooperative Agreement for Asia and the Pacific (RCA), as well as the regional Technical Cooperation Programme in Central and Eastern Europe.

10. The Conference notes the significant level of bilateral cooperation between States parties in the worldwide peaceful uses of nuclear energy and welcomes the reports thereon. The Conference recognizes that it is the responsibility of States parties to create the conditions to enable this cooperation, in which commercial entities play an important role in a manner that conforms with the States parties' obligations under Articles I and II of the Treaty. The Conference urges States in a position to do so to continue and where possible increase their cooperation in this field, particularly to developing countries and parties to the Treaty with economies in transition.

11. The Conference calls upon all States parties, in acting in pursuance of the objectives of the Treaty, to observe the legitimate right of all States parties, in particular developing States, to full access to nuclear material, equipment and technological information for peaceful purposes. Transfers of nuclear technology and international cooperation in conformity with articles I, II and III of the Treaty are to be encouraged. They would be facilitated by eliminating undue constraints that might impede such cooperation.

Conversion of nuclear materials to peaceful uses

1. The Conference notes steps taken by nuclear-weapon States to reduce their nuclear weapons arsenals and underlines the importance of international verification, as soon as practicable, of nuclear weapons material designated by each nuclear-weapon State as no longer required for military programmes and that has been irreversibly transferred to peaceful purposes. This process requires strict procedures for the safe handling, storage and disposal of sensitive nuclear materials, as well as the safe management of radioactive contaminants in strict compliance with highest possible standards of environmental protection and nuclear and radiation safety.

2. The Conference takes note of the Declaration of the Moscow Nuclear Safety and Security Summit of April 1996, including the measures in relation to the safe and effective management of weapons fissile material designated as no longer required for defence purposes, and the initiatives stemming therefrom.

3. The Conference also notes that there have been exceptional instances in which serious environmental consequences have resulted from uranium mining and associated nuclear fuel-cycle activities in the production of nuclear weapons.

4. The Conference calls upon all Governments and international organizations that have expertise in the field of cleanup and disposal of radioactive contaminants to consider giving appropriate assistance, as may be requested, for radiological assessment and

remedial purposes in these affected areas, while noting the efforts that have been made to date in this regard.

Article V

The Conference affirms that the provisions of article V of the Treaty as regards the peaceful applications of any nuclear explosions are to be interpreted in the light of the Comprehensive Nuclear-Test-Ban Treaty.

Article VI and preambular paragraphs 8 to 12

1. The Conference notes the reaffirmation by the States Parties of their commitment to article VI and preambular paragraphs 8 to 12 of the Treaty.

2. The Conference notes that, despite the achievements in bilateral and unilateral arms reduction, the total number of nuclear weapons deployed and in stockpile still amounts to many thousands. The Conference expresses its deep concern at the continued risk for humanity represented by the possibility that these nuclear weapons could be used.

3. The Conference takes note of the proposal made by the United Nations Secretary-General that the convening of a major international conference that would help to identify ways of eliminating nuclear dangers be considered at the Millennium Summit.

4. The Conference reaffirms that the cessation of all nuclear weapon test explosions or any other nuclear explosions will contribute to the non-proliferation of nuclear weapons in all its aspects, to the process of nuclear disarmament leading to the complete elimination of nuclear weapons and, therefore, to the further enhancement of international peace and security.

5. The Conference welcomes the adoption by the General Assembly and subsequent opening for signature of the Comprehensive Nuclear-Test-Ban Treaty in New York on 24 September 1996, and notes that 155 States have signed it and that 56 of them, including 28 whose ratification is necessary for its entry into force, have deposited their instruments of ratification. The Conference welcomes the ratifications by France and the United Kingdom of Great Britain and Northern Ireland and the recent decision by the Duma of the Russian Federation to ratify the Treaty. The Conference calls upon all States, in particular on those 16 States whose ratification is a prerequisite for the entry into force of the Comprehensive Nuclear-Test-Ban Treaty, to continue their efforts to ensure the early entry into force of the Treaty.

6. The Conference welcomes the final declaration adopted at the Conference on facilitating the entry into force of the Comprehensive Nuclear-Test-Ban Treaty, convened in Vienna in October 1999, in accordance with Article XIV of the Convention.

7. The Conference notes the International Court of Justice advisory opinion on the "Legality of the threat or use of nuclear weapons" issued at The Hague on 8 July 1996.

8. The Conference notes the establishment, in August 1998, by the Conference on Disarmament, of the Ad Hoc Committee under item 1 of its agenda entitled "Cessation of the nuclear arms race and nuclear disarmament" to negotiate, on the basis of the report of the Special Coordinator (CD/1299) and the mandate contained therein, a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.

The Conference regrets that negotiations have not been pursued on this issue as recommended in paragraph 4 (b) of the 1995 decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament".

9. The Conference welcomes the significant progress achieved in nuclear weapons reductions made unilaterally or bilaterally under the Strategic Arms Reduction Treaty (START) process, as steps towards nuclear disarmament. Ratification of START II by the Russian Federation is an important step in the efforts to reduce strategic offensive weapons and is welcomed. Completion of ratification of START II by the United States remains a priority.

10. The Conference also welcomes the significant unilateral reduction measures taken by other nuclear-weapon States, including the close-down and dismantling of nuclear weapon related facilities.

11. The Conference welcomes the efforts of several States to cooperate in making nuclear disarmament measures irreversible, in particular, through initiatives on the verification, management and disposition of fissile material declared excess to military purposes.

12. The Conference reiterates the important contribution made by Belarus, Kazakhstan and Ukraine to the implementation of article VI of the Treaty through their voluntary withdrawal of all tactical and strategic nuclear weapons from their territories.

13. The Conference welcomes the signing, in September 1997, by Belarus, Kazakhstan, the Russian Federation, Ukraine and the United States of America, of significant agreements relating to the Anti-Ballistic Missile Treaty, including a Memorandum of Understanding. The Conference welcomes the ratification of these documents by the Russian Federation. Ratification of these documents by the other countries remains a priority.

14. The Conference notes the nuclear-weapon States declaration that none of their nuclear weapons are targeted at any State.

15. The Conference agrees on the following practical steps for the systematic and progressive efforts to implement Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and paragraphs 3 and 4(c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament":

1. The importance and urgency of signatures and ratifications, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty.

2. A moratorium on nuclear-weapon-test explosions or any other nuclear explosions pending entry into force of that Treaty.

3. The necessity of negotiations in the Conference on Disarmament on a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices in accordance with the statement of the Special Coordinator in 1995 and the mandate contained therein, taking into consideration both nuclear disarmament and nuclear non-proliferation objectives. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate commencement of negotiations on such a treaty with a view to their conclusion within five years.

4. The necessity of establishing in the Conference on Disarmament an appropriate subsidiary body with a mandate to deal with nuclear disarmament. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate establishment of such a body.

5. The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.

6. An unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all States parties are committed under Article VI.

7. The early entry into force and full implementation of START II and the conclusion of START III as soon as possible while preserving and strengthening the ABM Treaty as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions.

8. The completion and implementation of the Trilateral Initiative between the United States of America, the Russian Federation and the International Atomic Energy Agency.

9. Steps by all the nuclear-weapon States leading to nuclear disarmament in a way that promotes international stability, and based on the principle of undiminished security for all:

- Further efforts by the nuclear-weapon States to reduce their nuclear arsenals unilaterally.

- Increased transparency by the nuclear-weapon States with regard to the nuclear weapons capabilities and the implementation of agreements pursuant to Article VI and as a voluntary confidence-building measure to support further progress on nuclear disarmament.

- The further reduction of non-strategic nuclear weapons, based on unilateral initiatives and as an integral part of the nuclear arms reduction and disarmament process.

- Concrete agreed measures to further reduce the operational status of nuclear weapons systems.

- A diminishing role for nuclear weapons in security policies to minimize the risk that these weapons ever be used and to facilitate the process of their total elimination.

- The engagement as soon as appropriate of all the nuclear-weapon States in the process leading to the total elimination of their nuclear weapons.

10. Arrangements by all nuclear-weapon States to place, as soon as practicable, fissile material designated by each of them as no longer required for military purposes under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside of military programmes.

11. Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.

12. Regular reports, within the framework of the NPT strengthened review process, by all States parties on the implementation of Article VI and paragraph 4 (c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament", and recalling the Advisory Opinion of the International Court of Justice of 8 July 1996.

13. The further development of the verification capabilities that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear-weapon-free world.

Article VII and the security of non-nuclear-weapon States

1. The Conference reaffirms that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State or in any other manner inconsistent with the purposes of the United Nations.

2. The Conference reaffirms that the total elimination of nuclear weapons is the only absolute guarantee against the use or threat of use of nuclear weapons. The Conference agrees that legally binding security assurances by the five nuclear-weapon States to the non-nuclear-weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) strengthen the nuclear non-proliferation regime. The Conference calls on the Preparatory Committee to make recommendations to the 2005 Review Conference on this issue.

3. The Conference notes the reaffirmation by the nuclear-weapon States of their commitment to the United Nations Security Council resolution 984 (1995) on security assurances for non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

4. The Conference notes the establishment in March 1998 by the Conference on Disarmament of the Ad Hoc Committee on effective international arrangements to assure non-nuclear-weapon States against the use, or threat of use of nuclear weapons.

5. The Conference recognizes the important role which the establishment of new nuclear-weapon-free zones and the signature to the protocols of new and previously existing zones by the nuclear-weapon States has played in extending negative security assurances to non-nuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons in the zones concerned. The Conference underlines the importance of concerned States taking steps to bring into effect the assurances provided by nuclear-weapon-free zone treaties and their protocols.

6. The Conference welcomes and supports the steps taken to conclude further nuclear-weapon-free zone treaties since 1995, and reaffirms the conviction that the establishment of internationally recognized nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned, enhances global and regional peace and security, strengthens the nuclear non-proliferation regime and contributes towards realizing the objectives of nuclear disarmament.

7. The Conference supports proposals for the establishment of nuclear-weapon-free zones where they do not yet exist, such as in the Middle East and South Asia.

8. The Conference welcomes and supports the declaration by Mongolia of its nuclear-weapon-free status, and takes note of the recent adoption by the Mongolian parliament of legislation defining that status as a unilateral measure to ensure the total absence of nuclear weapons on its territory, bearing in mind its unique conditions as a concrete contribution to promoting the aims of nuclear non-proliferation and a practical contribution to promoting political stability and predictability in the region.

9. The Conference further welcomes the Joint Declaration on the Denuclearization of the Korean Peninsula between the Republic of Korea and the Democratic People's Republic of Korea and urges its rapid implementation.

10. The Conference recognizes the continuing contributions that the Antarctic Treaty and the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba are making towards the achievement of nuclear non-proliferation and disarmament objectives, particularly in the southern hemisphere and adjacent areas, and towards keeping the areas covered by these treaties free of nuclear weapons, in accordance with international law. In this context, the Conference welcomes the vigorous efforts being made among States parties and signatories to those treaties in order to promote their common objectives.

11. The Conference stresses the importance of signature and ratification of the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba by all regional States, as well as the signature and ratification by the nuclear-weapon States that have not yet done so of the relevant protocols to those treaties, recognizing that security assurances are available to States parties to those Treaties. In this context, the Conference takes note of the statement of the five nuclear-weapon States that the internal processes are under way to secure the few lacking ratifications to the treaties of Rarotonga and Pelindaba, and that consultations with the States parties to the Treaty of Bangkok have been accelerated, paving the way for adherence by the five nuclear-weapon States to the protocol to that Treaty.

12. The Conference welcomes the consensus reached in the General Assembly since its thirty-fifth session that the establishment of a nuclear-weapon-free zone in the Middle East would greatly enhance international peace and security. The Conference urges all parties directly concerned to consider seriously taking the practical and urgent steps required for the implementation of the proposal to establish a nuclear-weapon-free zone in the region of the Middle East in accordance with the relevant resolutions of the General Assembly, and as a means of promoting this objective, invites the countries concerned to adhere to the Treaty on the Non-Proliferation of Nuclear Weapons, and pending the establishment of the zone, to agree to place all their nuclear activities under IAEA safeguards.

13. The Conference further welcomes the report on the establishment of nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned, adopted by consensus by the Disarmament Commission on 30 April 1999.

14. The Conference regards the establishment of additional nuclear-weapon-free zones as a matter of priority, and in this respect supports the intention and commitment of the five Central Asian States to establish a nuclear-weapon-free zone in their region, wel-

comes the practical steps they have taken towards implementation of their initiative and notes with satisfaction the substantial progress they have made in drawing up and agreeing on a draft treaty on the establishment of a nuclear-weapon-free zone in Central Asia.

15. The Conference, taking note of all initiatives by States parties, believes that the international community should continue to promote the establishment of new nuclear-weapon-free zones in accordance with the relevant UNDC guidelines and in that spirit welcomes the efforts and proposals that have been advanced by the States parties since 1995 in various regions of the world.

16. Regional issues

The Middle East, particularly implementation of the 1995 Resolution on the Middle East:

1. The Conference reaffirms the importance of the Resolution on the Middle East adopted by the 1995 Review and Extension Conference and recognizes that the resolution remains valid until the goals and objectives are achieved. The resolution, which was co-sponsored by the depositary States (the Russian Federation, the United Kingdom of Great Britain and Northern Ireland and the United States of America), is an essential element of the outcome of the 1995 Conference and of the basis on which the Treaty on the Non-Proliferation of Nuclear Weapons was indefinitely extended without a vote in 1995.

2. The Conference reaffirms its endorsement of the aims and objectives of the Middle East peace process and recognizes that efforts in this regard, as well as other efforts, contribute to, *inter alia*, a Middle East zone free of nuclear weapons as well as other weapons of mass destruction.

3. The Conference recalls that operative paragraph 4 of the 1995 Resolution on the Middle East "calls upon all States in the Middle East that have not yet done so, without exception, to accede to the Treaty as soon as possible and to place their nuclear facilities under full-scope International Atomic Energy Agency safeguards." The Conference notes, in this connection, that the report of the United Nations Secretariat on the Implementation of the 1995 Resolution on the Middle East (NPT/CONF.2000/7) states that several States have acceded to the Treaty and that, with these accessions, all States of the region of the Middle East, with the exception of Israel, are States parties to the Treaty on the Non-Proliferation of Nuclear Weapons. The Conference welcomes the accession of these States and reaffirms the importance of Israel's accession to the NPT and the placement of all its nuclear facilities under comprehensive IAEA safeguards, in realizing the goal of universal adherence to the Treaty in the Middle East.

4. The Conference notes the requirement under article III of the Non-Proliferation Treaty for non-nuclear-weapon States parties to conclude agreements with the IAEA to meet the requirements of the Statute of the IAEA. In this regard, the Conference notes paragraph 44 of the review of article III that nine States parties in the region have yet to conclude comprehensive safeguards agreements with the IAEA and invites those States to negotiate such agreements and bring them into force as soon as possible. The Conference welcomes the conclusion of an Additional Protocol by Jordan and invites all other States in the Middle East, whether or not party to the Treaty, to participate in the IAEA's strengthened safeguards system.

5. The Conference notes the unanimous adoption by the United Nations Disarmament Commission, at its 1999 session, of guidelines on the establishment of nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned (A/54/42). The Conference notes that, at that session, the Disarmament Commission encouraged the establishment of a nuclear-weapon-free zone in the Middle East, as well as the development of zones free from all weapons of mass destruction. The Conference notes the adoption without a vote by the General Assembly, for the twentieth consecutive year, of a resolution proposing the establishment of a nuclear-weapon-free zone in the region of the Middle East.

6. The Conference invites all States, especially States of the Middle East, to reaffirm or declare their support for the objective of establishing an effectively verifiable Middle East zone free of nuclear weapons as well as other weapons of mass destruction, to transmit their declarations of support to the Secretary-General of the United Nations, and to take practical steps towards that objective.

7. The Conference requests all States Parties, particularly the nuclear-weapon States, the States of the Middle East and other interested States, to report through the United Nations Secretariat to the President of the 2005 NPT Review Conference, as well as to the Chairperson of the Preparatory Committee meetings to be held in advance of that Conference, on the steps that they have taken to promote the achievement of such a zone and the realization of the goals and objectives of the 1995 Resolution on the Middle East. It requests that the Secretariat prepare a compilation of these reports in preparation for consideration of these matters at the Preparatory Committee meetings and the 2005 Review Conference.

8. The Conference requests the President of the 2000 NPT Review Conference to convey the Final Document of the Conference, including its conclusions and recommendations, to the Governments of all States, including those States Parties unable to attend the Conference and to States that are not party to the Treaty.

9. Recalling paragraph 6 of the 1995 Resolution on the Middle East, the Conference reiterates the appeal to all States parties to the Treaty on the Non-Proliferation of Nuclear Weapons to extend their cooperation and to exert their utmost efforts with a view to ensuring the early establishment by regional parties of a Middle East zone free of nuclear and all other weapons of mass destruction and their delivery systems. The Conference notes the statement by the five nuclear-weapon States reaffirming their commitment to the 1995 Resolution on the Middle East.

10. Bearing in mind the importance of full compliance with the NPT, the Conference notes the statement of 24 April 2000 by the IAEA Director-General that, since the cessation of IAEA inspections in Iraq on 16 December 1998, the Agency has not been in a position to provide any assurance of Iraq's compliance with its obligations under UN Security Council Resolution 687. The Conference further notes that the IAEA carried out an inspection in January 2000 pursuant to Iraq's safeguards agreement with the IAEA during which the inspectors were able to verify the presence of the nuclear material subject to safeguards (low enriched, natural and depleted uranium). The Conference reaffirms the importance of Iraq's full continuous cooperation with the IAEA and compliance with its obligations.

South Asia and other regional issues:

11. The Conference emphasizes that nuclear disarmament and nuclear non-proliferation are mutually reinforcing.

12. With respect to the nuclear explosions carried out by India and then by Pakistan in May 1998, the Conference recalls Security Council Resolution 1172 (1998), adopted unanimously on 6 June 1998, and calls upon both States to take all of the measures set out therein. Notwithstanding their nuclear tests, India and Pakistan do not have the status of nuclear-weapon States.

13. The Conference urges India and Pakistan to accede to the Non-Proliferation Treaty as non-nuclear-weapon States and to place all their nuclear facilities under comprehensive Agency safeguards. The Conference further urges both States to strengthen their non-proliferation export control measures over technologies, material and equipment that can be used for the production of nuclear weapons and their delivery systems.

14. The Conference notes that India and Pakistan have declared moratoriums on further testing and their willingness to enter into legal commitments not to conduct any further nuclear testing by signing and ratifying the Comprehensive Nuclear-Test-Ban Treaty. The Conference urges both States to sign the Treaty, in accordance with their pledges to do so.

15. The Conference notes the willingness expressed by India and Pakistan to participate in the negotiation in the Conference on Disarmament of a treaty banning the production of fissile material for nuclear weapons and other nuclear explosive devices. Pending the conclusion of a legal instrument, the Conference urges both countries to observe a moratorium on the production of such material. The Conference also urges both States to join other countries in actively seeking an early commencement of negotiations on this issue, in a positive spirit and on the basis of the agreed mandate, with a view to reaching early agreement.

16. The Conference notes with concern that, while the Democratic People's Republic of Korea remains a party to the Non-Proliferation Treaty, IAEA continues to be unable to verify the correctness and completeness of the initial declaration of nuclear material made by the Democratic People's Republic of Korea and is therefore unable to conclude that there has been no diversion of nuclear material in the Democratic People's Republic of Korea. The Conference looks forward to the fulfilment by the Democratic People's Republic of Korea of its stated intention to come into full compliance with its safeguards agreement with IAEA, which remains binding and in force. The Conference emphasizes the importance of action by the Democratic People's Republic of Korea to preserve and make available to IAEA all information needed to verify its initial inventory.

Article IX

1. The Conference reaffirms its conviction that the preservation of the integrity of the Treaty and its strict implementation is essential to international peace and security.

2. The Conference recognizes the crucial role of the Treaty in nuclear non-proliferation, nuclear disarmament and the peaceful uses of nuclear energy.

3. The Conference reaffirms that in accordance with article IX, States not currently States parties may accede to the Treaty only as non-nuclear-weapon States.

4. The Conference undertakes to make determined efforts towards the achievement of the goal of universality of the Treaty. These efforts should include the enhancement of regional security, particularly in areas of tension such as the Middle East and South Asia.

5. The Conference reaffirms the long-held commitment of parties to the Treaty to universal membership and notes that this goal has been advanced by the accession to the Treaty of several new States since the 1995 Review and Extension Conference, thereby bringing its membership to 187 States parties. The Conference reaffirms the importance of the Treaty in establishing a norm of international behaviour in the nuclear field.

6. The Conference therefore calls on those remaining States not parties to the Treaty to accede to it, thereby accepting an international legally binding commitment not to acquire nuclear weapons or nuclear explosive devices and to accept IAEA safeguards on all their nuclear activities. These States are Cuba, India, Israel, and Pakistan. In this context, the Conference welcomes the signature by Cuba of the protocol additional to its safeguards agreements with IAEA.

7. The Conference particularly urges those non-parties to the Treaty that operate unsafeguarded nuclear facilities - India, Israel and Pakistan - to take similar action, and affirms the important contribution this would make to regional and global security.

8. The Conference also takes note that the widening of the entry into force of protocols additional to safeguards agreements with IAEA will strengthen the nuclear safeguards regime and facilitate the exchange of nuclear and nuclear-related material in peaceful nuclear cooperation.

9. In this connection, the Conference underlines the necessity of universal adherence to the Treaty and of strict compliance by all existing parties with their obligations under the Treaty.

10. The Conference requests the President of the Conference to convey formally the views of States parties on this issue to all non-parties and to report their responses to the parties. Such efforts should contribute to enhancing the universality of the Treaty and the adherence of non-parties to it.

Improving the effectiveness of the strengthened review process for the NPT

1. The States parties reaffirmed the provisions in the Decision on "Strengthening the Review Process for the Treaty" adopted at the 1995 Review and Extension Conference.

2. The States parties stressed that three sessions of the Preparatory Committee, normally for a duration of 10 working days each, should be held in the years prior to the review conference. A fourth session, would, if necessary, be held in the year of the review conference.

3. The States parties recommended that specific time be allocated at sessions of the Preparatory Committee to address specific relevant issues.

4. Recalling the Decision on subsidiary bodies of the 2000 Review Conference (NPT/CONF.2000/DEC.1), subsidiary bodies can be established at the Review Conference to address specific relevant issues.

5. The States parties, recalling paragraph 4 of Decision 1 of the 1995 NPT Review and Extension Conference, agreed that the purpose of the first two sessions of the Preparatory Committee would be to "consider principles, objectives and ways in order to promote the full implementation of the Treaty, as well as its universality". To this end, each session of the Preparatory Committee should consider specific matters of substance relating to the implementation of the Treaty and Decisions 1 and 2, as well as the Resolution on the Middle East adopted in 1995, and the outcomes of subsequent Review Conferences, including developments affecting the operation and purpose of the Treaty.

6. The States parties also agreed that the Chairpersons of the sessions of the Preparatory Committee should carry out consultations with the States parties to prepare the ground for the outcome of the sessions as well as their agenda.

7. The consideration of the issues at each session of the Preparatory Committee should be factually summarized and its results transmitted in a report to the next session for further discussion. At its third and, as appropriate, fourth session, the Preparatory Committee, taking into account the deliberations and results of its previous sessions, should make every effort to produce a consensus report containing recommendations to the Review Conference.

8. The States parties agreed that the procedural arrangements for the Review Conference should be finalized at the last session of the Preparatory Committee.

9. The States parties also agreed that a meeting be allocated to non-governmental organizations to address each session of the Preparatory Committee and the Review Conference.

8. Statement by the Delegations of France, the Peoples' Republic of China, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland and the United States of America during the 2000 Review Conference of the NPT

1. The delegations of China, France, Russia, the United Kingdom and the United States, on the occasion of the sixth Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), formally reiterate the strong and continuing support of our countries for this Treaty, the cornerstone of the international nuclear non proliferation regime and the essential foundation for nuclear disarmament. We remain unequivocally committed to fulfilling all of our obligations under the Treaty.

2. We welcomed the decision on indefinite extension of the Treaty adopted in 1995 by its member States. We reaffirm our commitment to strengthening the review process of the Treaty and to the principles and objectives for nuclear non-proliferation and disarmament. We reaffirm our commitment to the resolution on the Middle East adopted in 1995. The principles established by those documents will make a continuing contribution to the review process, the Treaty remaining its fundamental guide.

3. The progress of NPT universality has been confirmed after the 1995 conference. We welcome the accession to the Treaty by Chile, Vanuatu, the United Arab Emirates, Comoros, Andorra, Angola, Djibouti, Oman and Brazil. Today, there are 187 member States. We reiterate the need for universal adherence to the NPT and call upon States that have not yet done so to accede to the Treaty at an early date. The nuclear explosions carried out by India and Pakistan in May 1998 were a cause of deep international concern. We continue to call upon both countries to undertake the measures set out in UNSCR 1172. Notwithstanding their nuclear tests, India and Pakistan do not have the status of nuclear-weapon States in accordance with the NPT.

4. We stress that compliance with the NPT by all member States is essential to further the comprehensive goals of the Treaty.

5. We reiterate our unequivocal commitment to the ultimate goals of a complete elimination of nuclear weapons and a treaty on general and complete disarmament under strict and effective international control.

6. A program of action was set out by the 1995 Review and Extension Conference as important in the full realization and effective implementation of Article VI. In pursuit of that program, there have been highly significant multilateral, bilateral and unilateral developments since 1995.

7. The CTBT was opened for signature in New York on 24 September 1996. The five nuclear-weapon States all signed it that very day. Today, 155 States have signed it and 55 of them, including 28 whose ratification is necessary for its entry into force, have deposited their instruments of ratification with the Secretary General of the United Nations, including France and the United Kingdom in a joint ceremony on 6 April 1998. The recent ratification of the CTBT by the Russian Federation is welcome. The Preparatory Commission for the CTBT Organization has been set up in Vienna and is putting into place the international monitoring system of the Treaty. Important progress has been made so far in the setting up of the verification system. We remain committed to ensuring that, at entry into force of the CTBT, the verification regime will be capable of meeting the verification requirements of this Treaty. The first conference of States having

ratified the Treaty to consider the issue of its entry into force took place in Vienna in October 1999. No efforts should be spared to make sure that the CTBT is a universal and internationally and effectively verifiable treaty and to secure its early entry into force. There should be no doubt as to the commitment of our five countries to that effect.

8. As one logical multilateral step in the full realization and effective implementation of Article VI, we reaffirm the necessity of a non-discriminatory, universally applicable and internationally and effectively verifiable convention banning the production of fissile material for nuclear weapons or other nuclear explosive devices negotiated in accordance with the 1995 statement of the Special Coordinator of the Conference on Disarmament and the mandate contained therein. We urge the Conference on Disarmament to agree on a program of work as soon as possible, which includes the immediate commencement and early conclusion of negotiations on such a treaty.

9. The contribution of the five nuclear-weapon States to systematic and progressive efforts to reduce nuclear weapons globally has been and will be highlighted by each of us nationally.

10. Emphasising the essential importance of cooperation, demonstrating and advancing mutual trust among ourselves, and promoting greater international security and stability, we declare that none of our nuclear weapons are targeted at any State.

11. Ratification of START II by the Russian Federation is an important step in the efforts to reduce strategic offensive weapons and is welcome. Completion of ratification of START II by the United States remains a priority. We look forward to the conclusion of START III as soon as possible while preserving and strengthening the ABM Treaty as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions.

12. We are committed to placing as soon as practicable fissile materials designated by each of us as no longer required for defence purposes under IAEA or other relevant international verification. We have launched a number of significant initiatives to provide for the safe and effective management and disposition of such materials.

13. We welcome the creation of two new nuclear-weapon free zones since 1995 as a significant contribution to the enhancement of regional and international peace and security: South-East Asia and Africa. The five nuclear-weapon States have signed and, in most cases, ratified all the relevant protocols to the treaties of Tlatelolco, Rarotonga and Pelindaba; internal processes are underway to secure the few lacking ratifications. The consultations with States parties to the treaty of Bangkok have recently been accelerated, paving the way for our adherence to the additional protocol. We are looking forward to the successful and early conclusions of those consultations. We encourage the States in Central Asia to pursue successfully their efforts to create a nuclear-weapon free zone in their region. We support and respect the nuclear-weapon free status of Mongolia.

14. We note that the actions of the nuclear-weapon States since 1995 on the relevant additional protocols to Nuclear Weapon Free Zone treaties have increased the number of non-nuclear-weapon States eligible for legally binding Negative Security Assurances to over 100. We reaffirm our commitment to United Nations Security Council resolution 984 adopted in April 1995 on security assurances for NPT non-nuclear-weapon States. According to operative paragraph 10 of resolution 984, the issues addressed in that resolution remain of continuing concern to the Security Council. We are ready to exchange views relating to the positive security assurances referred to in the resolution.

15. We consider the international safeguards system of the International Atomic Energy Agency (IAEA) as one of the essential pillars of the non-proliferation regime. This system acts as a guarantee for stability and the preservation of world peace. We call on all States parties, which are required by Article III of the Treaty and have not yet done so, to sign and bring into force comprehensive safeguards agreements without delay.

16. The development and the implementation of the strengthened safeguards system of the IAEA through new agreements is a significant achievement. We praise the remarkable work carried out by the IAEA in this field and hope that the strengthened system soon spreads across all regions of the world. Here again, universality is the challenge we face. To date, Additional Protocols have been signed by more than fifty non-nuclear-weapon States; nine of them have entered into force. We urge all non-nuclear-weapon States that have not yet done so to sign without delay the additional protocol with a view to its early implementation.

17. As regards States not members of the NPT, one of them has recently signed an Additional Protocol with the IAEA. We encourage the three others to negotiate an Additional Protocol with the IAEA.

18. All the five nuclear-weapon States signed an Additional Protocol with the IAEA and shall seek to ratify their agreements as soon as possible.

19. We support the promotion of transparency in nuclear related export controls within the framework of dialogue and cooperation among all interested States parties to the treaty and we welcome the initiatives taken in order to carry out this objective.

20. We reaffirm the inalienable right of all the parties to the Treaty to develop research, production, and use of nuclear energy for peaceful purposes without discrimination and in accordance with the relevant provisions of the Treaty and the relevant principles on safeguards. Pursuant to our obligation under Article IV, we have provided our support for the technical cooperation programs administered by the IAEA, which has enabled many nations to make progress in the application of nuclear technologies in important fields such as agriculture, hydrology, medicine and environment.

21. We stress the importance of international cooperation in order to maintain the highest practicable levels of nuclear safety. In this regard, we welcome the entry into force and the first review meeting of the convention on nuclear safety as well as the opening for signature of the joint convention on the safety of spent fuel management and on the safety of radioactive waste management. We call on all States which have not yet done so to sign and ratify those two conventions.

22. We are determined to take a forward-looking approach to nuclear non-proliferation and nuclear disarmament. The NPT provides an indispensable framework for future efforts against nuclear proliferation and towards nuclear disarmament. We fully acknowledge our particular responsibility and key role in ensuring continued progress in the implementation of the NPT.

23. The five nuclear-weapon States hope similarly genuine commitment to the pursuit of nuclear non-proliferation and disarmament as a contribution to enhanced peace and security will be shown by all States members of the NPT and States outside the NPT. We will continue to work together and with the non-nuclear weapon States for the success of the review process.

B. Implementing Nuclear Nonproliferation: The International Atomic Energy Agency, Export Controls and Material Protection

1. Statute of the IAEA

Article 1: Establishment of the Agency

The Parties hereto establish an International Atomic Energy Agency (hereinafter referred to as "the Agency") upon the terms and conditions hereinafter set forth.

Article II: Objectives

The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose.

Article III: Functions

A. The Agency is authorized:

1. To encourage and assist research on, and development and practical application of, atomic energy for peaceful uses throughout the world; and, if requested to do so, to act as an intermediary for the purposes of securing the performance of services or the supplying of materials, equipment, or facilities by one member of the Agency for another; and to perform any operation or service useful in research on, or development or practical application of, atomic energy for peaceful purposes;

2. To make provision, in accordance with this Statute, for materials, services, equipment, and facilities to meet the needs of research on, and development and practical application of, atomic energy for peaceful purposes, including the production of electric power, with due consideration for the needs of the under-developed areas of the world;

3. To foster the exchange of scientific and technical information on peaceful uses of atomic energy;

4. To encourage the exchange of training of scientists and experts in the field of peaceful uses of atomic energy;

5. To establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose; and to apply safeguards, at the request of the parties, to any bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the field of atomic energy;

6. To establish or adopt, in consultation and, where appropriate, in collaboration with the competent organs of the United Nations and with the specialized agencies concerned, standards of safety for protection of health and minimization of danger to life and property (including such standards for labour conditions), and to provide for the application of these standards to its own operation as well as to the operations making use of materials, services, equipment, facilities, and information made available by the Agency or at its request or under its control or supervision; and to provide for the application of these standards, at the request of the parties, to operations under any bilateral or multilateral arrangements, or, at the request of a State, to any of that State's activities in the field of atomic energy;

7. To acquire or establish any facilities, plant and equipment useful in carrying out its authorized functions, whenever the facilities, plant, and equipment otherwise available to it in the area concerned are inadequate or available only on terms it deems unsatisfactory.

B. In carrying out its functions, the Agency shall:

1. Conduct its activities in accordance with the purposes and principles of the United Nations to promote peace and international co-operation, and in conformity with policies of the United Nations furthering the establishment of safeguarded worldwide disarmament and in conformity with any international agreements entered into pursuant to such policies;

2. Establish control over the use of special fissionable materials received by the Agency, in order to ensure that these materials are used only for peaceful purposes;

3. Allocate its resources in such a manner as to secure efficient utilization and the greatest possible general benefit in all areas of the world, bearing in mind the special needs of the under- developed areas of the world;

4. Submit reports on its activities annually to the General Assembly of the United Nations and, when appropriate, to the Security Council: if in connection with the activities of the Agency there should arise questions that are within the competence of the Security Council, the Agency shall notify the Security Council, as the organ bearing the main responsibility for the maintenance of international peace and security, and may also take the measures open to it under this Statute, including those provided in paragraph C of Article XII;

5. Submit reports to the Economic and Social Council and other organs of the United Nations on matters within the competence of these organs.

C. In carrying out its functions, the Agency shall not make assistance to members subject to any political, economic, military, or other conditions incompatible with the provisions of this Statute.

D. Subject to the provisions of this Statute and to the terms of agreements concluded between a State or a group of States and the Agency which shall be in accordance with the provisions of the Statute, the activities of the Agency shall be carried out with due observance of the sovereign rights of States.

Article IV: Membership

A. The initial members of the Agency shall be those States Members of the United Nations or of any of the specialized agencies which shall have signed this Statute within ninety days after it is opened for signature and shall have deposited an instrument of ratification.

B. Other members of the Agency shall be those States, whether or not Members of the United Nations or of any of the specialized agencies, which deposit an instrument of acceptance of this Statute after their membership has been approved by the General Conference upon the recommendation of the Board of Governors. In recommending and approving a State for membership, the Board of Governors and the General Conference shall determine that the State is able and willing to carry out the obligations of membership in the Agency, giving due consideration to its ability and willingness to act in accordance with the purposes and principles of the Charter of the United Nations.

C. The Agency is based on the principle of the sovereign equality of all its members, and all members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligation assumed by them in accordance with this Statute.

Article V: General Conference

A. A General Conference consisting of representatives of all members shall meet in regular annual session and in such special sessions as shall be convened by the Director General at the request of the Board of Governors or of a majority of members. The sessions shall take place at the headquarters of the Agency unless otherwise determined by the General Conference.

B. At such sessions, each member shall be represented by one delegate who may be accompanied by alternates and by advisers. The cost of attendance of any delegation shall be borne by the member concerned.

C. The General Conference shall elect a President and such other officers as may be required at the beginning of each session. They shall hold office for the duration of the session. The General Conference, subject to the provisions of this Statute, shall adopt its own rules of procedure. Each member shall have one vote. Decisions pursuant to paragraph H of article XIV, paragraph C of article XVIII and paragraph B of article XIX shall be made by a two- thirds majority of the members present and voting. Decisions on other questions, including the determination of additional questions or categories of questions to be decided by a two- thirds majority, shall be made by a majority of the members present and voting. A majority of members shall constitute a quorum.

D. The General Conference may discuss any questions or any matters within the scope of this Statute or relating to the powers and functions of any organs provided for in this Statute, and may make recommendations to the membership of the Agency or to the Board of Governors or to both on any such questions or matters.

E. The General Conference shall:

1. Elect members of the Board of Governors in accordance with article VI;

2. Approve States for membership in accordance with article IV;

3. Suspend a member from the privileges and rights of membership in accordance with article XIX;

4. Consider the annual report of the Board;

5. In accordance with article XIV, approve the budget of the Agency recommended by the Board or return it with recommendations as to its entirety or parts to the Board. for resubmission to the General Conference;

6. Approve reports to be submitted to the United Nations as required by the relationship agreement between the Agency and the United Nations, except reports referred to in paragraph C of article XII, or return them to the Board with its recommendations;

7. Approve any agreement or agreements between the Agency and the United Nations and other organizations as provided in article XVI or return such agreements with its recommendations to the Board, for resubmission to the General Conference;

8. Approve rules and limitations regarding the exercise of borrowing powers by the Board, in accordance with paragraph G of article XIV; approve rules regarding the acceptance of voluntary contributions to the Agency; and approve, in accordance with paragraph F of article XIV, the manner in which the general fund referred to in that paragraph may be used;

9. Approve amendments to this Statute in accordance with paragraph C of article XVIII;

10. Approve the appointment of the Director General in accordance with paragraph A of article VII.

F. The General Conference shall have the authority:

1. To take decisions on any matter specifically referred to the General Conference for this purpose by the Board;

2. To propose matters for consideration by the Board and request from the Board reports on any matter relating to the functions of the Agency.

Article VI: Board of Governors

A. The Board of Governors shall be composed as follows:

1. The outgoing Board of Governors shall designate for membership on the Board the ten members most advanced in the technology of atomic energy including the production of source materials, and the member most advanced in the technology of atomic energy including the production of source materials in each of the following areas in which none of the aforesaid ten is located:

1. North America

2. Latin America

3. Western Europe

4. Eastern Europe

5. Africa

6. Middle East and South Asia

7. South East Asia and the Pacific

8. Far East.

2. The General Conference shall elect to membership of the Board of Governors:

(a) Twenty members, with due regard to equitable representation on the Board as a whole of the members in the areas listed in sub- paragraph A. 1 of this article, so that the Board shall at all times include in this category five representatives of the area of Latin America, four representatives of the area of Western Europe, three representatives of the area of Eastern Europe, four representatives of the area of Africa, two representatives of the area of the Middle East and South Asia, one representative of the area of South East Asia and the Pacific, and one representative of the area of the Far East. No member in this category in any one term of office will be eligible for re- election in the same category for the following term of office; and

(b) One further member from among the members in the following areas: Middle East and South Asia, South East Asia and the Pacific, Far East;

(c) One further member from among the members in the following areas: Africa, Middle East and South Asia, South East Asia and the Pacific.

B. The designations provided for in sub- paragraph A- l of this article shall take place not less than sixty days before each regular annual session of the General Conference. The elections provided for in sub- paragraph A- 2 of this article shall take place at regular annual sessions of the General Conference.

C. Members represented on the Board of Governors in accordance with sub- paragraph A- l of this article shall hold office from the end of the next regular annual session of the General Conference after their designation until the end of the following regular annual session of the General Conference.

D. Members represented on the Board of Governors in accordance with sub- paragraph A- 2 of this article shall hold office from the end of the regular annual session of the General Conference at which they are elected until the end of the second regular annual session of the General Conference thereafter.

E. Each member of the Board of Governors shall have one vote. Decisions on the amount of the Agency's budget shall be made by a two- thirds majority of those present and voting, as provided in paragraph H of article XIV. Decisions on other questions, including the determination of additional questions or categories of questions to be decided by a two thirds majority, shall be made by a majority of those present and voting. Two- thirds of all members of the Board shall constitute a quorum.

F. The Board of Governors shall have authority to carry out the functions of the Agency in accordance with this Statute, subject to its responsibilities to the General Conference as provided in this Statute.

G. The Board of Governors shall meet at such times as it may determine. The meetings shall take place at the headquarters of the Agency unless otherwise determined by the Board.

H. The Board of Governors shall elect a Chairman and other officers from among its members and, subject to the provisions of this Statute, shall adopt its own rules of procedure.

I. The Board of Governors may establish such committees as it deems advisable. The Board may appoint persons to represent it in its relations with other organizations.

J. The Board of Governors shall prepare an annual report to the General Conference concerning the affairs of the Agency and any projects approved by the Agency. The Board shall also prepare for submission to the General Conference such reports as the Agency is or may be required to make to the United Nations or to any other organization the work of which is related to that of the Agency. These reports, along with the annual reports, shall be submitted to members of the Agency at least one month before the regular annual session of the General Conference.

Article VII: Staff

A. The staff of the Agency shall be headed by a Director General. The Director General shall be appointed by the Board of Governors with the approval of the General Conference for a term of four years. He shall be the chief administrative officer of the Agency.

B. The Director General shall be responsible for the appointment, organization, and functioning of the staff and shall be under the authority of and subject to the control of the Board of Governors. He shall perform his duties in accordance with regulations adopted by the Board.

C. The staff shall include such qualified scientific and technical and other personnel as may be required to fulfill the objectives and functions of the Agency. The Agency shall be guided by the principle that its permanent staff shall be kept to a minimum.

D. The paramount consideration in the recruitment and employment of the staff and in the determination of the conditions of service shall be to secure employees of the highest standards of efficiency, technical competence, and integrity. Subject to this consideration, due regard shall be paid to the contributions of members to the Agency and to the importance of recruiting the staff on as wide a geographical basis as possible.

E. The terms and conditions on which the staff shall be appointed, remunerated, and dismissed shall be in accordance with regulations made by the Board of Governors, subject to the provisions of this Statute and to general rules approved by the General Conference on the recommendation of the Board.

F. In the performance of their duties, the Director General and the staff shall not seek or receive instructions from any source external to the Agency. They shall refrain from any action which might reflect on their position as officials of the Agency; subject to their responsibilities to the Agency, they shall not disclose any industrial secret or other confidential information coming to their knowledge by reason of their official duties for the Agency. Each member undertakes to respect the international character of the responsibilities of the Director General and the staff and shall not seek to influence them in the discharge of their duties.

G. In this article the term "staff" includes guards.

Article VIII: Exchange of information

A. Each member should make available such information as would, in the judgement of the member, be helpful to the Agency.

B. Each member shall make available to the Agency all scientific information developed as a result of assistance extended by the Agency pursuant to article XI.

C. The Agency shall assemble and make available in an accessible form the information made available to it under paragraphs A and B of this article. It shall take positive steps to encourage the exchange among its members of information relating to the nature and peaceful uses of atomic energy and shall serve as an intermediary among its members for this purpose.

Article IX: Supplying of materials

A. Members may make available to the Agency such quantities of special fissionable materials as they deem advisable and on such terms as shall be agreed with the Agency. The materials made available to the Agency may, at the discretion of the member making them available, be stored either by the member concerned or, with the agreement of the Agency, in the Agency's depots.

B. Members may also make available to the Agency source materials as defined in article XX and other materials. The Board of Governors shall determine the quantities of such materials which the Agency will accept under agreements provided for in article XIII.

C. Each member shall notify the Agency of the quantities, form, and composition of special fissionable materials, source materials, and other materials which that member is prepared, in conformity with its laws, to make available immediately or during a period specified by the Board of Governors.

D. On request of the Agency a member shall, from the materials which it has made available, without delay deliver to another member or group of members such quantities of such materials as the Agency may specify, and shall without delay deliver to the Agency itself such quantities of such materials as are really necessary for operations and scientific research in the facilities of the Agency.

E. The quantities, form and composition of materials made available by any member may be changed at any time by the member with the approval of the Board of Governors.

F. An initial notification in accordance with paragraph C of this article shall be made within three months of the entry into force of this Statute with respect to the member concerned. In the absence of a contrary decision of the Board of Governors, the materials initially made available shall be for the period of the calendar year succeeding the year when this Statute takes effect with respect to the member concerned. Subsequent notifications shall likewise, in the absence of a contrary action by the Board, relate to the period of the calendar year following the notification and shall be made no later than the first day of November of each year.

G. The Agency shall specify the place and method of delivery and, where appropriate, the form and composition, of materials which it has requested a member to deliver from the amounts which that member has notified the Agency it is prepared to make available. The Agency shall also verify the quantities of materials delivered and shall report those quantities periodically to the members.

H. The Agency shall be responsible for storing and protecting materials in its possession. The Agency shall ensure that these materials shall be safeguarded against

1. hazards of the weather,

2. unauthorized removal or diversion,

3. damage or destruction, including sabotage, and

4. forcible seizure. In storing special fissionable materials in its possession, the Agency shall ensure the geographical distribution of these materials in such a way as not to allow concentration of large amounts of such materials in any one country or region of the world.

I. The Agency shall as soon as practicable establish or acquire such of the following as may be necessary:

1. Plant, equipment, and facilities for the receipt, storage, and issue of materials;

2. Physical safeguards;

3. Adequate health and safety measures;

4. Control laboratories for the analysis and verification of materials received;

5. Housing and administrative facilities for any staff required for the foregoing.

J. The materials made available pursuant to this article shall be used as determined by the Board of Governors in accordance with the provisions of this Statute. No member shall have the right to require that the materials it makes available to the Agency be kept separately by the Agency or to designate the specific project in which they must be used.

Article X: Services, equipment, and facilities

Members may make available to the Agency services, equipment, and facilities which may be of assistance in fulfilling the Agency's objectives and functions.

Article XI: Agency projects

A. Any member or group of members of the Agency desiring to set up any project for research on, or development or practical application of, atomic energy for peaceful purposes may request the assistance of the Agency in securing special fissionable and other materials, services, equipment, and facilities necessary for this purpose. Any such request shall be accompanied by an explanation of the purpose and extent of the project and shall be considered by the Board of Governors .

B. Upon request, the Agency may also assist any member or group of members to make arrangements to secure necessary financing from outside sources to carry out such projects. In extending this assistance, the Agency will not be required to provide any guarantees or to assume any financial responsibility for the project.

C. The Agency may arrange for the supplying of any materials, services, equipment, and facilities necessary for the project by one or more members or may itself undertake to provide any or all of these directly, taking into consideration the wishes of the member or members making the request.

D. For the purpose of considering the request, the Agency may send into the territory of the member or group of members making the request a person or persons qualified to examine the project. For this purpose the Agency may, with the approval of the member or group of members making the request, use members of its own staff or employ suitably qualified nationals of any member.

E. Before approving a project under this article, the Board of Governors shall give due consideration to:

1. The usefulness of the project, including its scientific and technical feasibility;

2. The adequacy of plans, funds, and technical personnel to assure the effective execution of the project;

3. The adequacy of proposed health and safety standards for handling and storing materials and for operating facilities;

4. The inability of the member or group of members making the request to secure the necessary finances, materials, facilities, equipment, and services;

5. The equitable distribution of materials and other resources available to the Agency;

6. The special needs of the under- developed areas of the world; and

7. Such other matters as may be relevant.

F. Upon approving a project, the Agency shall enter into an agreement with the member or group of members submitting the project, which agreement shall:

1. Provide for allocation to the project of any required special fissionable or other materials;

2. Provide for transfer of special fissionable materials from their then place of custody, whether the materials be in the custody of the Agency or of the member making them available for use in Agency projects, to the member or group of members submitting the project, under conditions which ensure the safety of any shipment required and meet applicable health and safety standards;

3. Set forth the terms and conditions, including charges, on which any materials, services, equipment, and facilities are to be provided by the Agency itself, and, if any such materials, services, equipment, and facilities are to be provided by a member, the terms and conditions as arranged for by the member or group of members submitting the project and the supplying member;

4. Include undertakings by the member or group of members submitting the project: (a) that the assistance provided shall not be used in such a way as to further any military purpose; and (b) that the project shall be subject to the safeguards provided for in article XII, the relevant safeguards being specified in the agreement;

5. Make appropriate provision regarding the rights and interests of the Agency and the member or members concerned in any inventions or discoveries, or any patents therein, arising from the project;

6. Make appropriate provision regarding settlement of disputes;

7. Include such other provisions as may be appropriate.

G. The provisions of this article shall also apply where appropriate to a request for materials, services, facilities, or equipment in connection with an existing project.

Article XII: Agency safeguards

A. With respect to any Agency project, or other arrangement where the Agency is requested by the parties concerned to apply safeguards, the Agency shall have the following rights and responsibilities to the extent relevant to the project or arrangement:

1. To examine the design of specialized equipment and facilities, including nuclear reactors, and to approve it only from the view- point of assuring that it will not further any military purpose, that it complies with applicable health and safety standards, and that it will permit effective application of the safeguards provided for in this article;

2. To require the observance of any health and safety measures prescribed by the Agency;

3. To require the maintenance and production of operating records to assist in ensuring accountability for source and special fissionable materials used or produced in the project or arrangement;

4. To call for and receive progress reports;

5. To approve the means to be used for the chemical processing of irradiated materials solely to ensure that this chemical processing will not lend itself to diversion of materials for military purposes and will comply with applicable health and safety standards; to require that special fissionable materials recovered or produced as a by-product be used for peaceful purposes under continuing Agency safeguards for research or in reactors, existing or under construction, specified by the member or members concerned; and to require deposit with the Agency of any excess of any special fissionable materials recovered or produced as a by-product over what is needed for the above- stated uses in order to prevent stockpiling of these materials, provided that thereafter at the request of the member or members concerned special fissionable materials so deposited with the Agency shall be returned promptly to the member or members concerned for use under the same provisions as stated above.

6. To send into the territory of the recipient State or States inspectors, designated by the Agency after consultation with the State or States concerned, who shall have access at all times to all places and data and to any person who by reason of his occupation deals with materials, equipment, or facilities which are required by this Statute to be safeguarded, as necessary to account for source and special fissionable materials supplied and fissionable products and to determine whether there is compliance with the undertaking against use in furtherance of any military purpose referred to in sub- paragraph F-4 of article Xl, with the health and safety measures referred to in

sub- paragraph A-2 of this article, and with any other conditions prescribed in the agreement between the Agency and the State or States concerned. Inspectors designated by the Agency shall be accompanied by representatives of the authorities of the State concerned, if that State so requests, provided that the inspectors shall not thereby be delayed or otherwise impeded in the exercise of their functions;

7. In the event of non- compliance and failure by the recipient State or States to take requested corrective steps within a reasonable time, to suspend or terminate assistance and withdraw any materials and equipment made available by the Agency or a member in furtherance of the project.

B. The Agency shall, as necessary, establish a staff of inspectors. The Staff of inspectors shall have the responsibility of examining all operations conducted by the Agency itself to determine whether the Agency is complying with the health and safety measures prescribed by it for application to projects subject to its approval, supervision or control, and whether the Agency is taking adequate measures to prevent the source and special fissionable materials in its custody or used or produced in its own operations from being used in furtherance of any military purpose. The Agency shall take remedial action forthwith to correct any non- compliance or failure to take adequate measures.

C. The staff of inspectors shall also have the responsibility of obtaining and verifying the accounting referred to in sub paragraph A-6 of this article and of determining whether there is compliance with the undertaking referred to in sub paragraph F-4 of article XI, with the measures referred to in sub- paragraph A-2 of this article, and with all other conditions of the project prescribed in the agreement between the Agency and the State or States concerned. The inspectors shall report any non-compliance to the Director General who shall thereupon transmit the report to the Board of Governors. The Board shall call upon the recipient State or States to remedy forthwith any non-compliance which it finds to have occurred. The Board shall report the non-compliance to all members and to the Security Council and General Assembly of the United Nations. In the event of failure of the recipient State or States to take fully corrective action within a reasonable time, the Board may take one or both of the following measures: direct curtailment or suspension of assistance being provided by the Agency or by a member, and call for the return of materials and equipment made available to the recipient member or group of members. The Agency may also, in accordance with article XIX, suspend any non- complying member from the exercise of the privileges and rights of membership.

Article XIII: Reimbursement of members

Unless otherwise agreed upon between the Board of Governors and the member furnishing to the Agency materials, services, equipment, or facilities, the Board shall enter into an agreement with such member providing for reimbursement for the items furnished.

Article XIV: Finance

A. The Board of Governors shall submit to the General Conference the annual budget estimates for the expenses of the Agency. To facilitate the work of the Board in this regard, the Director General shall initially prepare the budget estimates. If the General Conference does not approve the estimates, it shall return them together with its recom-

mendations to the Board. The Board shall then submit further estimates to the General Conference for its approval.

B. Expenditures of the Agency shall be classified under the following categories:

1. Administrative expenses: these shall include:

(a) Costs of the staff of the Agency other than the staff employed in connection with materials, services, equipment, and facilities referred to in sub paragraph B-2 below; costs of meetings; and expenditures required for the preparation of Agency projects and for the distribution of information;

(b) Costs of implementing the safeguards referred to in article XII in relation to Agency projects or, under sub- paragraph A-5 of article III, in relation to any bilateral or multilateral arrangement, together with the costs of handling and storage of special fissionable material by the Agency other than the storage and handling charges referred to in paragraph E below;

2. Expenses, other than those included in sub-paragraph 1 of this paragraph, in connection with any materials, facilities, plant, and equipment acquired or established by the Agency in carrying out its authorized functions, and the costs of materials, services, equipment, and facilities provided by it under agreements with one or more members.

C. In fixing the expenditures under sub-paragraph B-l (b) above, the Board of Governors shall deduct such amounts as are recoverable under agreements regarding the application of safeguards between the Agency and parties to bilateral or multilateral arrangements.

D. The Board of Governors shall apportion the expenses referred to in sub- paragraph B-1 above, among members in accordance with a scale to be fixed by the General Conference. In fixing the scale the General Conference shall be guided by the principles adopted by the United Nations in assessing contributions of Member States to the regular budget of the United Nations.

E. The Board of Governors shall establish periodically a scale of charges, including reasonable uniform storage and handling charges, for materials, services, equipment, and facilities furnished to members by the Agency. The scale shall be designed to produce revenues for the Agency adequate to meet the expenses and costs referred to in sub paragraph B-2 above, less any voluntary contributions which the Board of Governors may, in accordance with paragraph F, apply for this purpose. The proceeds of such charges shall be placed in a separate fund which shall be used to pay members for any materials, services, equipment, or facilities furnished by them and to meet other expenses referred to in sub- paragraph B- 2 above which may be incurred by the Agency itself

F. Any excess of revenues referred to in paragraph E over the expenses and costs there referred to, and any voluntary contributions to the Agency, shall be placed in a general fund which may be used as the Board of Governors, with the approval of the General Conference, may determine.

G. Subject to rules and limitations approved by the General Conference, the Board of Governors shall have the authority to exercise borrowing powers on behalf of the Agency without, however, imposing on members of the Agency any liability in respect

of loans entered into pursuant to this authority, and to accept voluntary contributions made to the Agency.

H. Decisions of the General Conference on financial questions and of the Board of Governors on the amount of the Agency's budget shall require a two- thirds majority of those present and voting.

Article XV: Privileges and immunities

A. The Agency shall enjoy in the territory of each member such legal capacity and such privileges and immunities as are necessary for the exercise of its functions.

B. Delegates of members together with their alternates and advisers, Governors appointed to the Board together with their alternates and advisers, and the Director General and the staff of the Agency, shall enjoy such privileges and immunities as are necessary in the independent exercise of their functions in connection with the Agency.

C. The legal capacity, privileges, and immunities referred to in this article shall be defined in a separate agreement or agreements between the Agency, represented for this purpose by the Director General acting under instructions of the Board of Governors. and the members.

Article XVI: Relationship with other organizations

A. The Board of Governors, with the approval of the General Conference, is authorized to enter into an agreement or agreements establishing an appropriate relationship between the Agency and the United Nations and any other organizations the work of which is related to that of the Agency.

B. The agreement or agreements establishing the relationship of the Agency and the United Nations shall provide for:

1. Submission by the Agency of reports as provided for in sub-paragraphs B- 4 and B- 5 of article III;

2. Consideration by the Agency of resolutions relating to it adopted by the General Assembly or any of the Councils of the United Nations and the submission of reports, when requested, to the appropriate organ of the United Nations on the action taken by the Agency or by its members in accordance with this Statute as a result of such consideration.

Article XVII: Settlement of disputes

A. Any question or dispute concerning the interpretation or application of this Statute which is not settled by negotiation shall be referred to the International Court of Justice in conformity with the Statute of the Court, unless the parties concerned agree on another mode of settlement.

B. The General Conference and the Board of Governors are separately empowered, subject to authorization from the General Assembly of the United Nations, to request the International Court of Justice to give an advisory opinion on any legal question arising within the scope of the Agency's activities.

Article XVIII: Amendments and withdrawals

A. Amendments to this Statute may be proposed by any member. Certified copies of the text of any amendment proposed shall be prepared by the Director General and communicated by him to all members at least ninety days in advance of its consideration by the General Conference.

B. At the fifth annual session of the General Conference following the coming into force of this Statute, the question of a general review of the provisions of this Statute shall be placed on the agenda of that session. On approval by a majority of the members present and voting, the review will take place at the following General Conference. Thereafter, proposals on the question of a general review of this Statute may be submitted for decision by the General Conference under the same procedure.

C. Amendments shall come into force for all members when:

(i) Approved by the General Conference by a two-thirds majority of those present and voting after consideration of observations submitted by the Board of Governors on each proposed amendment, and

(ii) Accepted by two-thirds of all the members in accordance with their respective constitutional processes. Acceptance by a member shall be effected by the deposit of an instrument of acceptance with the depositary Government referred to in paragraph C of article XXI.

D. At any time after five years from the date when this Statute shall take effect in accordance with paragraph E of article XXI or whenever a member is unwilling to accept an amendment to this Statute, it may withdraw from the Agency by notice in writing to that effect given to the depositary Government referred to in paragraph C of article XXI, which shall promptly inform the Board of Governors and all members.

E. Withdrawal by a member from the Agency shall not affect its contractual obligations entered into pursuant to article XI or its budgetary obligations for the year in which it withdraws.

Article XIX: Suspension of privileges

A. A member of the Agency which is in arrears in the payment of its financial contributions to the Agency shall have no vote in the Agency if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two years. The General Conference may, nevertheless, permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

B. A member which has persistently violated the provisions of this Statute or of any agreement entered into by it pursuant to this Statute may be suspended from the exercise of the privileges and rights of membership by the General Conference acting by a two-thirds majority of the members present and voting upon recommendation by the Board of Governors.

Article XX: Definitions

As used in this Statute:

1. The term "special fissionable material" means plutonium-239; uranium- 233; uranium enriched in the isotopes 235 or 233; any material containing one or more of the foregoing; and such other fissionable material as the Board of Governors shall from time to time deter mine; but the term "special fissionable material" does not include source material.

2. The term "uranium enriched in the isotopes 235 or 233" means uranium containing the isotopes 235 or 233 or both in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature.

3 The term "source material" means uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope 235; thorium; any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; any other material containing one or more of the foregoing in such concentration as the Board of Governors shall from time to time determine; and such other material as the Board of Governors shall from time to time determine.

Article XXI: Signature, acceptance, and entry into force

A. This Statute shall be open for signature on 26 October 1956 by all States Members of the United Nations or of any of the specialized agencies and shall remain open for signature by those States for a period of ninety days.

B. The signatory States shall become parties to this Statute by deposit of an instrument of ratification.

C. Instruments of ratification by signatory States and instruments of acceptance by States whose membership has been approved under paragraph B of article IV of this Statute shall be deposited with the Government of the United States of America, hereby designated as depositary Government.

D. Ratification or acceptance of this Statute shall be effected by States in accordance with their respective constitutional processes.

E. This Statute, apart from the Annex, shall come into force when eighteen States have deposited instruments of ratification in accordance with paragraph B of this article, provided that such eighteen States shall include at least three of the following States: Canada, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America. Instruments of ratification and instruments of acceptance deposited thereafter shall take effect on the date of their receipt.

F. The depositary Government shall promptly inform all States signatory to this Statute of the date of each deposit of ratification and the date of entry into force of the Statute. The depositary Government shall promptly inform all signatories and members of the dates on which States subsequently become parties thereto.

G. The Annex to this Statute shall come into force on the first day this Statute is open for signature.

Article XXII: Registration with the United Nations

A. This Statute shall be registered by the depositary Government pursuant to Article 102 of the Charter of the United Nations.

B. Agreements between the Agency and any member or members, agreements between the Agency and any other organization or organizations, and agreements between members subject to approval of the Agency, shall be registered with the Agency. Such agreements shall be registered by the Agency with the United Nations if registration is required under Article 102 of the Charter of the United Nations.

Article XXIII: Authentic texts and certified copies

This Statute, done in the Chinese, English, French, Russian and Spanish languages, each being equally authentic, shall be deposited in the archives of the depositary Government. Duly certified copies of this Statute shall be transmitted by the depositary Government to the Governments of the other signatory States and to the Governments of States admitted to membership under paragraph B of article IV.

In witness whereof the undersigned, duly authorized, have signed this Statute.

DONE at the Headquarters of the United Nations, this twenty- sixth day of October, one thousand nine hundred and fifty-six.

2. The IAEA Model NPT Safeguards Agreement of 1971: The Structure and Content of Agreements Between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/153 [corrected], as of June 1972)

Part I

BASIC UNDERTAKING

I. The Agreement should contain, in accordance with Article III.l of the Treaty on the Non-Proliferation of Nuclear Weapons), an undertaking by the State to accept safeguards, in accordance with the terms of the Agreement, on all source or special fissionable material in all peaceful nuclear activities within its territory, under its jurisdiction or carried out under its control anywhere, for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices.

APPLICATION OF SAFEGUARDS

II. The Agreement should provide for the Agency's right and obligation to ensure that safeguards will be applied, in accordance with the terms of the Agreement, on all source or special fissionable material in all peaceful nuclear activities within the territory of the State, under its jurisdiction or carried out under its control anywhere, for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices.

CO-OPERATION BETWEEN THE AGENCY AND THE STATE

III. The Agreement should provide that the Agency and the State shall co-operate to facilitate the implementation of the safeguards provided for therein

IMPLEMENTATION OF SAFEGUARDS

IV. The Agreement should provide that safeguards shall be implemented in a manner designed:

A. To avoid hampering the economic and technological development of the State or international co-operation in the field of peaceful nuclear activities, including international exchange nuclear material 2);

B. To avoid undue interference in the State's peaceful nuclear activities, and in particular in the operation of facilities; and

C. To be consistent with prudent management practices required for the economic and safe conduct of nuclear activities.

V. The Agreement should provide that the Agency shall take every precaution to protect commercial and industrial secrets and other confidential information coming to its knowledge in the implementation of the Agreement. The Agency shall not publish or

communicate to any State, organization or person any information obtained by it in connection with the implementation of the Agreement, except that specific information relating to such implementation in the State may be given to the Board of Governors and to such Agency staff members as require such knowledge by reason of their official duties in connection with safeguards, but only to the extent necessary for the Agency to fulfil its responsibilities in implementing the Agreement. Summarized information on nuclear material being safeguarded by the Agency under the Agreement may be published upon decision of the Board if the States directly concerned agree.

VI. The Agreement should provide that in implementing safeguards pursuant thereto the Agency shall take full account of technological developments In the field of safeguards, and shall make every effort to ensure optimum cost-effectiveness and the application of the principle of safeguarding effectively the flow of *nuclear material* subject to safeguards under the Agreement by use of instruments and other techniques at certain strategic points to the extent that present or future technology permits. In order to ensure optimum cost-effectiveness, use should be made, for example, of such means as:

A. Containment as a means of defining *material balance areas* for accounting purposes;

B. Statistical techniques and random sampling in evaluating the flow of *nuclear material*; and

C. Concentration of verification procedures on those stages in the nuclear fuel cycle involving the production, processing, use or storage of nuclear material from which nuclear weapons or other nuclear explosive devices could readily be made, and minimization of verification procedures in respect of other nuclear material, on condition that this does not hamper the Agency in applying safeguards under the Agreement.

NATIONAL SYSTEM OF ACCOUNTING FOR AND CONTROL OF NUCLEAR MATERIAL

VII. The Agreement should provide that the State shall establish and maintain a system of accounting for and control of all nuclear material subject to safeguards under the Agreement, and that such safeguards shall be applied in such a manner as to enable the Agency to verify, in ascertaining that there has been no diversion of nuclear material from peaceful uses to nuclear weapons or other nuclear explosive devices, findings of the State's system. The Agency s verification shall include, inter alia, independent measurements and observations conducted by the Agency in accordance with the procedures specified in Part II below. The Agency, in its verification, shall take due account of the technical effectiveness of the State's system.

PROVISION OF INFORMATION TO THE AGENCY

VIII. The Agreement should provide that to ensure the effective implementation of safeguards thereunder the Agency shall be provided, in accordance with the provisions set out in Part II below, with information concerning nuclear material subject to safeguards under the Agreement and the features of facilities relevant to safeguarding such material. The Agency shall require only the minimum amount of information and data consistent with carrying out its responsibilities under the Agreement. Information pertaining to

facilities shall be the minimum necessary for safeguarding *nuclear material* subject to safeguards under the Agreement. In examining design information, the Agency shall, at the request of the State, be prepared to examine on premises of the State design information which the State regards as being of particular sensitivity. Such information would not have to be physically transmitted to the Agency provided that it remained available for ready further examination by the Agency on premises of the State.

AGENCY INSPECTORS

IX. The Agreement should provide that the State shall take the necessary steps to ensure that Agency inspectors can effectively discharge their functions under the Agreement. The Agency shall secure the consent of the State to the designation of Agency inspectors to that State. If the State, either upon proposal of a designation or at any other time after a designation has been made, objects to the designation, the Agency shall propose to the State an alternative designation or designations. The repeated refusal of a State to accept the designation of Agency inspectors which would impede the inspections conducted under the Agreement would be considered by the Board upon referral by the Director General with a view to appropriate action. The visits and activities of Agency inspectors shall be so arranged as to reduce to a minimum the possible inconvenience and disturbance to the State and to the peaceful nuclear activities inspected, as well as to ensure protection of industrial secrets or any other confidential information coming to the inspectors' knowledge.

PRIVILEGES AND IMMUNITIES

X. The Agreement should specify the privileges and immunities which shall be granted to the Agency and its staff in respect of their functions under the Agreement. In the case of a State party to the Agreement on the Privileges and Immunities of the Agency), the provisions thereof, as in force for such State, shall apply. In the case of other States, the privileges and immunities granted should be such as to ensure that:

A. The Agency and its staff will be in a position to discharge their functions under the Agreement effectively; and

B. No such State will be placed thereby in a more favourable position than States party to the Agreement on the Privileges and Immunities of the Agency.

TERMINATION OF SAFEGUARDS

Consumption or dilution of nuclear material

XI. The Agreement should provide that safeguards shall terminate on nuclear material subject to safeguards thereunder upon determination by the Agency that it has been consumed, or has been diluted in such a way that it is no longer usable for any nuclear activity relevant from the point of view of safeguards, or has become practicably irrecoverable.

Transfer of nuclear material out of the State

XII. The Agreement should provide, with respect to nuclear material subject to safeguards thereunder, for notification of transfers of such material out of the State, in accordance with the provisions set out in paragraphs 92--94 below. The Agency shall terminate safeguards under the Agreement on nuclear material when the recipient State has assumed responsibility therefor, as provided for in paragraph 91. The Agency shall maintain records indicating each transfer and, where applicable, the re-application of safeguards to the transferred nuclear material.

Provisions relating to nuclear material to be used in non-nuclear activities

XIII. The Agreement should provide that if the State wishes to use nuclear material subject to safeguards thereunder in non-nuclear activities, such as the production of alloys or ceramics, it shall agree with the Agency on the circumstances under which the safeguards on such *nuclear material* may be terminated

NON-APPLICATION OF SAFEGUARDS TO NUCLEAR MATERIAL TO BE USED IN NON-PEACEFUL ACTIVITIES

XIV. The Agreement should provide that if the State intends to exercise its discretion to use nuclear mater al which is required to be safeguarded thereunder in a nuclear activity which does not require the application of safeguards under the Agreement, the following procedures will apply:

A. The State shall inform the Agency of the activity, making it clear:

1. That the use of the *nuclear material* in a non-proscribed military activity will not be in conflict with an undertaking the State may have given and in respect of which Agency safeguards apply, that the *nuclear material* will be used only in a peaceful nuclear activity; and

2. That during the period of non-application of safeguards the *nuclear material* will not be used for the production of nuclear weapons or other nuclear explosive devices;

B. The Agency and the State shall make an arrangement so that, only while the *nuclear material* is in such an activity, the safeguards provided for in the Agreement will not be applied. The arrangement shall identify, to the extent possible, the period or circumstances during which safeguards will not be applied. In any event, the safeguards provided for in the Agreement shall again apply as soon as the *nuclear material* is reintroduced into a peaceful nuclear activity. The Agency shall be kept informed of the total quantity and composition of such unsafeguarded *nuclear material* in the State and of any exports of such material; and

C. Each arrangement shall be made in agreement with the Agency. The Agency's agreement shall be given as promptly as possible; it shall only relate to the temporal and procedural provisions, reporting arrangements, etc., but shall not involve any approval or classified knowledge of the military activity or relate to the use of the *nuclear material* therein.

FINANCE

XV. The Agreement should contain one of the following sets of provisions:

A. An agreement with a Member of the Agency should provide that each party thereto shall bear the expense it incurs in implementing its responsibilities thereunder. However, if the State or persons under its jurisdiction incur extraordinary expenses as a result of a specific request by the Agency, the Agency shall reimburse such expenses provided that it has agreed in advance to do so. In any case the Agency shall bear the cost of any additional measuring or sampling which inspectors may request; or

B. An agreement with a party not a Member of the Agency should in application of the provisions of Article XIV.C of the Statute, provide that the party shall reimburse fully to the Agency the safeguards expenses the Agency incurs thereunder. However, if the party or persons under its jurisdiction incur extraordinary expenses as a result of a specific request by the Agency, the Agency shall reimburse such expenses provided that it has agreed in advance to do so.

THIRD PARTY LIABILITY FOR NUCLEAR DAMAGE

XVI. The Agreement should provide that the State shall ensure that any protection against third party liability in respect of nuclear damage, including any insurance or other financial security, which may be available under its laws or regulations shall apply to the Agency and its officials for the purpose of the implementation of the Agreement, in the same way as that protection applies to nationals of the State.

INTERNATIONAL RESPONSIBILITY

XVII. The Agreement should provide that any claim by one party thereto against the other in respect of any damage, other than damage arising out of a nuclear incident, resulting from the implementation of safeguards under the Agreement, shall be settled in accordance with international law.

MEASURES IN RELATION TO VERIFICATION OF NON-DIVERSION

XVIII. The Agreement should provide that if the Board, upon report of the Director General, decides that an action by the State is essential and urgent in order to ensure verification that nuclear material subject to safeguards under the Agreement is not diverted to nuclear weapons or other nuclear explosive devices the Board shall be able to call upon the State to take the required action without delay, irrespective of whether procedures for the settlement of a dispute have been invoked.

XIX. The Agreement should provide that if the Board upon examination of relevant information reported to it by the Director General finds that the Agency is not able to verify that there has been no diversion of *nuclear material* required to be safeguarded under the Agreement to nuclear weapons or other nuclear explosive devices, it may make the reports provided for in paragraph C of Article XII of the Statute and may also take, where applicable, the other measures provided for in that paragraph. In taking such action the Board shall take account of the degree of assurance provided by the safe-

guards measures that have been applied and shall afford the State every reasonable opportunity to furnish the Board with any necessary reassurance.

INTERPRETATION AND APPLICATION OF THE AGREEMENT AND SETTLEMENT OF DISPUTES

XX. The Agreement should provide that the parties thereto shall, at the request of either, consult about any question arising out of the interpretation or application thereof.

XXI. The Agreement should provide that the State shall have the right to request that any question arising out of the interpretation or application thereof be considered by the Board; and that the State shall be invited by the Board to participate in the discussion of any such question by the Board.

XXII. The Agreement should provide that any dispute arising out of the interpretation or application thereof except a dispute with regard to a finding by the Board under paragraph 19 above or an action taken by the Board pursuant to such a finding which is not settled by negotiation or another procedure agreed to by the parties should, on the request of either party, be submitted to an arbitral tribunal composed as follows: each party would designate one arbitrator, and the two arbitrators so designated would elect a third, who would be the Chairman. If, within 30 days of the request for arbitration, either party has not designated an arbitrator, either party to the dispute may request the President of the International Court of Justice to appoint an arbitrator. The same procedure would apply if, within 30 days of the designation or appointment of the second arbitrator, the third arbitrator had not been elected. A majority of the members of the arbitral tribunal would constitute a quorum, and all decisions would require the concurrence of two arbitrators. The arbitral procedure would be fixed by the tribunal. The decisions of the tribunal would be binding on both parties.

FINAL CLAUSES

Amendment of the Agreement

XXIII. The Agreement should provide that the parties thereto shall, at the request of either of them, consult each other on amendment of the Agreement. All amendments shall require the agreement of both parties. It might additionally be provided, if convenient to the State, that the agreement of the parties on amendments to Part II of the Agreement could be achieved by recourse to a simplified procedure. The Director General shall promptly inform all Member States of any amendment to the Agreement.

Suspension of application of Agency safeguards under other agreements

XXIV. Where applicable and where the State desires such a provision to appear, the Agreement should provide that the application of Agency safeguards in the State under other safeguards agreements with the Agency shall be suspended while the Agreement is in force. If the State has received assistance from the Agency for a project, the State's undertaking in the Project Agreement not to use items subject thereto in such a way as to further any military purpose shall continue to apply.

Entry into force and duration

XXV. The Agreement should provide that it shall enter into force on the date on which the Agency receives from the State written notification that the statutory and constitutional requirements for entry into force have been met. The Director General shall promptly inform all Member States of the entry into force.

XXVI. The Agreement should provide for it to remain in force as long as the State is party to the Treaty on the Non-Proliferation of Nuclear Weapons).

PART II

INTRODUCTION

XXVII. The Agreement should provide that the purpose of Part II thereof is to specify the procedures to be applied for the implementation of the safeguards provisions of Part I.

OBJECTIVE OF SAFEGUARDS

XXVIII. The Agreement should provide that the objective of safeguards is the timely detection of diversion of significant quantities of *nuclear material* from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for purposes unknown, and deterrence of such diversion by the risk of early detection.

XXIX. To this end the Agreement should provide for the use of material accountancy as a safeguards measure of fundamental importance, with containment and surveillance as important complementary measures.

XXX. The Agreement should provide that the technical conclusion of the Agency's verification activities shall be a statement, in respect of each *material balance area*, of the amount of material unaccounted for over a specific period, giving the limits of accuracy of the amounts stated.

NATIONAL SYSTEM OF ACCOUNTING FOR AND CONTROL OF NUCLEAR MATERIAL

XXXI. The Agreement should provide that pursuant to paragraph 7 above the Agency, in carrying out its verification activities, shall make full use of the State s system of accounting for and control of all nuclear mate al subject to safeguards under the Agreement, and shall avoid unnecessary duplication of the State's accounting and control activities.

XXXII. The Agreement should provide that the State's system of accounting for and control of all nuclear material subject to safeguards under the Agreement shall be based on a structure of *material balance areas*, and shall make provision as appropriate and specified in the Subsidiary Arrangements for the establishment of such measures as:

A. A measurement system for the determination of the quantities of *nuclear material* received, produced, shipped, lost or otherwise removed from inventory, and the quantities on inventory;

B. The evaluation of precision and accuracy of measurements and the estimation of measurement uncertainty;

C. Procedures for identifying, reviewing and evaluating differences in shipper/receiver measurements;

D. Procedures for taking a *physical inventory*

E. Procedures for the evaluation of accumulations of unmeasured inventory and unmeasured losses;

F. A system of records and reports showing, for each *material balance area*, the inventory of *nuclear material* and the changes in that inventory including receipts into and transfers out of the *material balance area*;

G. Provisions to ensure that the accounting procedures and arrangements are being operated correctly; and

H. Procedures for the provisions of reports to the Agency in accordance with paragraphs 59--69 below.

STARTING POINT OF SAFEGUARDS

XXXIII. The Agreement should provide that safeguards shall not apply thereunder to material in mining or ore processing activities.

XXXIV. The Agreement should provide that:

A. When any material containing uranium or thorium which has not reached the stage of the nuclear fuel cycle described in sub-paragraph (c) below is directly or indirectly exported to a non-nuclear-weapon State, the State shall inform the Agency of its quantity, composition and destination, unless the material is exported for specifically non-nuclear purposes;

B. When any material containing uranium or thorium which has not reached the stage of the nuclear fuel cycle described in sub-paragraph (c) below is imported, the State shall inform the Agency of its quantity and composition, unless the material is imported for specifically non-nuclear purposes; and

C. When any *nuclear material* of a composition and purity suitable for fuel fabrication or for being isotopically enriched leaves the plant or the process stage in which it has been produced, or when such *nuclear material*, or any other *nuclear material* produced at a later stage in the nuclear fuel cycle, is imported into the State, the *nuclear material* shall become subject to the other safeguards procedures specified in the Agreement.

TERMINATION OF SAFEGUARDS

XXXV. The Agreement should provide that safeguards shall terminate on nuclear material subject to safeguards thereunder under the conditions set forth in paragraph 11 above. Where the conditions of that paragraph are not met, but the State considers that the recovery of safeguarded nuclear material from residues is not for the time being practicable or desirable, the Agency and the State shall consult on the appropriate safeguards measures to be applied. It should further be provided that safeguards shall termi-

nate on nuclear *material* subject to safeguards under the Agreement under the conditions set forth in paragraph 13 above, provided that the State and the Agency agree that such *nuclear material* is practicably irrecoverable.

EXEMPTIONS FROM SAFEGUARDS

XXXVI. The Agreement should provide that the Agency shall, at the request of the State, exempt nuclear material from safeguards, as follows:

A. Special fissionable material, when it is used in gram quantities or less as a sensing component in instruments;

B. *nuclear material*, when it is used in non-nuclear activities in accordance with paragraph 13 above, if such nuclear material is recoverable; and

C. Plutonium with an isotopic concentration of plutonium-238 exceeding 80%.

XXXVII. The Agreement should provide that nuclear material that would otherwise be subject to safeguards shall be exempted from safeguards at the request of the State, provided that nuclear material so exempted in the State may not at any time exceed:

A. One kilogram in total of special fissionable material, which may consist of one of more of the following:

1. Plutonium;

2. Uranium with an *enrichment* of 0.2 (20%) and above, taken account of by multiplying its weight by its *enrichment*; and

3. Uranium with an *enrichment* below 0.2 (20%) and above that of natural uranium, taken account of by multiplying its weight by five times the square of its *enrichment*;

B. Ten metric tons in total of natural uranium and depleted uranium with an *enrichment* above 0.005 (0.5%);

C. Twenty metric tons of depleted uranium with an *enrichment* of 0.005 (0.5%) or below; and

D. Twenty metric tons of thorium; or such greater amounts as may be specified by the Board of Governors for uniform application.

XXXVIII. The Agreement should provide that if exempted nuclear material is to be processed or stored together with safeguarded *nuclear material*, provision should be made for the re-application of safeguards thereto.

SUBSIDIARY ARRANGEMENTS

XXXIX. The Agreement should provide that the Agency and the State shall make Subsidiary Arrangements which shall specify in detail, to the extent necessary to permit the Agency to fulfil its responsibilities under the Agreement in an effective and efficient manner, how the procedures laid down in the Agreement are to be applied. Provision should be made for the possibility of an extension or change of the Subsidiary Arrangements by agreement between the Agency and the State without amendment of the Agreement.

XL. It should be provided that the Subsidiary Arrangements shall enter into force at the same time as, or as soon as possible after, the entry into force of the Agreement. The State and the Agency shall make every effort to achieve their entry into force within 90 days of the entry into force of the Agreement, a later date being acceptable only with the agreement of both parties. The State shall provide the Agency promptly with the information required for completing the Subsidiary Arrangements. The Agreement should also provide that, upon its entry into force, the Agency shall be entitled to apply the procedures laid down therein in respect of the *nuclear material* listed in the inventory provided for in paragraph 41 below.

INVENTORY

XLI. The Agreement should provide that, on the basis of the initial report referred to in paragraph 62 below, the Agency shall establish a unified inventory of all *nuclear material* in the State subject to safeguards under the Agreement, irrespective of its origin, and maintain this inventory on the basis of subsequent reports and of the results of its verification activities. Copies of the inventory shall be made available to the State at agreed intervals.

DESIGN INFORMATION

General

XLII. Pursuant to paragraph 8 above, the Agreement should stipulate that design information in respect of existing facilities shall be provided to the Agency during the discussion of the Subsidiary Arrangements, and that the time limits for the provision of such information in respect of new facilities shall be specified in the Subsidiary Arrangements. It should further be stipulated that such information shall be provided as early as possible before nuclear material is introduced into a new facility.

XLIII. The Agreement should specify that the design information in respect of each *facility* to be made available to the Agency shall include, when applicable:

A. The identification of the *facility*, stating its general character, purpose, nominal capacity and geographic location, and the name and address to be used for routine business purposes;

B. A description of the general arrangement of the *facility* with reference, to the extent feasible, to the form, location and flow of nuclear mater al and to the general layout of important items of equipment which use, produce or process *nuclear material*;

C. A description of features of the *facility* relating to material accountancy, containment and surveillance; and

D. A description of the existing and proposed procedures at the *facility* for *nuclear material* accountancy and control, with special reference to *material balance areas* established by the operator, measurements of flow and procedures for physical inventory taking.

XLIV. The Agreement should further provide that other information relevant to the application of safeguards shall be made available to the Agency in respect of each facil-

ity, in particular on organizational responsibility for material accountancy and control. It should also be provided that the State shall make available to the Agency supplementary information on the health and safety procedures which the Agency shall observe and with which the inspectors shall comply at the facility.

XLV. The Agreement should stipulate that design information in respect of a modification relevant for safeguards purposes shall be provided for examination sufficiently in advance for the safeguards procedures to be adjusted when necessary.

Purposes of examination of design information

XLVI. The Agreement should provide that the design information made available to the Agency shall be used for the following purposes:

A. To identify the features of *facilities* and nuclear material relevant to the application of safeguards to nuclear material in sufficient detail to facilitate verification;

B. To determine *material balance areas* to be used for Agency accounting purposes and to select those *strategic points* which are *key measurement points* and which will be used to determine the *nuclear material* flows and inventories; in determining such *material balance area*s the Agency shall, inter alia, use the following criteria:

1. The size of the *material balance area* should be related to the accuracy with which the material balance can be established;

2. In determining the mater al balance area advantage should be taken of any opportunity to use containment and surveillance to help ensure the completeness of flow measurements and thereby simplify the application of safeguards and concentrate measurement efforts at *key measurement points*;

3. A number of *material balance area*s in use at a *facility* or at distinct sites may be combined in one material balance area to be used for Agency accounting purposes when the Agency determines that this is consistent with its verification requirements; and

4. If the State so requests, a special material balance area around a process step involving commercially sensitive information may be established;

C. To establish the nominal timing and procedures for taking of *physical inventory* for Agency accounting purposes;

D. To establish the records and reports requirements and records evaluation procedures;

E. To establish requirements and procedures for verification of the quantity and location of *nuclear material*; and

F. To select appropriate combinations of containment and surveillance methods and techniques and the *strategic points* at which they are to be applied. It should further be provided that the results of the examination of the design information shall be included in the Subsidiary Arrangements.

Re-examination of design information

XLVII. The Agreement should provide that design information shall be re-examined in the light of changes in operating conditions, of developments in safeguards technology or of experience in the application o f verification procedures, with a view to modifying the action the Agency has taken pursuant to paragraph 46 above.

Verification of design information

XLVIII. The Agreement should provide that the Agency, in co-operation with the State, may send inspectors to *facilities* to verify the design information provided to the Agency pursuant to paragraphs 42--45 above for the purposes stated in paragraph 46.

INFORMATION IN RESPECT OF NUCLEAR MATERIAL OUTSIDE FACILITIES

XLIX. The Agreement should provide that the following information concerning *nuclear material* customarily used outside *facilities* shall be provided as applicable to the Agency:

A. A general description of the use of the *nuclear material*, its geographic location, and the user's name and address for routine business purposes;

B. A general description of the existing and proposed procedures for *nuclear material* accountancy and control, including organizational responsibility for material accountancy and control. The Agreement should further provide that the Agency shall be informed on a timely basis of any change in the information provided to it under this paragraph.

L. The Agreement should provide that the information made available to the Agency in respect of nuclear material customarily used outside facilities may be used, to the extent relevant, for the purposes set out in subparagraphs 46(b (f) above.

RECORDS SYSTEM

General

LI. The Agreement should provide that in establishing a national system of accounting for and control of nuclear material as referred to in paragraph 7 above, the State shall arrange that records are kept in respect of each material balance area. Provision should also be made that the Subsidiary Arrangements shall describe the records to be kept in respect of each material balance area.

LII. The Agreement should provide that the State shall make arrangements to facilitate the examination of records by inspectors, particularly if the records are not kept in English, French, Russian or Spanish.

LIII. The Agreement should provide that the records shall be retained for at least five years.

LIV. The Agreement should provide that the records shall consist, as appropriate, of:

A. Accounting records of all *nuclear material* subject to safeguards under the Agreement; and

B. Operating records for *facilities* containing such nuclear material.

LV. The Agreement should provide that the system of measurements on which the records used for the preparation of reports are based shall either conform to the latest international standards or be equivalent in quality to such standards.

Accounting records

LVI. The Agreement should provide that the accounting records shall set forth the following in respect of each material balance area:

A. All *inventory changes*, so as to permit a determination of the book inventory at any time;

B. All measurement results that are used for determination of the *physical inventory*, and

C. All adjustments and *corrections* that have been made in respect of *inventory changes*, *book inventories* and physical inventories.

LVII. The Agreement should provide that for all inventory changes and physical inventories the records shall show, in respect of each batch of nuclear material: material identification, batch data and source data. Provision should further be included that records shall account for uranium, thorium and plutonium separately in each batch of nuclear material. Furthermore, the date of the inventory change and, when appropriate, the originating *material balance area* and the receiving material balance area or the recipient, shall be indicated for each *inventory change*.

Operating records

LVIII. 58. The Agreement should provide that the operating records shall set forth as appropriate in respect of each material balance area:

A. Those operating data which are used to establish changes in the quantities and composition of *nuclear material*,

B. The data obtained from the calibration of tanks and instruments and from sampling and analyses, the procedures to control the quality of measurements and the derived estimates of random and systematic error;

C. A description of the sequence of the actions taken in preparing for, and in taking, a *physical inventory* in order to ensure that it is correct and complete; and

D. A description of the actions taken in order to ascertain the cause and magnitude of any accidental or unmeasured loss that might occur.

REPORTS SYSTEM

General

LIX. The Agreement should specify that the State shall provide the Agency with reports as detailed in paragraphs 60--69 below in respect of nuclear material subject to safeguards thereunder.

LX. The Agreement should provide that reports shall be made in English, French, Russian or Spanish, except as otherwise specified in the Subsidiary Arrangements.

LXI. The Agreement should provide that reports shall be based on the records kept in accordance with paragraphs 51--58 above and shall consist, as appropriate, of accounting reports and special reports.

Accounting reports

LXII. The Agreement should stipulate that the Agency shall be provided with an initial report on all nuclear material which is to be subject to safeguards thereunder. It should also be provided that the initial report shall be dispatched by the State to the Agency within 30 days of the last day of the calendar month in which the Agreement enters into force, and shall reflect the situation as of the last day of that month.

LXIII. The Agreement should stipulate that for each material balance area the State shall provide the Agency with the following accounting reports:

A. *inventory change* reports showing changes in the inventory of *nuclear material*. The reports shall be dispatched as soon as possible and in any event within 30 days after the end of the month in which the *inventory change*s occurred or were established; and

B. Material balance reports showing the material balance based on a *physical inventory* of *nuclear material* actually present in the *material balance area*. The reports shall be dispatched as soon as possible and in any event within 30 days after the *physical inventory* has been taken. The reports shall be based on data available as of the date of reporting and may be corrected at a later date as required.

LXIV. The Agreement should provide that inventory change reports shall specify identification and batch data for each batch of nuclear material the date of the inventory change and, as appropriate, the originating *material balance area* and the receiving *material balance area* or the recipient. These reports shall be accompanied by concise notes:

A. Explaining the *inventory changes* on the basis of the operating data contained in the operating records provided for under subparagraph 58(a) above; and

B. Describing, as specified in the Subsidiary Arrangements, the anticipated operational programme, particularly the taking of a *physical inventory*.

LXV. The Agreement should provide that the State shall report each inventory change adjustment and correction either periodically in a consolidated list or individually. The inventory changes shall be reported in terms of batches; small amounts, such as analyti-

cal samples, as specified in the Subsidiary Arrangements, may be combined and reported as one inventory change.

LXVI. The Agreement should stipulate that the Agency shall provide the State with semi-annual statements of book inventory of nuclear material subject to safeguards, for each material balance area as based on the inventory change reports for the period covered by each such statement.

LXVII. The Agreement should specify that the material balance reports shall include the following entries, unless otherwise agreed by the Agency and the State:

A. Beginning physical inventory;

B. inventory changes (first increases, then decreases);

C. Ending book inventory;

D. Shipper/receiver differences;

E. Adjusted ending book inventory

F. Ending physical inventory; and

G. Material unaccounted for.

A statement of the *physical inventory* listing all batches separately and specifying material identification and *batch data* for each *batch* shall be attached to each material balance report.

Special reports

LXVIII. The Agreement should provide that the State shall make special reports without delay

A. If any unusual incident or circumstances lead the State to believe that there is or may have been loss of nuclear material that exceeds the limits to be specified for this purpose in the Subsidiary Arrangements; or

B. If the containment has unexpectedly changed from that specified in the Subsidiary Arrangements to the extent that unauthorized removal of *nuclear material* has become possible.

Amplification and clarification of reports

LXIX. The Agreement should provide that at the Agency's request the State shall supply amplifications or clarifications of any report, in so far as relevant for the purpose of safeguards.

INSPECTIONS

General

LXX. The Agreement should stipulate that the Agency shall have the right to make inspections as provided for in paragraphs 71--82 below.

Purposes of inspections

LXXI. The Agreement should provide that the Agency may make ad hoc inspections in order to:

A. Verify the information contained in the initial report on the nuclear mater al subject to safeguards under the Agreement;

B. Identify and verify changes in the situation which have occurred since the date of the initial report; and

C. Identify, and if possible verify the quantity and composition of, nuclear mater al in accordance with paragraphs 93 and 96 below, before its transfer out of or upon its transfer into the State.

LXXII. The Agreement should provide that the Agency may make routine inspections in order to:

A. Verify that reports are consistent with records;

B. Verify the location, identity, quantity and composition of all *nuclear material* subject to safeguards under the Agreement; and

C. Verify information on the possible causes of material unaccounted for Shipper/receiver differences and uncertainties in the book inventory.

LXXIII. The Agreement should provide that the Agency may make special inspections subject to the procedures laid down in paragraph 77 below:

A. In order to verify the information contained in special reports; or

B. If the Agency considers that information made available by the State, including explanations from the State and information obtained from routine inspections, is not adequate for the Agency to fulfil its responsibilities under the Agreement. An inspection shall be deemed to be special when it is either additional to the routine inspection effort provided for in paragraphs 78--82 below, or involves access to information or locations i addition to the access specified in paragraph 76 for ad hoc and routine inspections, or both.

Scope of inspections

LXXIV. The Agreement should provide that for the purposes stated in paragraphs 71--73 above the Agency may:

A. Examine the records kept pursuant to paragraphs 51--58;

B. Make independent measurements of all *nuclear material* subject to safeguards under the Agreement;

C. Verify the functioning and calibration of instruments and other measuring and control equipment;

D. Apply and make use of surveillance and containment measures; and

E. Use other objective methods which have been demonstrated to be technically feasible.

LXXV. It should further be provided that within the scope of paragraph 74 above the Agency shall be enabled:

A. To observe that samples at *key measurement points* for material balance accounting are taken in accordance with procedures which produce representative samples, to observe the treatment and analysis of the samples and to obtain duplicates of such samples;

B. To observe that the measurements of *nuclear material* at *key measurement points* for material balance accounting are representative, and to observe the calibration of the instruments and equipment involved;

C. To make arrangements with the State that, if necessary:

1. Additional measurements are made and additional samples taken for the Agency's use;

2. The Agency's standard analytical samples are analysed;

3. Appropriate absolute standards are used in calibrating instruments and other equipment; and

4. Other calibrations are carried out;

D. To arrange to use its own equipment for independent measurement and surveillance, and if so agreed and specified in the Subsidiary Arrangements, to arrange to install such equipment;

E. To apply its seals and other identifying and tamper-indicating devices to containments, if so agreed and specified in the Subsidiary Arrangements; and

F. To make arrangements with the State for the shipping of samples taken for the Agency's use.

Access for inspections

LXXVI. The Agreement should provide that:

A. For the purposes specified in sub-paragraphs 71(a) and (b) above and until such time as the *strategic points* have been specified in the Subsidiary Arrangements, the Agency's inspectors shall have access to any location where the initial report or any inspections carried out in connection with it indicate that *nuclear material* is present;

B. For the purposes specified in sub-paragraph 71(c) above the inspectors shall have access to any location of which the Agency has been notified in accordance with sub-paragraphs 92(c) or 95(c) below;

C. For the purposes specified in paragraph 72 above the Agency's inspectors shall have access only to the strategic points specified in the Subsidiary Arrangements and to the records maintained pursuant to paragraphs $1--58; and

D. In the event of the State concluding that any unusual circumstances require extended limitations on access by the Agency, the State and the Agency shall promptly make arrangements with a view to enabling the Agency to discharge its safeguards responsibilities in the light of these limitations. The Director General shall report each such arrangement to the Board.

LXXVII. The Agreement should provide that in circumstances which may lead to special inspections for the purposes specified in paragraph 73 above the State and the Agency shall consult forthwith. As a result of such consultations the Agency may make inspections in addition to the routine inspection effort provided for in paragraphs 78--82 below, and may obtain access in agreement with the State to information or locations in addition to the access specified in paragraph 76 above for ad hoc and routine inspections. Any disagreement concerning the need for additional access shall be resolved in accordance with paragraphs 21 and 22; in case action by the State is essential and urgent, paragraph 18 above shall apply.

Frequency and intensity of routine inspections

LXXVIII. The Agreement should provide that the number, intensity, duration and timing of routine inspections shall be kept to the minimum consistent with the effective implementation of the safeguards procedures set forth therein, and that the Agency shall make the optimum and most economical use of available inspection resources.

LXXIX. The Agreement should provide that in the case of facilities and mater al balance areas outside facilities with a content or annual throughput whichever is greater, of nuclear material not exceeding five effective /kilograms routine inspections shall not exceed one per year. For other facilities the number, intensity, duration, timing and mode of inspections shall be determined on the basis that in the maximum or limiting case the inspection regime shall be no more intensive than is necessary and sufficient to maintain continuity of knowledge of the flow and inventory of nuclear mater al.

LXXX. The Agreement should provide that the maximum routine inspection effort in respect of *facilities* with a content or annual throughput of nuclear mater al exceeding five effective kilograms shall be determined as follows:

A. For reactors and sealed stores, the maximum total of routine inspection per year shall be determined by allowing one sixth of a man-year of inspection for each such *facility* in the State;

B. For other *facilities* involving plutonium or uranium enriched to more than 5 , the maximum total of routine inspection per year shall be determined by allowing for each such *facility* 30 x \ E man-days of inspection per year, where E is the inventory or annual throughput of *nuclear material* whichever is greater, expressed in effective kilograms. The maxi mum established for any such *facility* shall not, however, be less than 1. 5 man-years of inspection; and

C. For all other *facilities* the maximum total of routine inspection per year shall be determined by allowing for each such *facility* one third of a man-year of inspection plus 0.4 x E man-days of inspection per year, where E is the inventory or annual throughput of *nuclear material* whichever is greater, expressed in effective kilograms. The Agreement should further provide that the Agency and the State may agree to amend the maximum figures specified in this paragraph upon determination by the Board that such amendment is reasonable.

LXXXI. Subject to paragraphs 78--80 above the criteria to be used for determining the actual number, intensity, duration, timing and mode of routine inspections of any *facility* shall include:

A. The form of *nuclear material* in particular, whether the material is in bulk form or contained in a number of separate items; its chemical composition and, in the case of uranium, whether it is of low or high *enrichment*; and its accessibility;

B. The effectiveness of the State's accounting and control system, including the extent to which the operators of *facilities* are functionally independent of the State's accounting and control system; the extent to which the measures specified in paragraph 32 above have been implemented by the State; the promptness of reports submitted to the Agency; their consistency with the Agency independent verification; and the amount and accuracy of the material unaccounted for as verified by the Agency;

C. Characteristics of the State s nuclear fuel cycle, in particular, the number and types of *facilities* containing nuclear material subject to safeguards, the characteristics of such *facilities* relevant to safeguards, notably the degree of containment; the extent to which the design of such *facilities* facilitates verification of the flow and inventory of *nuclear material*; and the extent to which information from different *material balance areas* can be correlated;

D. International interdependence, in particular, the extent to which *nuclear material* is received from or sent to other States for use or processing; any verification activity by the Agency in connection therewith; and the extent to which the State's nuclear activities are interrelated with those of other States; and

E. Technical developments in the field of safeguards, including the use of statistical techniques and random sampling in evaluating the flow of *nuclear material*.

LXXXII. The Agreement should provide for consultation between the Agency and the State if the latter considers that the inspection effort is being deployed with undue concentration on particular *facilities*.

Notice of inspections

LXXXIII. The Agreement should provide that the Agency shall give advance notice to the State before arrival of inspectors at *facilities* or *material balance areas* outside *facilities*, as follows:

A. For ad hoc inspections pursuant to sub-paragraph 71(c) above, at least 24 hours, for those pursuant to sub-paragraphs 71(a) and (b), as well as the activities provided for in paragraph 48, at least one week;

B. For special inspections pursuant to paragraph 73 above, as promptly as possible after the Agency and the State have consulted as provided for in paragraph 77, it being understood that notification of arrival normally will constitute part of the consultations; and

C. For routine inspections pursuant to paragraph 72 above, at least 24 hours in respect of the facilities referred to in sub-paragraph 80(b) and sealed stores containing plutonium or uranium enriched to more than 5%, and one week in all other cases. Such notice of inspections shall include the names of the inspectors and shall indicate the facilities and the material balance areas outside *facilities* to be visited and the periods during which they will be visited. If the inspectors are to arrive from outside the State the Agency shall also give advance notice of the place and time of their arrival in the State.

LXXXIV. However, the Agreement should also provide that, as a supplementary measure, the Agency may carry out without advance notification a portion of the routine

inspections pursuant to paragraph 80 above in accordance with the principle of random sampling. In performing any unannounced inspections, the Agency shall fully take into account any operational programme provided by the State pursuant to paragraph 64(b). Moreover, whenever practicable, and on the basis of the operational programme, it shall advise the State periodically of its general programme of announced and unannounced inspections, specifying the general periods when inspections are foreseen. In carrying out any unannounced inspections, the Agency shall make every effort to minimize any practical difficulties for *facility* operators and the State, bearing in mind the relevant provisions of paragraphs 44 above and 89 below. Similarly the State shall make every effort to facilitate the task of the inspectors.

Designation of inspectors

LXXXV. The Agreement should provide that:

A. The Director General shall inform the State in writing of the name, qualifications, nationality, grade and such other particulars as may be relevant, of each Agency official he proposes for designation as an inspector for the State;

B. The State shall inform the Director General within 30 days of the receipt of such a proposal whether it accepts the proposal;

C. The Director General may designate each official who has been accepted by the State as one of the inspectors for the State, and shall inform the State of such designations; and

D. The Director General, acting in response to a request by the State or on his own initiative, shall immediately inform the State of the withdrawal of the designation of any official as an inspector for the State. The Agreement should also provide, however, that in respect of inspectors needed for the purposes stated in paragraph 48 above and to carry out ad hoc inspections pursuant to sub-paragraphs 71(a) and (b) the designation procedures shall be completed if possible within 30 days after the entry into force of the Agreement. If such designation appears impossible within this time limit, inspectors for such purposes shall be designated on a temporary basis.

LXXXVI. The Agreement should provide that the State shall grant or renew as quickly as possible appropriate visas, where required for each inspector designated for the State.

Conduct and visits of inspectors

LXXXVII. The Agreement should provide that inspectors, in exercising their functions under paragraphs 48 and 71--75 above, shall carry out their activities in a manner designed to avoid hampering or delaying the construction, commissioning or operation of facilities, or affecting their safety. In particular inspectors shall not operate any facility themselves or direct the staff of a facility to carry out any operation. If inspectors consider that in pursuance of paragraphs 74 and 75, particular operations in a facility should be carried out by the operator, they shall make a request therefor.

LXXXVIII. When inspectors require services available in the State, including the use of equipment, in connection with the performance of inspections, the State shall facilitate the procurement of such services and the use of such equipment by inspectors.

LXXXIX. The Agreement should provide that the State shall have the right to have inspectors accompanied during their inspections by representatives of the State, provided that inspectors shall not thereby be delayed or otherwise impeded in the exercise of their functions.

STATEMENTS ON THE AGENCY'S VERIFICATION ACTIVITIES

XC. The Agreement should provide that the Agency shall inform the State of:

A. The results of inspections, at intervals to be specified in the Subsidiary Arrangements; and

B. The conclusions it has drawn from its verification activities in the State, in particular by means of statements in respect of each *material balance area* which shall be made as soon as possible after a phys cal inventory has been taken and verified by the Agency and a material balance has been struck.

INTERNATIONAL TRANSFERS

General

XCI. The Agreement should provide that *nuclear material* subject or required to be subject to safeguards thereunder which is transferred internationally shall, for purposes of the Agreement, be regarded as being the responsibility of the State:

A. In the case of import, from the time that such responsibility ceases to lie with the exporting State, and no later than the time at which the *nuclear material* reaches its destination; and

B. In the case of export, up to the time at which the recipient State assumes such responsibility, and no later than the time at which the *nuclear material* reaches its destination. The Agreement should provide that the States concerned shall make suitable arrangements to determine the point at which the transfer of responsibility will take place. No State shall be deemed to have such responsibility for *nuclear material* merely by reason of the fact that the *nuclear material* is in transit on or over its territory or territorial waters, or that it is being transported under its flag or in its aircraft.

Transfers out of the State

XCII. The Agreement should provide that any intended transfer out of the State of safeguarded nuclear material in an amount exceeding one effective kilogram or by successive shipments to the same State within a period of three months each of less than one effective kilogram but exceeding in total one effective kilogram shall be notified to the Agency after the conclusion of the contractual arrangements leading to the transfer and normally at least two weeks before the *nuclear material* is to be prepared for shipping. The Agency and the State may agree on different procedures for advance notification. The notification shall specify:

A. The identification and, if possible, the expected quantity and composition of the *nuclear material* to be transferred, and the *material balance area* from which it will come;

B. The State for which the *nuclear material* is destined;

C. The dates on and locations at which the *nuclear material* is to be prepared for shipping;

D. The approximate dates of dispatch and arrival of the *nuclear material*; and

E. At what point of the transfer the recipient State will assume responsibility for the *nuclear material* and the probable date on which this point will be reached.

XCIII. The Agreement should further provide that the purpose of this notification shall be to enable the Agency if necessary to identify, and if possible verify the quantity and composition of, nuclear mater al subject to safeguards under the Agreement before it is transferred out of the State and, if the Agency so wishes or the State so requests, to affix seals to the nuclear material when it has been prepared for shipping. However, the transfer of the nuclear material shall not be delayed in any way by any action taken or contemplated by the Agency pursuant to this notification.

XCIV. The Agreement should provide that, if the *nuclear material* will not be subject to Agency safeguards in the recipient State, the exporting State shall make arrangements for the Agency to receive, within three months of the time when the recipient State accepts responsibility for the *nuclear material* from the exporting State, confirmation by the recipient State of the transfer.

Transfers into the State

XCV. The Agreement should provide that the expected transfer into the State of *nuclear material* required to be subject to safeguards in an amount greater than one effective kilogram or by successive shipments from the same State within a period of three months each of less than one effective kilogram but exceeding in total one effective kilogram shall be notified to the Agency as much in advance as possible of the expected arrival of the *nuclear material* and in any case not later than the date on which the recipient State assumes responsibility therefor. The Agency and the State may agree on different procedures for advance notification. The notification shall specify:

A. The identification and, if possible, the expected quantity and composition of the *nuclear material*;

B. At what point of the transfer responsibility for the nuclear mater al will be assumed by the State for the purposes of the Agreement, and the probable date on which this point will be reached; and

C. The expected date of arrival, the location to which the nuclear mater al is to be delivered and the date on which it is intended that the *nuclear material* should be unpacked.

XCVI. The Agreement should provide that the purpose of this notification shall be to enable the Agency if necessary to identify, and if possible verify the quantity and composition of, *nuclear material* subject to safeguards which has been transferred into the State, by means of inspection of the consignment at the time it is unpacked. However, unpacking shall not be delayed by any action taken or contemplated by the Agency pursuant to this notification.

Special reports

XCVII. The Agreement should provide that in the case of international transfers a special report as envisaged in paragraph 68 above shall be made if any unusual incident or circumstances lead the State to believe that there is or may have been loss of *nuclear material* including the occurrence of significant delay during the transfer.

DEFINITIONS

XCVIII. "Adjustment" means an entry into an accounting record or a report showing a shipper/ receiver difference or material unaccounted for.

XCIX. Annual throughput means, for the purposes of paragraphs 79 and 80 above, the amount of nuclear material transferred annually out of a facility working at nominal capacity.

C. "Batch" means a portion of nuclear material handled as a unit for accounting purposes at a key measurement point and for which the composition and quantity are defined by a single set of specifications or measurements. The nuclear material may be in bulk form or contained in a number of separate items.

CI. "Batch data means the total weight of each element of nuclear material and, in the case of plutonium and uranium, the isotopic composition when appropriate. The units of account shall be as follows:

A. Grams of contained plutonium;

B. Grams of total uranium and grams of contained uranium-235 plus uranium-233 for uranium enriched in these isotopes; and

C. Kilograms of contained thorium, natural uranium or depleted uranium.

For reporting purposes the weights of individual items in the *batch* shall be added together before rounding to the nearest unit.

CII. "Book inventory of a material balance area means the algebraic sum of the most recent physical inventory of that material balance area and of all inventory changes that have occurred since that physical inventory was taken.

CIII. "Correction" means an entry into an accounting record or a report to rectify an identified mistake or to reflect an improved measurement of a quantity previously entered into the record or report. Each correction must identify the entry to which it pertains.

CIV. Effective kilogram" means a special unit used in safeguarding *nuclear material*. The quantity in "effective kilograms" is obtained by taking:

A. For plutonium, its weight in kilograms;

B. For uranium with an *enrichment* of 0.01 (1%) and above, its weight in kilograms multiplied by the square of its *enrichment*;

C. For uranium with an *enrichment* below 0.01 (1%) and above 0.005 (0.5%), its weight in kilograms multiplied by 0.0001; and

D. For depleted uranium with an *enrichment* of 0.005 (0.5%) or below, and for thorium, its weight in kilograms multiplied by 0.00005.

CV. "Enrichment" means the ratio of the combined weight of the isotopes uranium-233 and uranium-235 to that of the total uranium in question.

CVI. "Facility" means:

A. A reactor, a critical *facility*, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant or a separate storage installation; or

B. Any location where *nuclear material* in amounts greater than one effective kilogram is customarily used.

CVII. Inventory change" means an increase or decrease, in terms of batches, of nuclear material in a material *balance area*; such a change shall involve one of the following:

A. Increases:

1. Import;

2. Domestic receipt: receipts from other material balance areas, receipts from a non-safeguarded (non-peaceful) activity or receipts at the starting point of safeguards;

3. Nuclear production: production of special fissionable material in a reactor; and

4. De-exemption: reapplication of safeguards on nuclear material previously exempted therefrom on account of its use or quantity.

B. Decreases:

1. Export;

2. Domestic shipment: shipments to other material balance areas or shipments for a non-safeguarded (non-peaceful) activity;

3. Nuclear loss: loss of *nuclear material* due to its transformation into other element(s) or isotope(s) as a result of nuclear reactions;

4. Measured discard: *nuclear material* which has been measured, or estimated on the basis of measurements, and disposed of in such a way that it is not suitable for further nuclear use;

5. Retained waste: *nuclear material* generated from processing or from an operational accident, which is deemed to be unrecoverable for the time being but which is stored;

6. Exemption: exemption of *nuclear material* from safeguards on account of its use or quantity; and

7. Other loss: for example, accidental loss (that is, irretrievable and inadvertent loss of nuclear mater al as the result of an operational accident) or theft.

CVIII. "Key measurement point" means a location where nuclear mater al appears in such a form that it may be measured to determine material flow or inventory. "Key measurement points" thus include, but are not limited to, the inputs and outputs (including measured discards) and storages in material balance areas.

CIX. "Man-year of inspection" means, for the purposes of paragraph 80 above, 300 man-days of inspection, a man-day being a day during which a single inspector has access to a facility at any time for a total of not more than eight hours.

CX. Material balance area" means an area in or outside of a *facility* such that:

A. The quantity of *nuclear material* in each transfer into or out of each "material balance area" can be determined; and

B. The *physical inventory* of *nuclear material* in each *material balance area*" can be determined when necessary, in accordance with specified procedures, in order that the material balance for Agency safeguards purposes can be established .

CXI. "Material unaccounted for" means the difference between book inventory and physical inventory.

CXII. "nuclear material means any source or any special fissionable material as defined in Article XX of the Statute. The term source material shall not be interpreted as applying to ore or ore residue. Any determination by the Board under Article XX of the Statute after the entry into force of this Agreement which adds to the materials considered to be source material or special fissionable material shall have effect under this Agreement only upon acceptance by the State.

CXIII. "Physical inventory" means the sum of all the measured or derived estimates of batch quantities of nuclear material on hand at a given time within a material balance area obtained in accordance with specified procedures.

CXIV. "Shipper/receiver difference means the difference between the quantity of *nuclear material* in a *batch* as stated by the shipping *material balance area* and as measured at the receiving *material balance area*.

CXV. "Source data" means those data, recorded during measurement or calibration or used to derive empirical relationships, which identify nuclear mater al and provide *batch data*. Source data may include, for example, weight of compounds, conversion factors to determine weight of element, specific gravity, element concentration, isotopic ratios, relationship between volume and manometer readings and relationship between plutonium produced and power generated.

CXVI. "Strategic point" means a location selected during examination of design information where, under normal conditions and when combined with the information from all "strategic points" taken together, the information necessary and sufficient for the implementation of safeguards measures is obtained and verified; a "strategic point" may include any location where key measurements related to material balance accountancy are made and where containment and surveillance measures are executed.

3. Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards (INFCIRC 540, 15 May 1997)

Foreword to the Model Protocol

This document is a model Additional Protocol designed for States having a Safeguards Agreement with the Agency, in order to strengthen the effectiveness and improve the efficiency of the safeguards system as a contribution to global nuclear non-proliferation objectives.

The Board of Governors has requested the Director General to use this Model Protocol as the standard for additional protocols that are to be concluded by States and other parties to comprehensive safeguards agreements with the Agency. Such protocols shall contain all of the measures in this Model Protocol.

The Board of Governors has also requested the Director General to negotiate additional protocols or other legally binding agreements with nuclear-weapon States incorporating those measures provided for in the Model Protocol that each nuclear-weapon State has identified as capable of contributing to the non-proliferation and efficiency aims of the Protocol, when implemented with regard to that State, and as consistent with that State's obligations under Article I of the NPT.

The Board of Governors has further requested the Director General to negotiate additional protocols with other States that are prepared to accept measures provided for in the model Protocol in pursuance of safeguards effectiveness and efficiency objectives.

In conformity with the requirements of the Statute, each individual Protocol or other legally binding agreement will require the approval of the Board and its authorization to the Director General to conclude and subsequently implement the Protocol so approved.

Preamble

Whereas ..... (hereinafter referred to as ".....") is a party to (an) Agreement(s) between ..... and the International Atomic Energy Agency (hereinafter referred to as the "Agency") for the application of safeguards [full title of the Agreement(s) to be inserted] (hereinafter referred to as the "Safeguards Agreement(s)"), which entered into force on .....;

Aware of the desire of the international community to further enhance nuclear non-proliferation by strengthening the effectiveness and improving the efficiency of the Agency's safeguards system;

Recalling that the Agency must take into account in the implementation of safeguards the need to: avoid hampering the economic and technological development of ..... or international co-operation in the field of peaceful nuclear activities; respect health, safety, physical protection and other security provisions in force and the rights of individuals; and take every precaution to protect commercial, technological and industrial secrets as well as other confidential information coming to its knowledge;

Whereas the frequency and intensity of activities described in this Protocol shall be kept to the minimum consistent with the objective of strengthening the effectiveness and improving the efficiency of Agency safeguards;

Now therefore ..... and the Agency have agreed as follows:

RELATIONSHIP BETWEEN THE PROTOCOL AND THE SAFEGUARDS AGREEMENT

Article 1

The provisions of the Safeguards Agreement shall apply to this Protocol to the extent that they are relevant to and compatible with the provisions of this Protocol. In case of conflict between the provisions of the Safeguards Agreement and those of this Protocol, the provisions of this Protocol shall apply.

PROVISION OF INFORMATION

Article 2

a. ..... shall provide the Agency with a declaration containing:

(i) A general description of and information specifying the location of nuclear fuel cycle-related research and development activities[1] not involving nuclear material carried out anywhere that are funded, specifically authorized or controlled by, or carried out on behalf of, ...

(ii) Information identified by the Agency on the basis of expected gains in effectiveness or efficiency, and agreed to by ....., on operational activities of safeguards relevance at facilities and locations outside facilities where nuclear material is customarily used.

(iii) A general description of each building on each site, including its use and, if not apparent from that description, its contents. The description shall include a map of the site.

(iv) A description of the scale of operations for each location engaged in the activities specified in Annex I to this Protocol.

(v) Information specifying the location, operational status and the estimated annual production capacity of uranium mines and concentration plants and thorium concentration plants, and the current annual production of such mines and concentration plants for ..... as a whole. ..... shall provide, upon request by the Agency, the current annual production of an individual mine or concentration plant. The provision of this information does not require detailed nuclear material accountancy.

(vi) Information regarding source material which has not reached the composition and purity suitable for fuel fabrication or for being isotopically enriched, as follows:

[1] Terms in italics have specialized meanings, which are defined in Article 18 below.

(a) the quantities, the chemical composition, the use or intended use of such material, whether in nuclear or non-nuclear use, for each location in ..... at which the material is present in quantities exceeding ten metric tons of uranium and/or twenty metric tons of thorium, and for other locations with quantities of more than one metric ton, the aggregate for ..... as a whole if the aggregate exceeds ten metric tons of uranium or twenty metric tons of thorium. The provision of this information does not require detailed nuclear material accountancy;

(b) the quantities, the chemical composition and the destination of each export out of ....., of such material for specifically non-nuclear purposes in quantities exceeding:

(1) ten metric tons of uranium, or for successive exports of uranium from ..... to the same State, each of less than ten metric tons, but exceeding a total of ten metric tons for the year;

(2) twenty metric tons of thorium, or for successive exports of thorium from ..... to the same State, each of less than twenty metric tons, but exceeding a total of twenty metric tons for the year;

(c) the quantities, chemical composition, current location and use or intended use of each import into ..... of such material for specifically non-nuclear purposes in quantities exceeding:

(1) ten metric tons of uranium, or for successive imports of uranium into ..... each of less than ten metric tons, but exceeding a total of ten metric tons for the year;

(2) twenty metric tons of thorium, or for successive imports of thorium into ..... each of less than twenty metric tons, but exceeding a total of twenty metric tons for the year;

(vii) (a) information regarding the quantities, uses and locations of nuclear material exempted from safeguards pursuant to [paragraph 37 of INFCIRC/153][1];

(b) information regarding the quantities (which may be in the form of estimates) and uses at each location, of nuclear material exempted from safeguards pursuant to [paragraph 36(b) of INFCIRC/153] but not yet[2] in a non-nuclear end-use form, in quantities exceeding those set out in [paragraph 37 of INFCIRC/153] . The provision of this information does[3] not require detailed nuclear material accountancy.

(viii) Information regarding the location or further processing of intermediate or high-level waste containing plutonium, high enriched uranium or uranium-233 on which safeguards have been terminated pursuant to [paragraph 11 of INFCIRC/153] . For the purpose of this paragraph, "further processing" does not[4] include repackaging of the

[1] The reference to the corresponding provision of the relevant Safeguards Agreement should be inserted where bracketed references to INFCIRC/153 are made.

[22] The reference to the corresponding provision of the relevant Safeguards Agreement should be inserted where bracketed references to INFCIRC/153 are made.

3 The reference to the corresponding provision of the relevant Safeguards Agreement should be inserted where bracketed references to INFCIRC/153 are made.

4 The reference to the corresponding provision of the relevant Safeguards Agreement should be inserted where bracketed references to INFCIRC/153 are made.

waste or its further conditioning not involving the separation of elements, for storage or disposal.

(ix) The following information regarding specified equipment and non-nuclear material as follows:

(a) for each export out of ..... of such equipment and material: the identity, quantity, location of intended use in the receiving State and date or, as appropriate, expected date, of export;

(b) upon specific request by the Agency, confirmation by ....., as importing State, of information provided to the Agency in accordance with paragraph (a) above.

(x) General plans for the succeeding ten-year period relevant to the development of the nuclear fuel cycle (including planned nuclear fuel cycle-related research and development activities) when approved by the appropriate authorities in ..... .

b. ..... shall make every reasonable effort to provide the Agency with the following information:

(i) a general description of and information specifying the location of nuclear fuel cycle-related research and development activities not involving nuclear material which are specifically related to enrichment, reprocessing of nuclear fuel or the processing of intermediate or high-level waste containing plutonium, high enriched uranium or uranium-233 that are carried out anywhere in ..... but which are not funded, specifically authorized or controlled by, or carried out on behalf of, ... For the purpose of this paragraph, "processing" of intermediate or high-level waste does not include repackaging of the waste or its conditioning not involving the separation of elements, for storage or disposal.

(ii) A general description of activities and the identity of the person or entity carrying out such activities, at locations identified by the Agency outside a site which the Agency considers might be functionally related to the activities of that site. The provision of this information is subject to a specific request by the Agency. It shall be provided in consultation with the Agency and in a timely fashion.

c. Upon request by the Agency, ... shall provide amplifications or clarifications of any information it has provided under this Article, in so far as relevant for the purpose of safeguards.

Article 3

a. ..... shall provide to the Agency the information identified in Article 2.a.(i), (iii), (iv), (v), (vi)(a), (vii) and (x) and Article 2.b.(i) within 180 days of the entry into force of this Protocol.

b. ..... shall provide to the Agency, by 15 May of each year, updates of the information referred to in paragraph a. above for the period covering the previous calendar year. If there has been no change to the information previously provided, ... shall so indicate.

c. ..... shall provide to the Agency, by 15 May of each year, the information identified in Article 2.a.(vi)(b) and (c) for the period covering the previous calendar year.

d. ..... shall provide to the Agency on a quarterly basis the information identified in Article 2.a.(ix)(a). This information shall be provided within sixty days of the end of each quarter.

e. ..... shall provide to the Agency the information identified in Article 2.a.(viii) 180 days before further processing is carried out and, by 15 May of each year, information on changes in location for the period covering the previous calendar year.

f. ..... and the Agency shall agree on the timing and frequency of the provision of the information identified in Article 2.a.(ii).

g. ..... shall provide to the Agency the information in Article 2.a.(ix)(b) within sixty days of the Agency's request.

COMPLEMENTARY ACCESS

General

Article 4

The following shall apply in connection with the implementation of complementary access under Article 5 of this Protocol:

a. The Agency shall not mechanistically or systematically seek to verify the information referred to in Article 2; however, the Agency shall have access to:

(i) Any location referred to in Article 5.a.(i) or (ii) on a selective basis in order to assure the absence of undeclared nuclear material and activities;

(ii) Any location referred to in Article 5.b. or c. to resolve a question relating to the correctness and completeness of the information provided pursuant to Article 2 or to resolve an inconsistency relating to that information;

(iii) Any location referred to in Article 5.a.(iii) to the extent necessary for the Agency to confirm, for safeguards purposes, ...'s declaration of the decommissioned status of a facility or location outside facilities where nuclear material was customarily used.

b. (i) Except as provided in paragraph (ii) below, the Agency shall give ..... advance notice of access of at least 24 hours;

(ii) For access to any place on a site that is sought in conjunction with design information verification visits or ad hoc or routine inspections on that site, the period of advance notice shall, if the Agency so requests, be at least two hours but, in exceptional circumstances, it may be less than two hours.

c. Advance notice shall be in writing and shall specify the reasons for access and the activities to be carried out during such access.

d. In the case of a question or inconsistency, the Agency shall provide ..... with an opportunity to clarify and facilitate the resolution of the question or inconsistency. Such an opportunity will be provided before a request for access, unless the Agency considers that delay in access would prejudice the purpose for which the access is sought. In any event, the Agency shall not draw any conclusions about the question or inconsistency until ..... has been provided with such an opportunity.

e. Unless otherwise agreed to by ....., access shall only take place during regular working hours.

f. ..... shall have the right to have Agency inspectors accompanied during their access by representatives of ....., provided that the inspectors shall not thereby be delayed or otherwise impeded in the exercise of their functions.

Provision of access

Article 5

..... shall provide the Agency with access to:

a. (i) Any place on a site;

(ii) Any location identified by ..... under Article 2.a.(v)-(viii);

(iii) Any decommissioned facility or decommissioned location outside facilities where nuclear material was customarily used.

b. Any location identified by ..... under Article 2.a.(i), Article 2.a.(iv), Article 2.a.(ix)(b) or Article 2.b, other than those referred to in paragraph a.(i) above, provided that if ..... is unable to provide such access, ... shall make every reasonable effort to satisfy Agency requirements, without delay, through other means.

c. Any location specified by the Agency, other than locations referred to in paragraphs a. and b. above, to carry out location-specific environmental sampling, provided that if ..... is unable to provide such access, ... shall make every reasonable effort to satisfy Agency requirements, without delay, at adjacent locations or through other means.

Scope of Activities

Article 6

When implementing Article 5, the Agency may carry out the following activities:

a. For access in accordance with Article 5.a.(i) or (iii): visual observation; collection of environmental samples; utilization of radiation detection and measurement devices; application of seals and other identifying and tamper indicating devices specified in Subsidiary Arrangements; and other objective measures which have been demonstrated to be technically feasible and the use of which has been agreed by the Board of Governors (hereinafter referred to as the "Board") and following consultations between the Agency and .....

b. For access in accordance with Article 5.a.(ii): visual observation; item counting of nuclear material; non-destructive measurements and sampling; utilization of radiation detection and measurement devices; examination of records relevant to the quantities, origin and disposition of the material; collection of environmental samples; and other objective measures which have been demonstrated to be technically feasible and the use of which has been agreed by the Board and following consultations between the Agency and .....

c. For access in accordance with Article 5.b.: visual observation; collection of environmental samples; utilization of radiation detection and measurement devices; examination of safeguards relevant production and shipping records; and other objective measures which have been demonstrated to be technically feasible and the use of which has been agreed by the Board and following consultations between the Agency and .....

d. For access in accordance with Article 5.c., collection of environmental samples and, in the event the results do not resolve the question or inconsistency at the location specified by the Agency pursuant to Article 5.c., utilization at that location of visual observation, radiation detection and measurement devices, and, as agreed by ..... and the Agency, other objective measures.

Managed access

Article 7

a. Upon request by ....., the Agency and ..... shall make arrangements for managed access under this Protocol in order to prevent the dissemination of proliferation sensitive information, to meet safety or physical protection requirements, or to protect proprietary or commercially sensitive information. Such arrangements shall not preclude the Agency from conducting activities necessary to provide credible assurance of the absence of undeclared nuclear materials and activities at the location in question, including the resolution of a question relating to the correctness and completeness of the information referred to in Article 2 or of an inconsistency relating to that information.

b. ..... may, when providing the information referred to in Article 2, inform the Agency of the places at a site or location at which managed access may be applicable.

c. Pending the entry into force of any necessary Subsidiary Arrangements, ... may have recourse to managed access consistent with the provisions of paragraph a. above.

Article 8

Nothing in this Protocol shall preclude ..... from offering the Agency access to locations in addition to those referred to in Articles 5 and 9 or from requesting the Agency to conduct verification activities at a particular location. The Agency shall, without delay, make every reasonable effort to act upon such a request.

Article 9

..... shall provide the Agency with access to locations specified by the Agency to carry out wide-area environmental sampling, provided that if ..... is unable to provide such access it shall make every reasonable effort to satisfy Agency requirements at alternative locations. The Agency shall not seek such access until the use of wide-area environmental sampling and the procedural arrangements therefor have been approved by the Board and following consultations between the Agency and .....

Statements on the Agency's access activities

Article 10

The Agency shall inform ..... of:

a. The activities carried out under this Protocol, including those in respect of any questions or inconsistencies the Agency had brought to the attention of ....., within sixty days of the activities being carried out by the Agency.

b. The results of activities in respect of any questions or inconsistencies the Agency had brought to the attention of ....., as soon as possible but in any case within thirty days of the results being established by the Agency.

c. The conclusions it has drawn from its activities under this Protocol. The conclusions shall be provided annually.

DESIGNATION OF AGENCY INSPECTORS

Article 11

a. (i) The Director General shall notify ..... of the Board's approval of any Agency official as a safeguards inspector. Unless ..... advises the Director General of its rejection of such an official as an inspector for ..... within three months of receipt of notification of the Board's approval, the inspector so notified to ..... shall be considered designated to ..... ;

(ii) The Director General, acting in response to a request by ..... or on his own initiative, shall immediately inform ..... of the withdrawal of the designation of any official as an inspector for ..... .

b. A notification referred to in paragraph a. above shall be deemed to be received by ..... seven days after the date of the transmission by registered mail of the notification by the Agency to ..... .

VISAS

Article 12

..... shall, within one month of the receipt of a request therefor, provide the designated inspector specified in the request with appropriate multiple entry/exit and/or transit visas, where required, to enable the inspector to enter and remain on the territory of ..... for the purpose of carrying out his/her functions. Any visas required shall be valid for at least one year and shall be renewed, as required, to cover the duration of the inspector's designation to .....

SUBSIDIARY ARRANGEMENTS

Article 13

a. Where ..... or the Agency indicates that it is necessary to specify in Subsidiary Arrangements how measures laid down in this Protocol are to be applied, ... and the Agency shall agree on such Subsidiary Arrangements within ninety days of the entry into force of this Protocol or, where the indication of the need for such Subsidiary Arrangements is made after the entry into force of this Protocol, within ninety days of the date of such indication.

b. Pending the entry into force of any necessary Subsidiary Arrangements, the Agency shall be entitled to apply the measures laid down in this Protocol.

COMMUNICATIONS SYSTEMS

Article 14

a. ..... shall permit and protect free communications by the Agency for official purposes between Agency inspectors in ..... and Agency Headquarters and/or Regional Offices, including attended and unattended transmission of information generated by Agency containment and/or surveillance or measurement devices. The Agency shall have, in consultation with ....., the right to make use of internationally established systems of direct communications, including satellite systems and other forms of telecommunication, not in use in ..... At the request of ..... or the Agency, details of the implementation of this paragraph with respect to the attended or unattended transmission of information generated by Agency containment and/or surveillance or measurement devices shall be specified in the Subsidiary Arrangements.

b. Communication and transmission of information as provided for in paragraph a. above shall take due account of the need to protect proprietary or commercially sensitive information or design information which ..... regards as being of particular sensitivity.

PROTECTION OF CONFIDENTIAL INFORMATION

Article 15

a. The Agency shall maintain a stringent regime to ensure effective protection against disclosure of commercial, technological and industrial secrets and other confidential information coming to its knowledge, including such information coming to the Agency's knowledge in the implementation of this Protocol.

b. The regime referred to in paragraph a. above shall include, among others, provisions relating to:

(i) General principles and associated measures for the handling of confidential information;

(ii) Conditions of staff employment relating to the protection of confidential information;

(iii) Procedures in cases of breaches or alleged breaches of confidentiality.

c. The regime referred to in paragraph a. above shall be approved and periodically reviewed by the Board.

ANNEXES

Article 16

a. The Annexes to this Protocol shall be an integral part thereof. Except for the purposes of amendment of the Annexes, the term "Protocol" as used in this instrument means the Protocol and the Annexes together.

b. The list of activities specified in Annex I, and the list of equipment and material specified in Annex II, may be amended by the Board upon the advice of an open-ended working group of experts established by the Board. Any such amendment shall take effect four months after its adoption by the Board.

ENTRY INTO FORCE

Article 17

This Protocol shall enter into force on the date on which the Agency receives from ..... written notification that .....'s statutory and/or constitutional requirements for entry into force have been met.

Or[1]

upon signature by the representatives of ..... and the Agency.

..... may, at any date before this Protocol enters into force, declare that it will apply this Protocol provisionally.

The Director General shall promptly inform all Member States of the Agency of any declaration of provisional application of, and of the entry into force of, this Protocol.

DEFINITIONS

Article 18

For the purpose of this Protocol:

a. Nuclear fuel cycle-related research and development activities means those activities which are specifically related to any process or system development aspect of any of the following:

[1] The choice of alternative depends on the preference of the State concerned according to its internal legal requirements.

- conversion of nuclear material,

- enrichment of nuclear material,

- nuclear fuel fabrication,

- reactors,

- critical facilities,

- reprocessing of nuclear fuel,

- processing (not including repackaging or conditioning not involving the separation of elements, for storage or disposal) of intermediate or high-level waste containing plutonium, high enriched uranium or uranium-233, but do not include activities related to theoretical or basic scientific research or to research and development on industrial radioisotope applications, medical, hydrological and agricultural applications, health and environmental effects and improved maintenance.

b. Site means that area delimited by ..... in the relevant design information for a facility, including a closed-down facility, and in the relevant information on a location outside facilities where nuclear material is customarily used, including a closed-down location outside facilities where nuclear material was customarily used (this is limited to locations with hot cells or where activities related to conversion, enrichment, fuel fabrication or reprocessing were carried out). It shall also include all installations, co-located with the facility or location, for the provision or use of essential services, including: hot cells for processing irradiated materials not containing nuclear material; installations for the treatment, storage and disposal of waste; and buildings associated with specified items identified by ..... under Article 2.a.(iv) above.

c. Specific equipment and non-nuclear material means equipment and non-nuclear material listed in Annex II to this Protocol.

d. Decommissioned facility or decommissioned location outside facilities means an installation or location at which residual structures and equipment essential for its use have been removed or rendered inoperable so that it is not used to store and can no longer be used to handle, process or utilize nuclear material.

e. Closed-down facility or closed-down location outside facilities means an installation or location where operations have been stopped and the nuclear material removed but which has not been decommissioned.

f. High enriched uranium means uranium containing 20 percent or more of the isotope uranium-235.

g. Location-specific environmental sampling means the collection of environmental samples (e.g., air, water, vegetation, soil, smears) at, and in the immediate vicinity of, a location specified by the Agency for the purpose of assisting the Agency to draw conclusions about the absence of undeclared nuclear material or nuclear activities at the specified location.

h. Wide-area environmental sampling means the collection of environmental samples (e.g., air, water, vegetation, soil, smears) at a set of locations specified by the Agency for the purpose of assisting the Agency to draw conclusions about the absence of undeclared nuclear material or nuclear activities over a wide area.

i. Nuclear material means any source or any special fissionable material as defined in Article XX of the Statute. The term source material shall not be interpreted as applying to ore or ore residue. Any determination by the Board under Article XX of the Statute of the Agency after the entry into force of this Protocol which adds to the materials considered to be source material or special fissionable material shall have effect under this Protocol only upon acceptance by .....

j. Facility means:

(i) A reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant or a separate storage installation; or

(ii) Any location where nuclear material in amounts greater than one effective kilogram is customarily used.

k. Location outside facilities means any installation or location, which is not a facility, where nuclear material is customarily used in amounts of one effective kilogram or less.

Annex I - List of activities referred to in Article 2.a.(iv) of the Protocol

Annex II - List of specified equipment and non-nuclear material for the reporting of exports and imports according to Article 2.a.(ix)

4. Export Controls for Nuclear Materials and Certain Categories of Equipments and Materials: The Consolidated Trigger List of the Zangger Group (INFCIRC 209/rev2, as of 9 March 2000)[1]

Memorandum A

1. Introduction

The Government has had under consideration procedures in relation to exports of nuclear materials in the light of its commitment not to provide source or special fissionable material to any non-nuclear-weapon State for peaceful purposes unless the source or special fissionable material is subject to safeguards under an agreement with the International Atomic Energy Agency.

2. Definition of source and special fissionable Material

The definition of source and special fissionable material adopted by the Government shall be that contained in Article XX of the Agency's Statute:

(a) "Source Material"

The term "source material" means uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope 235; thorium; any of the foregoing in the form of metal, alloy chemical compound, or concentrate; any other material containing one or more of the foregoing in such concentration as the Board of Governors shall from time to time determine; and such other material as the Board of Governors shall from time to time determine.

(b) "Special fissionable Material"

i) The term "special fissionable material" means plutonium-239; uranium-233; uranium enriched in the isotopes 235 or 233; any material containing one or more of the foregoing; and such other fissionable material as the Board of Governors shall from time to time determine; but the term "special fissionable material" does not include source material.

ii) The term "uranium enriched in the isotopes 235 or 233" means uranium containing the isotopes 235 or 233 or both in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature.

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[1] The states member to the Zangger Committee are: Argentina, Australia, Austria, Belgium, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Republic of Korea, Luxemburg, The Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom and United States of America.

3. The Application of Safeguards

The Government is solely concerned with ensuring, where relevant, the application of safeguards non-nuclear-weapon States not party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)* with a view to preventing diversion of the safeguarded nuclear material from peaceful purposes to nuclear weapons or other nuclear explosive devices. If the Government wishes to supply source or special fissionable material for peaceful purposes to such a State, it will:

(a) Specify to the recipient State, as a condition of supply that the source or special fissionable material or special fissionable material produced in or by the use thereof shall not be diverted to nuclear weapons or other nuclear explosive devices; and

(b) Satisfy itself that safeguards to that end, under an agreement with the Agency and in accordance with its safeguards system, will be applied to the source or special fissionable material in question.

4. Direct Exports

In the case of direct exports of source or special fissionable material to non-nuclear-weapon States not party to the NPT, the Government will satisfy itself, before authorizing the export of the material in question, that such material will be subject to a safeguards agreement with the Agency as soon as the recipient State takes over responsibility for the material, but no later than the time the material reaches its destination.

5. Retransfers

The Government, when exporting source or special fissionable material to a nuclear-weapon State not party to the NPT, will require satisfactory assurances that the material will not be re-exported to a non-nuclear-weapon State not party to the NPT unless arrangements corresponding to those referred to above are made for the acceptance of safeguards by the State receiving such re-export.

6. Miscellaneous

Exports of the items specified in sub-paragraph (i) below, and exports of source or special fissionable to a given country, within a period of 12 months, below the limes specified in sub-paragraph (b) below, shall be disregarded for the purpose of the procedures described above:

(a) Plutonium with an isotopic concentration of plutonium-238 exceeding 80%; Special fissionable material when used in gram quantities or less as a sensing component in instruments; and Source material which the Government is satisfied is to be used only in non-nuclear activities, such as the production alloys or ceramics:

(b) Special fissionable material 50 effective grams; Natural uranium 500 kilograms; Depleted uranium 1000 kilograms; and Thorium 1000 kilograms.

Memorandum B

1. Introduction

The Government has had under consideration procedures in relation to exports of certain categories of equipment and material, in the light of its commitment not to provide equipment or material especially designed or prepared for the processing use or production of special fissionable material to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material produced. processed or used in the equipment or material in question is subject to safeguards under an agreement with the International Atomic Energy Agency.

2. The Designation of Equipment or Material Especially Designed or Prepared for the Processing, Use of Production of Special Fissionable Material

The designation of items of equipment or material especially designed or prepared for the processing, use or production of special fissionable material (hereinafter referred to as the "Trigger List) adopted by Government is as follows (quantities below the levels indicated in the Annex being regarded as insignificant for practical purposes):

2.1. Reactors and equipment therefor (see Annex, section 1.);

2.2. Non-nuclear materials for reactors (see Annex, section 2.);

2.3. Plants for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor (see Annex, section 3.);

2.4. Plants for the fabrication of fuel elements (see Annex, section 4.);

2.5. Plants for the separation of isotopes of uranium and equipment, other than analytical instruments, designed or prepared therefor (See Annex, section 5);

2.6. Plants for the production of heavy water, deuterium and deuterium compounds and equipment designed or prepared therefor (see Annex, section 6.).

2.7. Plants for the conversion of uranium and plutonium for use in the fabrication of fuel elements and the separation of uranium isotopes as defined in Annex sections 4 and 5 respectively, and equipment especially designed or prepared therefor (see Annex, section 7.)

3. The Application of Safeguards

The Government is solely concerned with ensuring, where relevant. the application of safeguards in non-nuclear-weapon States not party to the Treaty on the Non Proliferation of Nuclear Weapons (NPT) with a view to preventing diversion of the safeguarded nuclear material from peaceful purposes to nuclear weapons or other nuclear explosive devices. If the Government wishes to supply Trigger List items for peaceful purposes such a State, it will:

(a) Specify to the recipient State, as a condition of supply, that the source or special fissionable material produced, processed or used in the facility for which the items is supplied shall not be diverted to weapons or other nuclear explosive devices; and

(b) Satisfy itself that safeguards to that end, under an agreement with the Agency and in accordance its safeguards system, will be applied to the source or special fissionable material in question.

4. Direct Exports

In the case of direct exports to non-nuclear weapon States not party to the NPT, the Government will satisfy itself, before authorizing the export of the equipment or material in question, that such equipment or material will fall under a safeguards agreement with the Agency.

5. Retransfers

The Government, when exporting Trigger List items, will require satisfactory assurances that the items will not be re-exported to a non-nuclear weapon State not party to the NPT unless arrangements corresponding to those referred to above are made for the acceptance of safeguards by the State receiving such re-export.

6. Miscellaneous

The Government reserves to itself discretion as to interpretation and implementation of its commitment to in paragraph 1 above and the right to require, if it wishes, safeguards as above in relation to items it exports in addition to those items specified in paragraph 2 above.

Annex: Clarification of items on the Trigger List (as designated in Section 2 of Memorandum B)

This annex is usually identical with Annex B of the Guidelines for Nuclear Transfers of the Nuclear Suppliers Group (INFCIRC 254/rev8, part1); see on pp. 216 of this documentation.

5. Export Controls for Nuclear Materials Through the Nuclear Suppliers Group: Guidelines for Nuclear Transfers (INFCIRC 254/ Rev 8, Part 1, as of February 2006)[1]

GUIDELINES FOR NUCLEAR TRANSFERS

1. The following fundamental principles for safeguards and export controls should apply to nuclear transfers for peaceful purposes to any non-nuclear-weapon State and, in the case of controls on retransfer, to transfers to any State. In this connection, suppliers have defined an export trigger list.

Prohibition on nuclear explosives

2. Suppliers should authorize transfer of items or related technology identified in the trigger list only upon formal governmental assurances from recipients explicitly excluding uses which would result in any nuclear explosive device.

Physical protection

3. (a) All nuclear materials and facilities identified by the agreed trigger list should be placed under effective physical protection to prevent unauthorized use and handling. The levels of physical protection to be ensured in relation to the type of materials, equipment and facilities, have been agreed by the suppliers, taking account of international recommendations.

(b) The implementation of measures of physical protection in the recipient country is the responsibility of the Government of that country. However, in order to implement the terms agreed upon amongst suppliers, the levels of physical protection on which these measures have to be based should be the subject of an agreement between supplier and recipient.

(c) In each case special arrangements should be made for a clear definition of responsibilities for the transport of trigger list items.

Safeguards

4. (a) Suppliers should transfer trigger list items or related technology to a non-nuclear weapon State only when the receiving State has brought into force an agreement with the IAEA requiring the application of safeguards on all source and special fissionable material in its current and future peaceful activities. Suppliers should authorize such transfers only upon formal governmental assurances from the recipient that:

[1] Members of the Nuclear Suppliers Group are: Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Republic of Korea, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, and United States of America.

− if the above-mentioned agreement should be terminated the recipient will bring into force an agreement with the IAEA based on existing IAEA model safeguards agreements requiring the application of safeguards on all trigger list items or related technology transferred by the supplier or processed, or produced or used in connection with such transfers; and

− if the IAEA decides that the application of IAEA safeguards is no longer possible, the supplier and recipient should elaborate appropriate verification measures. If the recipient does not accept these measures, it should allow

(b) Transfers covered by paragraph 4 (a) to a non-nuclear-weapon State without such a safeguards agreement should be authorized only in exceptional cases when they are deemed essential for the safe operation of existing facilities and if safeguards are applied to those facilities. Suppliers should inform and, if appropriate, consult in the event that they intend to authorize or to deny such transfers.

(c) The policy referred to in paragraph 4 (a) and 4 (b) does not apply to agreements or contracts drawn up on or prior to April 3, 1992. In case of countries that have adhered or will adhere to INFCIRC/254/Rev. 1/Part 1 later than April 3, 1992, the policy only applies to agreements (to be) drawn up after their date of adherence.

(d) Under agreements to which the policy referred to in paragraph 4 (a) does not apply (see paragraphs 4 (b) and (c)) suppliers should transfer trigger list items or related technology only when covered by IAEA safeguards with duration and coverage provisions in conformity with IAEA doc. GOV/1621. However, suppliers undertake to strive for the earliest possible implementation of the policy referred to in paragraph 4 (a) under such agreements.

(e) Suppliers reserve the right to apply additional conditions of supply as a matter of national policy.

5. Suppliers will jointly reconsider their common safeguards requirements, whenever appropriate.

Special controls on sensitive exports

6. Suppliers should exercise restraint in the transfer of sensitive facilities, technology and material usable for nuclear weapons or other nuclear explosive devices. If enrichment or reprocessing facilities, equipment or technology are to be transferred, suppliers should encourage recipients to accept, as an alternative to national plants, supplier involvement and/or other appropriate multinational participation in resulting facilities. Suppliers should also promote international (including IAEA) activities concerned with multinational regional fuel cycle centres.

Special controls on export of enrichment facilities, equipment and technology

7. For a transfer of an enrichment facility, or technology therefor, the recipient nation should agree that neither the transferred facility, nor any facility based on such technology, will be designed or operated for the production of greater than 20% enriched uranium without the consent of the supplier nation, of which the IAEA should be advised.

Controls on supplied or derived material usable for nuclear weapons or other nuclear explosive devices

8. Suppliers should, in order to advance the objectives of these guidelines and to provide opportunities further to reduce the risks of proliferation, include, whenever appropriate and practicable, in agreements on supply of nuclear materials or of facilities which produce material usable for nuclear weapons or other nuclear explosive devices, provisions calling for mutual agreement between the supplier and the recipient on arrangements for reprocessing, storage, alteration, use, transfer or retransfer of any material usable for nuclear weapons or other nuclear explosive devices involved.

Controls on retransfer

9. (a) Suppliers should transfer trigger list items or related technology only upon the recipient's assurance that in the case of:

(1) retransfer of such items or related technology, or

(2) transfer of trigger list items derived from facilities originally transferred by the supplier, or with the help of equipment or technology originally transferred by the supplier; the recipient of the retransfer or transfer will have provided the same assurances as those required by the supplier for the original transfer.

(b) In addition the supplier's consent should be required for:

(1) any retransfer of trigger list items or related technology and any transfer referred to under paragraph 9(a) (2) from any State which does not require full scope safeguards, in accordance with paragraph 4(a) of these Guidelines, as a condition of supply;

(2) any retransfer of enrichment, reprocessing or heavy water production facilities, equipment or related technology, and for any transfer of facilities or equipment of the same type derived from items originally transferred by the supplier;

(3) any retransfer of heavy water or material usable for nuclear weapons or other nuclear explosive devices.

(c) To ensure the consent right as defined under paragraph 9 (b), government to government assurances will be required for any relevant original transfer.

(d) Suppliers should consider restraint in the transfer of items and related technology identified in the trigger list if there is a risk of retransfers contrary to the assurances given under paragraph 9(a) and (c) as a result of a failure by the recipient to develop and maintain appropriate, effective national export and transshipment controls, as identified by UNSC Resolution 1540.

Non-proliferation Principle

10. Notwithstanding other provisions of these Guidelines, suppliers should authorize transfer of items or related technology identified in the trigger list only when they are satisfied that the transfers would not contribute to the proliferation of nuclear weapons or other nuclear explosive devices or be diverted to acts of nuclear terrorism.

Implementation

11. Suppliers should have in place legal measures to ensure the effective implementation of the Guidelines, including export licensing regulations, enforcement measures, and penalties for violations.

SUPPORTING ACTIVITIES

Physical security

12. Suppliers should promote international co-operation in the areas of physical security through the exchange of physical security information, protection of nuclear materials in transit, and recovery of stolen nuclear materials and equipment. Suppliers should promote broadest adherence to the respective international instruments, inter alia, to the Convention on the Physical Protection of Nuclear Material, as well as implementation of INFCIRC/225, as amended from time to time. Suppliers recognize the importance of these activities and other relevant IAEA activities in preventing the proliferation of nuclear weapons and countering the threat of nuclear terrorism.

Support for effective IAEA safeguards

13. Suppliers should make special efforts in support of effective implementation of IAEA safeguards. Suppliers should also support the Agency's efforts to assist Member States in the improvement of their national systems of accounting and control of nuclear material and to increase the technical effectiveness of safeguards.

Similarly, they should make every effort to support the IAEA in increasing further the adequacy of safeguards in the light of technical developments and the rapidly growing number of nuclear facilities, and to support appropriate initiatives aimed at improving the effectiveness of IAEA safeguards.

Trigger list plant design features

14. Suppliers should encourage the designers and makers of trigger list facilities to construct them in such a way as to facilitate the application of safeguards and to enhance physical protection, taking also into consideration the risk of terrorist attacks. Suppliers should promote protection of information on the design of trigger list installations, and stress to recipients the necessity of doing so. Suppliers also recognize the importance of including safety and non-proliferation features in designing and construction of trigger list facilities.

Export Controls

15. Suppliers should, where appropriate, stress to recipients the need to subject transferred trigger list items and related technology and trigger list items derived from facilities originally transferred by the supplier or with the help of equipment or technology originally transferred by the supplier to export controls as outlined in UNSC Resolution 1540. Suppliers are encouraged to offer assistance to recipients to fulfil their respective obligations under UNSC Resolution 1540 where appropriate and feasible.

Consultations

16. (a) Suppliers should maintain contact and consult through regular channels on matters connected with the implementation of these Guidelines.

(b) Suppliers should consult, as each deems appropriate, with other Governments concerned on specific sensitive cases, to ensure that any transfer does not contribute to risks of conflict or instability.

(c) Without prejudice to subparagraphs (d) to (f) below:

− In the event that one or more suppliers believe that there has been a violation of supplier/recipient understanding resulting from these Guidelines, particularly in the case of an explosion of a nuclear device, or illegal termination or violation of IAEA safeguards by a recipient, suppliers should consult promptly through diplomatic channels in order to determine and assess the reality and extent of the alleged violation. Suppliers are also encouraged to consult where nuclear material or nuclear fuel cycles activity undeclared to the IAEA or a nuclear explosive activity is revealed.

− Pending the early outcome of such consultations, suppliers will not act in a manner that could prejudice any measure that may be adopted by other suppliers concerning their current contacts with that recipient. Each supplier should also consider suspending transfers of Trigger List items while consultations under 16(c) are ongoing, pending supplier agreement on an appropriate response.

− Upon the findings of such consultations, the suppliers, bearing in mind Article XII of the IAEA Statute, should agree on an appropriate response and possible action, which could include the termination of nuclear transfers to that recipient.

(d) If a recipient is reported by the IAEA to be in breach of its obligation to comply with its safeguards agreement, suppliers should consider the suspension of the transfer of Trigger List items to that State whilst it is under investigation by the IAEA. For the purposes of this paragraph, "breach" refers only to serious breaches of proliferation concern;

(e) Suppliers support the suspension of transfers of Trigger List items to States that violate their nuclear non-proliferation and safeguards obligations, recognising that the responsibility and authority for such decisions rests with national governments or the United Nations Security Council. In particular, this is applicable in situations where the IAEA Board of Governors takes any of the following actions:

− finds, under Article XII.C of the Statute, that there has been non-compliance in the recipient, or requires a recipient to take specific actions to bring itself into compliance with its safeguards obligations;

− decides that the Agency is not able to verify that there has been no diversion of nuclear material required to be safeguarded, including situations where actions taken by a recipient have made the IAEA unable to carry out its safeguards mission in that State.

An extraordinary Plenary meeting will take place within one month of the Board of Governors' action, at which suppliers will review the situation, compare national policies and decide on an appropriate response.

(f) The provisions of subparagraph (e) above do not apply to transfers under paragraph 4(b) of the Guidelines.

17. Unanimous consent is required for any changes in these Guidelines, including any which might result from the reconsideration mentioned in paragraph 5.

ANNEX A

TRIGGER LIST REFERRED TO IN GUIDELINES

GENERAL NOTES

1. The object of these controls should not be defeated by the transfer of component parts. Each government will take such actions as it can to achieve this aim and will continue to seek a workable definition for component parts, which could be used by all suppliers.

2. With reference to Paragraph 9(b)(2) of the Guidelines, *same type* should be understood as when the design, construction or operating processes are based on the same or similar physical or chemical processes as those identified in the Trigger List.

TECHNOLOGY CONTROLS

The transfer of "technology" directly associated with any item in the List will be subject to as great a degree of scrutiny and control as will the item itself, to the extent permitted by national legislation. Controls on "technology" transfer do not apply to information "in the public domain" or to "basic scientific research".

In addition to controls on “technology” transfer for nuclear non-proliferation reasons, suppliers should promote protection of this technology for the design, construction, and operation of trigger list facilities in consideration of the risk of terrorist attacks, and should stress to recipients the necessity of doing so.

DEFINITIONS

"Technology" means specific information required for the "development", production", or "use" of any item contained in the List. This information may take the form of "technical data", or "technical assistance".

"Basic scientific research" - Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena and observable facts, not primarily directed towards a specific practical aim or objective.

"development" - is related to all phases before "production" such as:

- design
- design research
- design analysis
- design concepts
- assembly and testing of prototypes

- pilot production schemes
- design data
- process of transforming design data into a product
- configuration design
- integration design
- layouts

"in the public domain" - "In the public domain," as it applies herein, means technology that has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove technology from being in the public domain.)

"production" - means all production phases such as:

- construction
- production engineering
- manufacture
- integration
- assembly (mounting)
- inspection
- testing
- quality assurance

"technical assistance" - "Technical assistance" may take forms such as: instruction, skills, training, working knowledge, consulting services.

Note: "Technical assistance" may involve transfer of "technical data".

"technical data" - "Technical data" may take forms such as blueprints, plans, diagrams, models, formulae, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

"use" - Operation, installation (including on-site installation), maintenance (checking), repair, overhaul and refurbishing.

MATERIAL AND EQUIPMENT

1. Source and special fissionable material

As defined in Article XX of the Statute of the International Atomic Energy Agency:

1.1. "Source material"

The term "source material" means uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope 235; thorium; any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; any other material containing one or more of the foregoing in such concentration as the Board of Governors shall from time to time determine; and such other material as the Board of Governors shall from time to time determine.

1.2. "Special fissionable material"

i) The term "special fissionable material" means plutonium-239; uranium-233; uranium enriched in the isotopes 235 or 233; any material containing one or more of the foregoing; and such other fissionable material as the Board of Governors shall from time to time determine; but the term "special fissionable material" does not include source material.

ii) The term "uranium enriched in the isotopes 235 or 233" means uranium containing the isotopes 235 or 233 or both in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature.

However, for the purposes of the Guidelines, items specified in subparagraph (a) below, and exports of source or special fissionable material to a given recipient country, within a period of 12 months, below the limits specified in subparagraph (b) below, shall not be included:

(a) Plutonium with an isotopic concentration of plutonium-238 exceeding 80%.

Special fissionable material when used in gram quantities or less as a sensing component in instruments; and Source material which the Government is satisfied is to be used only in non-nuclear activities, such as the production of alloys or ceramics;

(b) Special fissionable material 50 effective grams;

Natural uranium 500 kilograms;

Depleted uranium 1000 kilograms; and Thorium 1000 kilograms.

2. Equipment and Non-nuclear Materials

The designation of items of equipment and non-nuclear materials adopted by the Government is as follows (quantities below the levels indicated in the Annex B being regarded as insignificant for practical purposes):

2.1. Nuclear reactors and especially designed or prepared equipment and components therefor (see Annex B, section 1.);

2.2. Non-nuclear materials for reactors (see Annex B, section 2.);

2.3. Plants for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor (see Annex B, section 3.);

2.4. Plants for the fabrication of nuclear reactor fuel elements, and equipment especially designed or prepared therefor (see Annex B, section 4.);

2.5. Plants for the separation of isotopes of uranium and equipment, other than analytical instruments, especially designed or prepared therefor (see Annex B, section 5.);

2.6. Plants for the production or concentration of heavy water, deuterium and deuterium compounds and equipment especially designed or prepared therefor (see Annex B, section 6.);

2.7. Plants for the conversion of uranium and plutonium for use in the fabrication of fuel elements and the separation of uranium isotopes as defined in sections 4 and 5 respectively, and equipment especially designed or prepared therefor (See Annex B, section 7.).

ANNEX B

CLARIFICATION OF ITEMS ON THE TRIGGER LIST (as designated in Section 2 of MATERIAL AND EQUIPMENT of Annex A,)

1. Nuclear reactors and especially designed or prepared equipment and components therefor

1.1. Complete nuclear reactors

Nuclear reactors capable of operation so as to maintain a controlled self-sustaining fission chain reaction, excluding zero energy reactors, the latter being defined as reactors with a designed maximum rate of production of plutonium not exceeding 100 grams per year.

EXPLANATORY NOTE

A "nuclear reactor" basically includes the items within or attached directly to the reactor vessel, the equipment which controls the level of power in the core, and the components which normally contain or come in direct contact with or control the primary coolant of the reactor core.

It is not intended to exclude reactors which could reasonably be capable of modification to produce significantly more than 100 grams of plutonium per year. Reactors designed for sustained operation at significant power levels, regardless of their capacity for plutonium production, are not considered as "zero energy reactors".

EXPORTS

The export of the whole set of major items within this boundary will take place only in accordance with procedures of the Memorandum. Those individual items within this functionally defined boundary which will be exported only in accordance with the procedures of the Memorandum are listed in paragraphs 1.2. to 1.10. Pursuant to paragraph 6 of the Memorandum, the Government reserves the right to apply the procedures of the Memorandum to other items within the functionally defined boundary.

1.2. Nuclear reactor vessels

Metal vessels, or as major shop-fabricated parts therefor, especially designed or prepared to contain the core of a nuclear reactor as defined in paragraph 1.1. above, as well as relevant reactor internals as defined in paragraph 1.8. below.

EXPLANATORY NOTE

The reactor vessel head is covered by item 1.2. as a major shop-fabricated part of a reactor vessel.

1.3. Nuclear reactor fuel charging and discharging machines

Manipulative equipment especially designed or prepared for inserting or removing fuel in a nuclear reactor as defined in paragraph 1.1. above.

EXPLANATORY NOTE

The items noted above are capable of on-load operation or of employing technically sophisticated positioning or alignment features to allow complex off-load fuelling operations such as those in which direct viewing of or access to the fuel is not normally available.

1.4. Nuclear reactor control rods

Especially designed or prepared rods, support or suspension structures therefor, rod drive mechanisms or rod guide tubes to control the fission process in a nuclear reactor as defined in paragraph 1.1. above.

1.5. Nuclear reactor pressure tubes

Tubes which are especially designed or prepared to contain fuel elements and the primary coolant in a reactor as defined in paragraph 1.1. above at an operating pressure in excess of 50 atmospheres.

1.6. Zirconium tubes

Zirconium metal and alloys in the form of tubes or assemblies of tubes, and in quantities exceeding 500 kg for any one recipient country in any period of 12 months, especially designed or prepared for use in a reactor as defined in paragraph 1.1. above, and in which the relation of hafnium to zirconium is less than 1:500 parts by weight.

1.7. Primary coolant pumps

Pumps especially designed or prepared for circulating the primary coolant for nuclear reactors as defined in paragraph 1.1. above.

EXPLANATORY NOTE

Especially designed or prepared pumps may include elaborate sealed or multi-sealed systems to prevent leakage of primary coolant, canned-driven pumps, and pumps with inertial mass systems. This definition encompasses pumps certified to Section III, Division I, Subsection NB (Class 1 components) of the American Society of Mechanical Engineers (ASME) Code, or equivalent standards.

1.8 Nuclear reactor internals

"Nuclear reactor internals" especially designed or prepared for use in a nuclear reactor as defined in paragraph 1.1. above, including support columns for the core, fuel channels, thermal shields, baffles, core grid plates, and diffuser plates.

EXPLANATORY NOTE

"Nuclear reactor internals" are major structures within a reactor vessel which have one or more functions such as supporting the core, maintaining fuel alignment, directing primary coolant flow, providing radiation shields for the reactor vessel, and guiding in-core instrumentation.

1.9 Heat exchangers

Heat exchangers (steam generators) especially designed or prepared for use in the primary coolant circuit of a nuclear reactor as defined in paragraph 1.1. above.

EXPLANATORY NOTE

Steam generators are especially designed or prepared to transfer the heat generated in the reactor (primary side) to the feed water (secondary side) for steam generation. In the case of a liquid metal fast breeder reactor for which an intermediate liquid meta coolant loop is also present, the heat exchangers for transferring heat from the primary side to the intermediate coolant circuit are understood to be within the scope of control in addition to the steam generator. The scope of control for this entry does not include heat exchangers for the emergency cooling system or the decay heat cooling system.

1.10 Neutron detection and measuring instrumentation

Especially designed or prepared neutron detection and measuring instruments for determining neutron flux levels within the core of a reactor as defined in paragraph 1.1. above.

EXPLANATORY NOTE

The scope of this entry encompasses in-core and ex-core instrumentation which measure flux levels in a large range, typically from l0 4 neutrons per cm2 per second to 10 10 neutrons per cm 2 per second or more. Ex-core refers to those instruments outside the core of a reactor as defined in paragraph 1.1. above, but located within the biological shielding.

2. Non-nuclear materials for reactors

2.1. Deuterium and heavy water

Deuterium, heavy water (deuterium oxide) and any other deuterium compound in which the ratio of deuterium to hydrogen atoms exceeds 1:5000 for use in a nuclear reactor as defined in paragraph 1.1. above, in quantities exceeding 200 kg of deuterium atoms for any one recipient country in any period of 12 months.

2.2 Nuclear grade graphite

Graphite having a purity level better than 5 parts per million boron equivalent and with a density greater than 1.50 g/cm 3 for use in a reactor as defined in paragraph 1.1. above, in quantities exceeding 30 metric tons for any one recipient country in any period of 12 months.

EXPLANATORY NOTE

For the purpose of export control, the Government will determine whether or not the exports of graphite meeting the above specifications are for nuclear reactor use.

Boron equivalent (BE) may be determined experimentally or is calculated as the sum of BEZ for impurities (excluding BE_{carbon} since carbon is not considered an impurity) including boron, where:

BE_Z (ppm) = CF x concentration of element z (in ppm); CF is the conversion factor: ($ó_Z$ x A_B) divided by ($ó_B$ x A_Z); $ó_B$ and $ó_Z$ are the thermal neutron capture cross sections (in barns) for naturally occurring boron and element z respectively; and A_B and A_Z are the atomic masses of naturally occurring boron and element z respectively.

3. Plants for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor

INTRODUCTORY NOTE

Reprocessing irradiated nuclear fuel separates plutonium and uranium from intensely radioactive fission products and other transuranic elements. Different technical processes can accomplish this separation. However, over the years Purex has become the most commonly used and accepted process. Purex involves the dissolution of irradiated nuclear fuel in nitric acid, followed by separation of the uranium, plutonium, and fission products by solvent extraction using a mixture of tributyl phosphate in an organic diluent.

Purex facilities have process functions similar to each other, including: irradiated fuel element chopping, fuel dissolution, solvent extraction, and process liquor storage. There may also be equipment for thermal denitration of uranium nitrate, conversion of plutonium nitrate to oxide or metal, and treatment of fission product waste liquor to a form suitable for long term storage or disposal. However, the specific type and configuration of the equipment performing these functions may differ between Purex facilities for several reasons, including the type and quantity of irradiated nuclear fuel to be reprocessed and the intended disposition of the recovered materials, and the safety and maintenance philosophy incorporated into the design of the facility.

A "plant for the reprocessing of irradiated fuel elements", includes the equipment and components which normally come in direct contact with and directly control the irradiated fuel and the major nuclear material fission-product processing streams.

These processes, including the complete systems for plutonium conversion and plutonium metal production, may be identified by the measures taken to avoid criticality (e.g. by geometry), radiation exposure (e.g. by shielding), and toxicity hazards (e.g. by containment).

EXPORTS

The export of the whole set of major items this within this boundary will take place only in accordance with the procedures of the Memorandum.

Items of equipment that are considered to fall within the meaning of the phrase "and equipment especially designed or prepared" for the reprocessing of irradiated fuel elements include:

3.1. Irradiated fuel element chopping machines

INTRODUCTORY NOTE

This equipment breaches the cladding of the fuel to expose the irradiated nuclear material to dissolution. Especially designed metal cutting shears are the most commonly employed, although advanced equipment such as lasers, may be used.

Remotely operated equipment especially designed or prepared for use in a reprocessing plant as identified above and intended to cut, chop or shear irradiated nuclear fuel assemblies, bundles or rods.

3.2. Dissolvers

INTRODUCTORY NOTE

Dissolvers normally receive the chopped-up spent fuel. In these critically safe vessels, the irradiated nuclear material is dissolved in nitric acid and the remaining hulls removed from the process stream.

Critically safe tanks (e.g. small diameter, annular or slab tanks) especially designed or prepared for use in a reprocessing plant as identified above, intended for dissolution of irradiated nuclear fuel and which are capable of withstanding hot, highly corrosive liquid, and which can be remotely loaded and maintained.

3.3. Solvent extractors and solvent extraction equipment

INTRODUCTORY NOTE

Solvent extractors both receive the solution of irradiated fuel from the dissolvers and the organic solution which separates the uranium, plutonium, and fission products. Solvent extraction equipment is normally designed to meet strict operating parameters, such as long operating lifetimes with no maintenance requirements or adaptability to easy replacement, simplicity of operation and control, and flexibility for variations in process conditions.

Especially designed or prepared solvent extractors such as packed or pulse columns, mixer settlers or centrifugal contactors for use in a plant for the reprocessing of irradiated fuel. Solvent extractors must be resistant to the corrosive effect of nitric acid. Solvent extractors are normally fabricated to extremely high standards (including special welding and inspection and quality assurance and quality control techniques) out of low carbon stainless steels, titanium, zirconium, or other high quality materials.

3.4. Chemical holding or storage vessels

INTRODUCTORY NOTE

Three main process liquor streams result from the solvent extraction step. Holding or storage vessels are used in the further processing of all these streams, as follows:

(a) The pure uranium nitrate solution is concentrated by evaporation and passed to a denitration process where it is converted to uranium oxide. This oxide is re-used in the nuclear fuel cycle.

(b) The intensely radioactive fission products solution is normally concentrated by evaporation and stored as a liquor concentrate. This concentrate may be subsequently evaporated and converted to a form suitable for storage or disposal.

(c) The pure plutonium nitrate solution is concentrated and stored pending its transfer to further process steps. In particular, holding or storage vessels for plutonium so-

lutions are designed to avoid criticality problems resulting from changes in concentration and form of this stream.

Especially designed or prepared holding or storage vessels for use in a plant for the reprocessing of irradiated fuel. The holding or storage vessels must be resistant to the corrosive effect of nitric acid. The holding or storage vessels are normally fabricated of materials such as low carbon stainless steels, titanium or zirconium, or other high quality materials. Holding or storage vessels may be designed for remote operation and maintenance and may have the following features for control of nuclear criticality:

(1) walls or internal structures with a boron equivalent of at least two per cent, or

(2) a maximum diameter of 175 mm (7 in) for cylindrical vessels, or

(3) a maximum width of 75 mm (3 in) for either a slab or annular vessel.

4. Plants for the fabrication of nuclear reactor fuel elements, and equipment especially designed or prepared therefor

INTRODUCTORY NOTE

Nuclear fuel elements are manufactured from one or more of the source or special fissionable materials mentioned in Part A of this annex. For oxide fuels, the most common type of fuel, equipment for pressing pellets, sintering, grinding and grading will be present. Mixed oxide fuels are handled in glove boxes (or equivalent containment) until they are sealed in the cladding. In all cases, the fuel is hermetically sealed inside a suitable cladding which is designed to be the primary envelope encasing the fuel so as to provide suitable performance and safety during reactor operation. Also, in all cases, precise control of processes, procedures and equipment to extremely high standards is necessary in order to ensure predictable and safe fuel performance.

EXPLANATORY NOTE

Items of equipment that are considered to fall within the meaning of the phrase "and equipment especially designed or prepared" for the fabrication of fuel elements include equipment which:

a) normally comes in direct contact with, or directly processes, or controls, the production flow of nuclear material;

b) seals the nuclear material within the cladding;

c) checks the integrity of the cladding or the seal; or

d) checks the finish treatment of the sealed fuel.

Such equipment or systems of equipment may include, for example:

1) fully automatic pellet inspection stations especially designed or prepared for checking final dimensions and surface defects of fuel pellets;

2) automatic welding machines especially designed or prepared for welding end caps onto the fuel pins (or rods);

3) automatic test and inspection stations especially designed or prepared for checking the integrity of complete fuel pins (or rods).

Item 3 typically includes equipment for: a) x-ray examination of pin (or rod) end cap welds, b) helium leak detection from pressurized pins (or rods), and c) gamma-ray scanning of the pins (or rods) to check for correct loading of the fuel pellets inside.

5. Plants for the separation of isotopes of uranium and equipment, other than analytical instruments, especially designed or prepared therefor

Items of equipment that are considered to fall within the meaning of the phrase "equipment, other than analytical instruments, especially designed or prepared" for the separation of isotopes of uranium include:

5.1. Gas centrifuges and assemblies and components especially designed or prepared for use in gas centrifuges

INTRODUCTORY NOTE

The gas centrifuge normally consists of a thin-walled cylinder(s) of between 75 mm (3 in) and 400 mm (16 in) diameter contained in a vacuum environment and spun at high peripheral speed of the order of 300 m/s or more with its central axis vertical. In order to achieve high speed the materials of construction for the rotating components have to be of a high strength to density ratio and the rotor assembly, and hence its individual components, have to be manufactured to very close tolerances in order to minimize the unbalance. In contrast to other centrifuges, the gas centrifuge for uranium enrichment is characterized by having within the rotor chamber a rotating disc-shaped baffle(s) and a stationary tube arrangement for feeding and extracting the UF_6 gas and featuring at least 3 separate channels, of which 2 are connected to scoops extending from the rotor axis towards the periphery of the rotor chamber. Also contained within the vacuum environment are a number of critical items which do not rotate and which although they are especially designed are not difficult to fabricate nor are they fabricated out of unique materials. A centrifuge facility however requires a large number of these components, so that quantities can provide an important indication of end use.

5.1.1. Rotating components

(a) Complete rotor assemblies:

Thin-walled cylinders, or a number of interconnected thin-walled cylinders, manufactured from one or more of the high strength to density ratio materials described in the Explanatory Note to this Section. If interconnected, the cylinders are joined together by flexible bellows or rings as described in section 5.1.1.(c) following. The rotor is fitted with an internal baffle(s) and end caps, as described in section 5.1.1.(d) and (e) following, if in final form. However the complete assembly may be delivered only partly assembled.

(b) Rotor tubes:

Especially designed or prepared thin-walled cylinders with thickness of 12 mm (0.5 in) or less, a diameter of between 75 mm (3 in) and 400 mm (16 in), and manufactured from one or more of the high strength to density ratio materials described in the Explanatory Note to this Section.

(c) Rings or Bellows:

Components especially designed or prepared to give localized support to the rotor tube or to join together a number of rotor tubes. The bellows is a short cylinder of wall thickness 3 mm (0.12 in) or less, a diameter of between 75 mm (3 in) and 400 mm (16 in), having a convolute, and manufactured from one of the high strength to density ratio materials described in the Explanatory Note to this Section.

(d) Baffles:

Disc-shaped components of between 75 mm (3 in) and 400 mm (16 in) diameter especially designed or prepared to be mounted inside the centrifuge rotor tube, in order to isolate the take-off chamber from the main separation chamber and, in some cases, to assist the UF_6 gas circulation within the main separation chamber of the rotor tube, and manufactured from one of the high strength to density ratio materials described in the EXPLANATORY NOTE to this Section.

(e) Top caps/Bottom caps:

Disc-shaped components of between 75 mm (3 in) and 400 mm (16 in) diameter especially designed or prepared to fit to the ends of the rotor tube, and so contain the UF_6 within the rotor tube, and in some cases to support, retain or contain as an integrated part an element of the upper bearing (top cap) or to carry the rotating elements of the motor and lower bearing (bottom cap), and manufactured from one of the high strength to density ratio materials described in the Explanatory Note to this Section.

EXPLANATORY NOTE

The materials used for centrifuge rotating components are:

(a) Maraging steel capable of an ultimate tensile strength of $2.05 \cdot x\ 10^9$ N/m^2 (300,000 psi) or more;

(b) Aluminium alloys capable of an ultimate tensile strength of $0.46 \cdot 10^9$ N/m^2 (67,000 psi) or more;

(c) Filamentary materials suitable for use in composite structures and having a specific modulus of 3.18×10^6 m or greater and a specific ultimate tensile strength of 7.62×10^4 m or greater ('Specific Modulus' is the Young's Modulus in N/m^2 divided by the specific weight in N/m^3; 'Specific Ultimate Tensile Strength' is the ultimate tensile strength in N/m^2 divided by the specific weight in N/m^3).

5.1.2. Static components

(a) Magnetic suspension bearings:

Especially designed or prepared bearing assemblies consisting of an annular magnet suspended within a housing containing a damping medium. The housing will be manufactured from a UF_6-resistant material (see EXPLANATORY NOTE to Section 5.2.). The magnet couples with a pole piece or a second magnet fitted to the top cap described in Section 5.1.1.(e). The magnet may be ring-shaped with a relation between outer and inner diameter smaller or equal to 1.6:1. The magnet may be in a form having an initial permeability of 0.15 H/m (120,000 in CGS units) or more, or a remanence of 98.5% or more, or an energy product of greater than 80 kJ/m^3 (10^7 gauss-oersteds). In addition to the usual material properties, it is a prerequisite that the deviation of the magnetic axes from the geometrical axes is limited to very small tolerances (lower than 0.1 mm or 0.004 in) or that homogeneity of the material of the magnet is specially called for.

(b) Bearings/Dampers:

Especially designed or prepared bearings comprising a pivot/cup assembly mounted on a damper. The pivot is normally a hardened steel shaft with a hemisphere at one end with a means of attachment to the bottom cap described in section 5.1.1.(e) at the other. The shaft may however have a hydrodynamic bearing attached. The cup is pellet-shaped with a hemispherical indentation in one surface. These components are often supplied separately to the damper.

(c) Molecular pumps:

Especially designed or prepared cylinders having internally machined or extruded helical grooves and internally machined bores. Typical dimensions are as follows: 75 mm (3 in) to 400 mm (16 in) internal diameter, 10 mm (0.4 in) or more wall thickness, with the length equal to or greater than the diameter. The grooves are typically rectangular in cross-section and 2 mm (0.08 in) or more in depth.

(d) Motor stators:

Especially designed or prepared ring-shaped stators for high speed multiphase AC hysteresis (or reluctance) motors for synchronous operation within a vacuum in the frequency range of 600 to 2000 Hz and a power range of 50 to 1000 VA. The stators consist of multi-phase windings on a laminated low loss iron core comprised of thin layers typically 2.0 mm (0.08 in) thick or less.

(e) Centrifuge housing/recipients:

Components especially designed or prepared to contain the rotor tube assembly of a gas centrifuge. The housing consists of a rigid cylinder of wall thickness up to 30 mm (1.2 in) with precision machined ends to locate the bearings and with one or more flanges for mounting. The machined ends are parallel to each other and perpendicular to the cylinder's longitudinal axis to within 0.05 degrees or less. The housing may also be a honeycomb type structure to accommodate several rotor tubes. The housings are made of or protected by materials resistant to corrosion by UF_6.

(f) Scoops:

Especially designed or prepared tubes of up to 12 mm (0.5 in) internal diameter for the extraction of UF_6 gas from within the rotor tube by a Pitot tube action (that is, with an aperture facing into the circumferential gas flow within the rotor tube, for example by bending the end of a radially disposed tube) and capable of being fixed to the central gas extraction system. The tubes are made of or protected by materials resistant to corrosion by UF_6.

5.2. Especially designed or prepared auxiliary systems, equipment and components for gas centrifuge enrichment plants

INTRODUCTORY NOTE

The auxiliary systems, equipment and components for a gas centrifuge enrichment plant are the systems of plant needed to feed UF_6 to the centrifuges, to link the individual centrifuges to each other to form cascades (or stages) to allow for progressively higher enrichments and to extract the 'product' and 'tails' UF_6 from the centrifuges, together with the equipment required to drive the centrifuges or to control the plant.

Normally UF_6 is evaporated from the solid using heated autoclaves and is distributed in gaseous form to the centrifuges by way of cascade header pipework. The 'product' and 'tails' UF_6 gaseous streams flowing from the centrifuges are also passed by way of cascade header pipework to cold traps (operating at about 203 K (-70°C)) where they are condensed prior to onward transfer into suitable containers for transportation or storage. Because an enrichment plant consists of many thousands of centrifuges arranged in cascades there are many kilometers of cascade header pipework, incorporating thousands of welds with a substantial amount of repetition of layout. The equipment, components and piping systems are fabricated to very high vacuum and cleanliness standards.

5.2.1. Feed systems/product and tails withdrawal systems

Especially designed or prepared process systems including:

Feed autoclaves (or stations), used for passing UF_6 to the centrifuge cascades at up to 100 kPa (15 psi) and at a rate of 1 kg/h or more;

Desublimers (or cold traps) used to remove UF_6 from the cascades at up to 3 kPa (0.5 psi) pressure. The desublimers are capable of being chilled to 203 K (-70°C) and heated to 343 K (70°C);

'Product' and 'tails' stations used for trapping UF_6 into containers.

This plant, equipment and pipework is wholly made of or lined with UF_6-resistant materials (see EXPLANATORY NOTE to this section) and is fabricated to very high vacuum and cleanliness standards.

5.2.2. Machine header piping systems

Especially designed or prepared piping systems and header systems for handling UF_6 within the centrifuge cascades. The piping network is normally of the 'triple' header system with each centrifuge connected to each of the headers. There is thus a substantial amount of repetition in its form. It is wholly made of UF_6-resistant materials (see EXPLANATORY NOTE to this section) and is fabricated to very high vacuum aneanliness standards.

5.2.3. UF_6 mass spectrometers/ion sources

Especially designed or prepared magnetic or quadrupole spectrometers capable of taking 'on-line' samples of feed, product or tails, from UF_6 gas streams and having all of the following characteristics:

1. Unit resolution for atomic mass unit greater than 320;

2. Ion sources constructed of or lined with nichrome or monel or nickel plated;

3. Electron bombardment ionization sources;

4. Having a collector system suitable for isotopic analysis.

5.2.4. Frequency changers

Frequency changers (also known as converters or invertors) especially designed or prepared to supply motor stators as defined under 5.1.2.(d), or parts, components and subassemblies of such frequency changers having all of the following characteristics:

1. A multiphase output of 600 to 2000 Hz;

2. High stability (with frequency control better than 0.1 %);

3. Low harmonic distortion (less than 2%); and

4. An efficiency of greater than 80%.

EXPLANATORY NOTE

The items listed above either come into direct contact with the UF_6 process gas or directly control the centrifuges and the passage of the gas from centrifuge to centrifuge and cascade to cascade.

Materials resistant to corrosion by UF_6 include stainless steel, aluminium, aluminium alloys, nickel or alloys containing 60% or more nickel.

5.3. Especially designed or prepared assemblies and components for use in gaseous diffusion enrichment

INTRODUCTORY NOTE

In the gaseous diffusion method of uranium isotope separation, the main technological assembly is a special porous gaseous diffusion barrier, heat exchanger for cooling the gas (which is heated by the process of compression), seal valves and control valves, and pipelines. Inasmuch as gaseous diffusion technology uses uranium hexafluoride (UF_6), all equipment, pipeline and instrumentation surfaces (that come in contact with the gas) must be made of materials that remain stable in contact with UF_6. A gaseous diffusion facility requires a number of these assemblies, so that quantities can provide an important indication of end use.

5.3.1. Gaseous diffusion barriers

(a) Especially designed or prepared thin, porous filters, with a pore size of 100 to 1,000 Å (angstroms), a thickness of 5 mm (0.2 in) or less, and for tubular forms, a diameter of 25 mm (1 in) or less, made of metallic, polymer or ceramic materials resistant to corrosion by UF_6, and

(b) Especially prepared compounds or powders for the manufacture of such filters. Such compounds and powders include nickel or alloys containing 60% or more nickel, aluminium oxide, or UF_6-resistant fully fluorinated hydrocarbon polymers having a purity of 99.9% or more, a particle size less than 10 microns, and a high degree of particle size uniformity, which are especially prepared for the manufacture of gaseous diffusion barriers.

5.3.2. Diffuser housings

Especially designed or prepared hermetically sealed cylindrical vessels greater than 300 mm (12 in) in diameter and greater than 900 mm (35 in) in length, or rectangular vessels of comparable dimensions, which have an inlet connection and two outlet connections all of which are greater than 50 mm (2 in) in diameter, for containing the gaseous diffusion barrier, made of or lined with UF_6-resistant materials and designed for horizontal or vertical installation.

5.3.3. Compressors and gas blowers

Especially designed or prepared axial, centrifugal, or positive displacement compressors, or gas blowers with a suction volume capacity of 1 m^3 /min or more of UF_6, and with a

discharge pressure of up to several hundred kPa (100 psi), designed for long-term operation in the UF_6 environment with or without an electrical motor of appropriate power, as well as separate assemblies of such compressors and gas blowers. These compressors and gas blowers have a pressure ratio between 2:1 and 6:1 and are made of, or lined with, materials resistant to UF_6.

5.3.4. Rotary shaft seals

Especially designed or prepared vacuum seals, with seal feed and seal exhaust connections, for sealing the shaft connecting the compressor or the gas blower rotor with the driver motor so as to ensure a reliable seal against in-leaking of air into the inner chamber of the compressor or gas blower which is filled with UF_6. Such seals are normally designed for a buffer gas in-leakage rate of less than 1000 cm^3 /min (60 in^3 /min).

5.3.5. Heat exchangers for cooling UF_6

Especially designed or prepared heat exchangers made of or lined with UF_6-resistant materials (except stainless steel) or with copper or any combination of those metals, and intended for a leakage pressure change rate of less than 10 Pa (0.0015 psi) per hour under a pressure difference of 100 kPa (15 psi).

5.4. Especially designed or prepared auxiliary systems, equipment and components for use in gaseous diffusion enrichment

INTRODUCTORY NOTE

The auxiliary systems, equipment and components for gaseous diffusion enrichment plants are the systems of plant needed to feed UF_6 to the gaseous diffusion assembly, to link the individual assemblies to each other to form cascades (or stages) to allow for progressively higher enrichments and to extract the 'product' and 'tails' UF_6 from the diffusion cascades. Because of the high inertial properties of diffusion cascades, any interruption in their operation, and especially their shut-down, leads to serious consequences. Therefore, a strict and constant maintenance of vacuum in all technological systems, automatic protection from accidents, and precise automated regulation of the gas flow is of importance in a gaseous diffusion plant. All this leads to a need to equip the plant with a large number of special measuring, regulating and controlling systems.

Normally UF_6 is evaporated from cylinders placed within autoclaves and is distributed in gaseous form to the entry point by way of cascade header pipework. The 'product' and 'tails' UF_6 gaseous streams flowing from exit points are passed by way of cascade header pipework to either cold traps or to compression stations where the UF_6 gas is liquefied prior to onward transfer into suitable containers for transportation or storage. Because a gaseous diffusion enrichment plant consists of a large number of gaseous diffusion assemblies arranged in cascades, there are many kilometers of cascade header pipework, incorporating thousands of welds with substantial amounts of repetition of layout. The equipment, components and piping systems are fabricated to very high vacuum and cleanliness standards.

5.4.1. Feed systems/product and tails withdrawal systems

Especially designed or prepared process systems, capable of operating at pressures of 300 kPa (45 psi) or less, including:

Feed autoclaves (or systems), used for passing UF_6 to the gaseous diffusion cascades;

Desublimers (or cold traps) used to remove UF_6 from diffusion cascades;

Liquefaction stations where UF_6 gas from the cascade is compressed and cooled to form liquid UF_6;

'Product' and 'tails' stations used for transferring UF_6 into containers.

5.4.2. Header piping systems

Especially designed or prepared piping systems and header systems for handling UF_6 within the gaseous diffusion cascades. This piping network is normally of the "double" header system with each cell connected to each of the headers.

5.4.3. Vacuum systems

(a) Especially designed or prepared large vacuum manifolds, vacuum headers and vacuum pumps having a suction capacity of 5 m^3 /min (175 ft^3 /min) or more.

(b) Vacuum pumps especially designed for service in UF_6-bearing atmospheres made of, or lined with, aluminium, nickel, or alloys bearing more than 60% nickel. These pumps may be either rotary or positive, may have displacement and fluorocarbon seals, and may have special working fluids present.

5.4.4. Special shut-off and control valves

Especially designed or prepared manual or automated shut-off and control bellows valves made of UF_6-resistant materials with a diameter of 40 to 1500 mm (1.5 to 59 in) for installation in main and auxiliary systems of gaseous diffusion enrichment plants.

5.4.5. UF_6 mass spectrometers/ion sources

Especially designed or prepared magnetic or quadrupole mass spectrometers capable of taking "on-line" samples of feed, product or tails, from UF_6 gas streams and having all of the following characteristics:

1. Unit resolution for atomic mass unit greater than 320;
2. Ion sources constructed of or lined with nichrome or monel or nickel plated;
3. Electron bombardment ionization sources;
4. Collector system suitable for isotopic analysis.

EXPLANATORY NOTE

The items listed above either come into direct contact with the UF_6 process gas or directly control the flow within the cascade. All surfaces which come into contact with the process gas are wholly made of, or lined with, UF_6-resistant materials. For the purposes of the sections relating to gaseous diffusion items the materials resistant to corrosion by UF_6 include stainless steel, aluminium, aluminium alloys, aluminium oxide, nickel or alloys containing 60% or more nickel and UF_6-resistant fully fluorinated hydrocarbon polymers.

5.5. Especially designed or prepared systems, equipment and components for use in aerodynamic enrichment plants

INTRODUCTORY NOTE

In aerodynamic enrichment processes, a mixture of gaseous UF_6 and light gas (hydrogen or helium) is compressed and then passed through separating elements wherein isotopic separation is accomplished by the generation of high centrifugal forces over a curved-wall geometry. Two processes of this type have been successfully developed: the separation nozzle process and the vortex tube process. For both processes the main components of a separation stage include cylindrical vessels housing the special separation elements (nozzles or vortex tubes), gas compressors and heat exchangers to remove the heat of compression. An aerodynamic plant requires a number of these stages, so that quantities can provide an important indication of end use. Since aerodynamic processes use UF_6, all equipment, pipeline and instrumentation surfaces (that come in contact with the gas) must be made of materials that remain stable in contact with UF_6.

EXPLANATORY NOTE

The items listed in this section either come into direct contact with the UF_6 process gas or directly control the flow within the cascade. All surfaces which come into contact with the process gas are wholly made of or protected by UF_6-resistant materials. For the purposes of the section relating to aerodynamic enrichment items, the materials resistant to corrosion by UF_6 include copper, stainless steel, aluminium, aluminium alloys, nickel or alloys containing 60% or more nickel and UF_6-resistant fully fluorinated hydrocarbon polymers.

5.5.1. Separation nozzles

Especially designed or prepared separation nozzles and assemblies thereof. The separation nozzles consist of slit-shaped, curved channels having a radius of curvature less than 1 mm (typically 0.1 to 0.05 mm), resistant to corrosion by UF_6 and having a knife-edge within the nozzle that separates the gas flowing through the nozzle into two fractions.

5.5.2. Vortex tubes

Especially designed or prepared vortex tubes and assemblies thereof. The vortex tubes are cylindrical or tapered, made of or protected by materials resistant to corrosion by UF_6, having a diameter of between 0.5 cm and 4 cm, a length to diameter ratio of 20:1 or less and with one or more tangential inlets. The tubes may be equipped with nozzle-type appendages at either or both ends.

EXPLANATORY NOTE

The feed gas enters the vortex tube tangentially at one end or through swirl vanes or at numerous tangential positions along the periphery of the tube.

5.5.3. Compressors and gas blowers

Especially designed or prepared axial, centrifugal or positive displacement compressors or gas blowers made of or protected by materials resistant to corrosion by UF_6 and with a suction volume capacity of 2 m^3/min or more of UF_6/carrier gas (hydrogen or helium) mixture.

EXPLANATORY NOTE

These compressors and gas blowers typically have a pressure ratio between 1.2:1 and 6:1.

5.5.4. Rotary shaft seals

Especially designed or prepared rotary shaft seals, with seal feed and seal exhaust connections, for sealing the shaft connecting the compressor rotor or the gas blower rotor with the driver motor so as to ensure a reliable seal against out-leakage of process gas or in-leakage of air or seal gas into the inner chamber of the compressor or gas blower which is filled with a UF_6/carrier gas mixture.

5.5.5. Heat exchangers for gas cooling

Especially designed or prepared heat exchangers made of or protected by materials resistant to corrosion by UF_6.

5.5.6. Separation element housings

Especially designed or prepared separation element housings, made of or protected by materials resistant to corrosion byUF_6, for containing vortex tubes or separation nozzles.

EXPLANATORY NOTE

These housings may be cylindrical vessels greater than 300 mm in diameter and greater than 900 mm in length, or may be rectangular vessels of comparable dimensions, and may be designed for horizontal or vertical installation.

5.5.7. Feed systems/product and tails withdrawal systems

Especially designed or prepared process systems or equipment for enrichment plants made of or protected by materials resistant to corrosion by UF_6, including:

(a) Feed autoclaves, ovens, or systems used for passing UF_6 to the enrichment process;

(b) Desublimers (or cold traps) used to remove UF_6 from the enrichment process for subsequent transfer upon heating;

(c) Solidification or liquefaction stations used to remove UF_6 from the enrichment process by compressing and converting UF_6 to a liquid or solid form;

(d) 'Product' or 'tails' stations used for transferring UF_6 into containers.

5.5.8. Header piping systems

Especially designed or prepared header piping systems, made of or protected by materials resistant to corrosion by UF_6, for handling UF_6 within the aerodynamic cascades. This piping network is normally of the 'double' header design with each stage or group of stages connected to each of the headers.

5.5.9. Vacuum systems and pumps

(a) Especially designed or prepared vacuum systems having a suction capacity of 5 m^3/min or more, consisting of vacuum manifolds, vacuum headers and vacuum pumps, and designed for service in UF_6-bearing atmospheres,

(b) Vacuum pumps especially designed or prepared for service in UF_6-bearing atmospheres and made of or protected by materials resistant to corrosion by UF_6. These pumps may use fluorocarbon seals and special working fluids.

5.5.10. Special shut-off and control valves

Especially designed or prepared manual or automated shut-off and control bellows valves made of or protected by materials resistant to corrosion by UF_6 with a diameter of 40 to 1500 mm for installation in main and auxiliary systems of aerodynamic enrichment plants.

5.5.11. UF_6 mass spectrometers/ion sources

Especially designed or prepared magnetic or quadrupole mass spectrometers capable of taking 'on-line' samples of feed, 'product' or 'tails', from UF_6 gas streams and having all of the following characteristics:

1. Unit resolution for mass greater than 320;
2. Ion sources constructed of or lined with nichrome or monel or nickel plated;
3. Electron bombardment ionization sources;
4. Collector system suitable for isotopic analysis.

5.5.12. UF_6/carrier gas separation systems

Especially designed or prepared process systems for separating UF_6 from carrier gas (hydrogen or helium).

EXPLANATORY NOTE

These systems are designed to reduce the UF_6 content in the carrier gas to 1 ppm less and may incorporate equipment such as:

(a) Cryogenic heat exchangers and cryoseparators capable of temperatures of -1200 C or less, or

(b) Cryogenic refrigeration units capable of temperatures of -1200 C or less, or

(c) Separation nozzle or vortex tube units for the separation of UF_6 from carrier gas, or

(d) UF6 cold traps capable of temperatures of -20^0 C or less.

5.6. Especially designed or prepared systems, equipment and components for use in chemical exchange or ion exchange enrichment plants

INTRODUCTORY NOTE

The slight difference in mass between the isotopes of uranium causes small changes in chemical reaction equilibria that can be used as a basis for separation of the isotopes. Two processes have been successfully developed: liquid-liquid chemical exchange and solid-liquid ion exchange.

In the liquid-liquid chemical exchange process, immiscible liquid phases (aqueous and organic) are countercurrently contacted to give the cascading effect of thousands of separation stages. The aqueous phase consists of uranium chloride in hydrochloric acid solution; the organic phase consists of an extractant containing uranium chloride in an

organic solvent. The contactors employed in the separation cascade can be liquid-liquid exchange columns (such as pulsed columns with sieve plates) or liquid centrifugal contactors. Chemical conversions (oxidation and reduction) are required at both ends of the separation cascade in order to provide for the reflux requirements at each end. A major design concern is to avoid contamination of the process streams with certain metal ions. Plastic, plastic-lined (including use of fluorocarbon polymers) and/or glass-lined columns and piping are therefore used.

In the solid-liquid ion exchange process, enrichment is accomplished by uranium adsorption/desorption on a special, very fast-acting, ion exchange resin or adsorbent. A solution of uranium in hydrochloric acid and other chemical agents is passed through cylindrical enrichment columns containing packed beds of the adsorbent. For a continuous process, a reflux system is necessary to release the uranium from the adsorbent back into the liquid flow so that 'product' and 'tails' can be collected. This is accomplished with the use of suitable reduction/oxidation chemical agents that are fully regenerated in separate external circuits and that may be partially regenerated within the isotopic separation columns themselves. The presence of hot concentrated hydrochloric acid solutions in the process requires that the equipment be made of or protected by special corrosion-resistant materials.

5.6.1. Liquid-liquid exchange columns (Chemical exchange)

Countercurrent liquid-liquid exchange columns having mechanical power input (i.e., pulsed columns with sieve plates, reciprocating plate columns, and columns with internal turbine mixers), especially designed or prepared for uranium enrichment using the chemical exchange process. For corrosion resistance to concentrated hydrochloric acid solutions, these columns and their internals are made of or protected by suitable plastic materials (such as fluorocarbon polymers) or glass. The stage residence time of the columns is designed to be short (30 seconds or less).

5.6.2. Liquid-liquid centrifugal contactors (Chemical exchange)

Liquid-liquid centrifugal contactors especially designed or prepared for uranium enrichment using the chemical exchange process. Such contactors use rotation to achieve dispersion of the organic and aqueous streams and then centrifugal force to separate the phases. For corrosion resistance to concentrated hydrochloric acid solutions, the contactors are made of or are lined with suitable plastic materials (such as fluorocarbon polymers) or are lined with glass. The stage residence time of the centrifugal contactors is designed to be short (30 seconds or less).

5.6.3. Uranium reduction systems and equipment (Chemical exchange)

(a) Especially designed or prepared electrochemical reduction cells to reduce uranium from one valence state to another for uranium enrichment using the chemical exchange process. The cell materials in contact with process solutions must be corrosion resistant to concentrated hydrochloric acid solutions.

EXPLANATORY NOTE

The cell cathodic compartment must be designed to prevent re-oxidation of uranium to its higher valence state. To keep the uranium in the cathodic compartment, the cell may

have an impervious diaphragm membrane constructed of special cation exchange material. The cathode consists of a suitable solid conductor such as graphite.

(b) Especially designed or prepared systems at the product end of the cascade for taking the U^{+4} out of the organic stream, adjusting the acid concentration and feeding to the electrochemical reduction cells.

EXPLANATORY NOTE

These systems consist of solvent extraction equipment for stripping the U^{+4} from the organic stream into an aqueous solution, evaporation and/or other equipment to accomplish solution pH adjustment and control, and pumps or other transfer devices for feeding to the electrochemical reduction cells. A major design concern is to avoid contamination of the aqueous stream with certain metal ions. Consequently, for those parts in contact with the process stream, the system is constructed of equipment made of or protected by suitable materials (such as glass, fluorocarbon polymers, polyphenyl sulfate, polyether sulfone, and resin-impregnated graphite).

5.6.4. Feed preparation systems (Chemical exchange)

Especially designed or prepared systems for producing high-purity uranium chloride feed solutions for chemical exchange uranium isotope separation plants.

EXPLANATORY NOTE

These systems consist of dissolution, solvent extraction and/or ion exchange equipment for purification and electrolytic cells for reducing the uranium U^{+6} or U^{+4} to U^{+3} . These systems produce uranium chloride solutions having only a few parts per million of metallic impurities such as chromium, iron, vanadium, molybdenum and other bivalent or higher multi-valent cations. Materials of construction for portions of the system processing high-purity U^{+3} include glass, fluorocarbon polymers, polyphenyl sulfate or polyether sulfone plastic-lined and resin-impregnated graphite.

5.6.5. Uranium oxidation systems (Chemical exchange)

Especially designed or prepared systems for oxidation of U^{+3} to U^{+4} for return to the uranium isotope separation cascade in the chemical exchange enrichment process.

EXPLANATORY NOTE

These systems may incorporate equipment such as:

(a) Equipment for contacting chlorine and oxygen with the aqueous effluent from the isotope separation equipment and extracting the resultant U^{+4} into the stripped organic stream returning from the product end of the cascade.

(b) Equipment that separates water from hydrochloric acid so that the water and the concentrated hydrochloric acid may be reintroduced to the process at the proper locations.

5.6.6. Fast-reacting ion exchange resins/adsorbents (Ion exchange)

Fast-reacting ion exchange resins or adsorbents especially designed or prepared for uranium enrichment using the ion exchange process, including porous macroreticular resins, and/or pellicular structures in which the active chemical exchange groups are limited to a coating on the surface of an inactive porous support structure, and other

composite structures in any suitable form including particles or fibers. These ion exchange resins/adsorbents have diameters of 0.2 mm or less and must be chemically resistant to concentrated hydrochloric acid solutions as well as physically strong enough so as not to degrade in the exchange columns. The resins/adsorbents are especially designed to achieve very fast uranium isotope exchange kinetics (exchange rate half-time of less than 10 seconds) and are capable of operating at a temperature in the range of 100^0C to 200^0C.

5.6.7. Ion exchange columns (Ion exchange)

Cylindrical columns greater than 1000 mm in diameter for containing and supporting packed beds of ion exchange resin/adsorbent, especially designed or prepared for uranium enrichment using the ion exchange process. These columns are made of or protected by materials (such as titanium or fluorocarbon plastics) resistant to corrosion by concentrated hydrochloric acid solutions and are capable of operating at a temperature in the range of 100^0C to 200^0C and pressures above 0.7 MPa (102 psia).

5.6.8. Ion exchange reflux systems (Ion exchange)

(a) Especially designed or prepared chemical or electrochemical reduction systems for regeneration of the chemical reducing agent(s) used in ion exchange uranium enrichment cascades.

(b) Especially designed or prepared chemical or electrochemical oxidation systems for regeneration of the chemical oxidizing agent(s) used in ion exchange uranium enrichment cascades.

EXPLANATORY NOTE

The ion exchange enrichment process may use, for example, trivalent titanium (Ti^{+3}) as a reducing cation in which case the reduction system would regenerate Ti^{+3} by reducing Ti^{+4}.

The process may use, for example, trivalent iron (Fe^{+3}) as an oxidant in which case the oxidation system would regenerate Fe^{+3} by oxidizing Fe^{+2}.

5.7. Especially designed or prepared systems, equipment and components for use in laser-based enrichment plants

INTRODUCTORY NOTE

Present systems for enrichment processes using lasers fall into two categories: those in which the process medium is atomic uranium vapor and those in which the process medium is the vapor of a uranium compound. Common nomenclature for such processes include: first category - atomic vapor laser isotope separation (AVLIS or SILVA); second category molecular laser isotope separation (MLIS or MOLIS) and chemical reaction by isotope selective laser activation (CRISLA). The systems, equipment and components for laser enrichment plants embrace: (a) devices to feed uranium-metal vapor (for selective photo-ionization) or devices to feed the vapor of a uranium compound (for photo-dissociation or chemical activation); (b) devices to collect enriched and depleted uranium metal as 'product' and 'tails' in the first category, and devices to collect dissociated or reacted compounds as 'product' and unaffected material as 'tails' in the second category; (c) process laser systems to selectively excite the uranium-235 species; and (d) feed preparation and product conversion equipment. The complexity of the spectroscopy

of uranium atoms and compounds may require incorporation of any of a number of available laser technologies.

EXPLANATORY NOTE

Many of the items listed in this section come into direct contact with uranium metal vapor or liquid or with process gas consisting of UF_6 or a mixture of UF_6 and other gases. All surfaces that come into contact with the uranium or UF_6 are wholly made of or protected by corrosion-resistant materials. For the purposes of the section relating to laser-based enrichment items, the materials resistant to corrosion by the vapor or liquid of uranium metal or uranium alloys include yttria-coated graphite and tantalum; and the materials resistant to corrosion by UF_6 include copper, stainless steel, aluminium, aluminium alloys, nickel or alloys containing 60% or more nickel and UF_6-resistant fully fluorinated hydrocarbon polymers.

5.7.1. Uranium vaporization systems (AVLIS)

Especially designed or prepared uranium vaporization systems which contain high-power strip or scanning electron beam guns with a delivered power on the target of more than 2.5 kW/cm.

5.7.2. Liquid uranium metal handling systems (AVLIS)

Especially designed or prepared liquid metal handling systems for molten uranium or uranium alloys, consisting of crucibles and cooling equipment for the crucibles.

EXPLANATORY NOTE

The crucibles and other parts of this system that come into contact with molten uranium or uranium alloys are made of or protected by materials of suitable corrosion and heat resistance. Suitable materials include tantalum, yttria-coated graphite, graphite coated with other rare earth oxides or mixtures thereof.

5.7.3. Uranium metal 'product' and 'tails' collector assemblies (AVLIS)

Especially designed or prepared 'product' and 'tails' collector assemblies for uranium metal in liquid or solid form.

EXPLANATORY NOTE

Components for these assemblies are made of or protected by materials resistant to the heat and corrosion of uranium metal vapor or liquid (such as yttria-coated graphite or tantalum) and may include pipes, valves, fittings, 'gutters', feed-throughs, heat exchangers and collector plates for magnetic, electrostatic or other separation methods.

5.7.4. Separator module housings (AVLIS)

Especially designed or prepared cylindrical or rectangular vessels for containing the uranium metal vapor source, the electron beam gun, and the 'product' and 'tails' collectors.

EXPLANATORY NOTE

These housings have multiplicity of ports for electrical and water feed-throughs, laser beam windows, vacuum pump connections and instrumentation diagnostics and monitoring. They have provisions for opening and closure to allow refurbishment of internal components.

5.7.5. Supersonic expansion nozzles (MLIS)

Especially designed or prepared supersonic expansion nozzles for cooling mixtures of UF_6 and carrier gas to 150 K or less and which are corrosion resistant to UF_6.

5.7.6. Uranium pentafluoride product collectors (MLIS)

Especially designed or prepared uranium pentafluoride (UF_5) solid product collectors consisting of filter, impact, or cyclone-type collectors, or combinations thereof, and which are corrosion resistant to the UF_5 / UF_6 environment.

5.7.7. UF_6/carrier gas compressors (MLIS)

Especially designed or prepared compressors for UF_6/carrier gas mixtures, designed for long term operation in a UF_6 environment. The components of these compressors that come into contact with process gas are made of or protected by materials resistant to corrosion by UF_6.

5.7.8. Rotary shaft seals (MLIS)

Especially designed or prepared rotary shaft seals, with seal feed and seal exhaust connections, for sealing the shaft connecting the compressor rotor with the driver motor so as to ensure a reliable seal against out-leakage of process gas or in-leakage of air or seal gas into the inner chamber of the compressor which is filled with a UF6/carrier gas mixture.

5.7.9. Fluorination systems (MLIS)

Especially designed or prepared systems for fluorinating UF_5 (solid) to UF_6 (gas).

EXPLANATORY NOTE

These systems are designed to fluorinate the collected UF_5 powder to UF_6 for subsequent collection in product containers or for transfer as feed to MLIS units for additional enrichment. In one approach, the fluorination reaction may be accomplished within the isotope separation system to react and recover directly off the 'product' collectors. In another approach, the UF_5 powder may be removed/transferred from the 'product' collectors into a suitable reaction vessel (e.g., fluidized-bed reactor, screw reactor or flame tower) for fluorination. In both approaches, equipment for storage and transfer of fluorine (or other suitable fluorinating agents) and for collection and transfer of UF_6 are used.

5.7.10. UF_6 mass spectrometers/ion sources (MLIS)

Especially designed or prepared magnetic or quadrupole mass spectrometers capable of taking 'on-line' samples of feed, 'product' or 'tails', from UF6 gas streams and having all of the following characteristics:

l. Unit resolution for mass greater than 320;

2. Ion sources constructed of or lined with nichrome or monel or nickel plated;

3. Electron bombardment ionization sources;

4. Collector system suitable for isotopic analysis.

5.7.11. Feed systems/product and tails withdrawal systems (MLIS)

Especially designed or prepared process systems or equipment for enrichment plants made of or protected by materials resistant to corrosion by UF_6, including:

(a) Feed autoclaves, ovens, or systems used for passing UF_6 to the enrichment process;

(b) Desublimers (or cold traps) used to remove UF_6 from the enrichment process for subsequent transfer upon heating;

(c) Solidification or liquefaction stations used to remove UF_6 from the enrichment process by compressing and converting UF_6 to a liquid or solid form;

(d) 'Product' or 'tails' stations used for transferring UF_6 into containers.

5.7.12. UF_6/carrier gas separation systems (MLIS)

Especially designed or prepared process systems for separating UF_6 from carrier gas. The carrier gas may be nitrogen, argon, or other gas.

EXPLANATORY NOTE

These systems may incorporate equipment such as:

(a) Cryogenic heat exchangers or cryoseparators capable of temperatures of -120^0C or less, or

(b) Cryogenic refrigeration units capable of temperatures of -120^0C or less, or

(c) UF_6 cold traps capable of temperatures of -20^0C or less.

5.7.13. Laser systems (AVLIS, MLIS and CRISLA)

Lasers or laser systems especially designed or prepared for the separation of uranium isotopes.

EXPLANATORY NOTE

The laser system for the AVLIS process usually consists of two lasers: a copper vapor laser and a dye laser. The laser system for MLIS usually consists of a CO_2 or excimer laser and a multi-pass optical cell with revolving mirrors at both ends. Lasers or laser systems for both processes require a spectrum frequency stabilizer for operation over extended periods of time.

The lasers and laser components in laser-based enrichment processes include the following:

Lasers, laser amplifiers, and oscillators as follows:

(a) Copper vapor lasers with 40 W or greater average power operating at wavelengths between 500 nm and 600 nm;

(b) Argon ion lasers with greater than 40 W average output power operating at wavelengths between 400 nm and 515 nm;

(c) Neodymium-doped (other than glass) lasers as follows:

(1) having an output wavelength between 1000 nm and 1100 nm, being pulse-excited and Q-switched with a pulse duration equal to or greater than 1 ns, having either of the following:

(a) a single-traverse mode output having an average output power exceeding 40 W;

(b) a multiple-traverse mode output having an average output power exceeding 50 W;

(2) operating at a wavelength between 1000 nm and 1100 nm and incorporating frequency doubling giving an output wavelength between 500 nm and 550 nm with an average power at the doubled frequency (new wavelength) of greater than 40 W;

(d) Tunable pulsed single-mode dye oscillators capable of an average power output of greater than 1W, a repetition rate greater than 1 kHz, a pulse less than 100ns, and a wavelength between 300 nm and 800 nm;

(e) Tunable pulsed dye laser amplifiers and oscillators, except single mode oscillators, with an average power output of greater than 30 W, a repetition rate greater than 1 kHz, a pulse width less than 100 ns, and a wavelength between 300 nm and 800 nm;

(f) Alexandrite lasers with a bandwidth of 0.005 nm or less, a repetition rate of greater than 125 Hz, and an average power output greater than 30 W operating at wavelengths between 720 nm and 800 nm;

(g) Pulsed carbon dioxide lasers with a repetition rate greater then 250 Hz, an average power output of greater than 500 W, and a pulse of less than 200 ns operating at wavelengths between 9000 nm and 11,000 nm;

(h) Pulsed excimer lasers (XeF, XeCl, KrF) with a repetition rate greater than 250 Hz, an average power output of greater than 500 W operating at wavelengths of between 240 and 360 nm;

(i) Para-hydrogen Raman shifters designed to operate at 16 ∝m output wavelength and at a repetition rate greater than 250 Hz.

5.8. Especially designed or prepared systems, equipment and components for use in plasma separation enrichment plants

INTRODUCTORY NOTE

In the plasma separation process, a plasma of uranium ions passes through an electric field tuned to the ^{235}U ion resonance frequency so that they preferentially absorb energy and increase the diameter of their corkscrew-like orbits. Ions with a large-diameter path are trapped to produce a product enriched in ^{235}U. The plasma, which is made by ionizing uranium vapor, is contained in a vacuum chamber with a high-strength magnetic field produced by a superconducting magnet. The main technological systems of the process include the uranium plasma generation system, the separator module with superconducting magnet, and metal removal systems for the collection of 'product' and 'tails'.

5.8.1. Microwave power sources and antennae

Especially designed or prepared microwave power sources and antennae for producing or accelerating ions and having the following characteristics: greater than 30 GHz frequency and greater than 50 kW mean power output for ion production.

5.8.2. Ion excitation coils

Especially designed or prepared radio frequency ion excitation coils for frequencies of more than 100 kHz and capable of handling more than 40 kW mean power.

5.8.3. Uranium plasma generation systems

Especially designed or prepared systems for the generation of uranium plasma, which may contain high-power strip or scanning electron beam guns with a delivered power on the target of more than 2.5 kW/cm.

5.8.4. Liquid uranium metal handling systems

Especially designed or prepared liquid metal handling systems for molten uranium or uranium alloys, consisting of crucibles and cooling equipment for the crucibles.

EXPLANATORY NOTE

The crucibles and other parts of this system that come into contact with molten uranium or uranium alloys are made of or protected by materials of suitable corrosion and heat resistance. Suitable materials include tantalum, yttria-coated graphite, graphite coated with other rare earth oxides or mixtures thereof.

5.8.5. Uranium metal 'product' and 'tails' collector assemblies

Especially designed or prepared 'product' and 'tails' collector assemblies for uranium metal in solid form. These collector assemblies are made of or protected by materials resistant to the heat and corrosion of uranium metal vapor, such as yttria-coated graphite or tantalum.

5.8.6. Separator module housings

Cylindrical vessels especially designed or prepared for use in plasma separation enrichment plants for containing the uranium plasma source, radio-frequency drive coil and the 'product' and 'tails' collectors.

EXPLANATORY NOTE

These housings have a multiplicity of ports for electrical feed-throughs, diffusion pump connections and instrumentation diagnostics and monitoring. They have provisions for opening and closure to allow for refurbishment of internal components and are constructed of a suitable non-magnetic material such as stainless steel.

5.9. Especially designed or prepared systems, equipment and components for use in electromagnetic enrichment plants

INTRODUCTORY NOTE

In the electromagnetic process, uranium metal ions produced by ionization of a salt feed material (typically UCl_4) are accelerated and passed through a magnetic field that has the

effect of causing the ions of different isotopes to follow different paths. The major components of an electromagnetic isotope separator include: a magnetic field for ion-beam diversion/separation of the isotopes, an ion source with its acceleration system, and a collection system for the separated ions. Auxiliary systems for the process include the magnet power supply system, the ion source high-voltage power supply system, the vacuum system, and extensive chemical handling systems for recovery of product and cleaning/recycling of components.

5.9.1. Electromagnetic isotope separators

Electromagnetic isotope separators especially designed or prepared for the separation of uranium isotopes, and equipment and components therefor, including:

(a) Ion sources

Especially designed or prepared single or multiple uranium ion sources consisting of a vapor source, ionizer, and beam accelerator, constructed of suitable materials such as graphite, stainless steel, or copper, and capable of providing a total ion beam current of 50 mA or greater.

(b) Ion collectors

Collector plates consisting of two or more slits and pockets especially designed or prepared for collection of enriched and depleted uranium ion beams and constructed of suitable materials such as graphite or stainless steel.

(c) Vacuum housings

Especially designed or prepared vacuum housings for uranium electromagnetic separators, constructed of suitable non-magnetic materials such as stainless steel and designed for operation at pressures of 0.1 Pa or lower.

EXPLANATORY NOTE

The housings are specially designed to contain the ion sources, collector plates and water-cooled liners and have provision for diffusion pump connections and opening and closure for removal and reinstallation of these components.

(d) Magnet pole pieces

Especially designed or prepared magnet pole pieces having a diameter greater than 2 m used to maintain a constant magnetic field within an electromagnetic isotope separator and to transfer the magnetic field between adjoining separators.

5.9.2. High voltage power supplies

Especially designed or prepared high-voltage power supplies for ion sources, having all of the following characteristics: capable of continuous operation, output voltage of 20,000 V or greater, output current of 1 A or greater, and voltage regulation of better than 0.01% over a time period of 8 hours.

5.9.3. Magnet power supplies

Especially designed or prepared high-power, direct current magnet power supplies having all of the following characteristics: capable of continuously producing a current output of 500 A or greater at a voltage of 100 V or greater and with a current or voltage regulation better than 0.01% over a period of 8 hours.

6. Plants for the production or concentration of heavy water, deuterium and deuterium compounds and equipment especially designed or prepared therefor

INTRODUCTORY NOTE

Heavy water can be produced by a variety of processes. However; the two processes that have proven to be commercially viable are the water - hydrogen sulphide exchange process (GS process) and the ammonia -hydrogen exchange process.

The GS process is based upon the exchange of hydrogen and deuterium between water and hydrogen sulphide within a series of towers which are operated with the top section cold and the bottom section hot. Water flows down the towers while the hydrogen sulphide gas circulates from the bottom to the top of the towers. A series of perforated trays are used to promote mixing between the gas and the water. Deuterium migrates to the water at low temperatures and to the hydrogen sulphide at high temperatures. Gas or water enriched in deuterium is removed from the first stage towers at the junction of the hot and cold sections and the process is repeated in subsequent stage towers. The product of the last stage, water enriched up to 30% in deuterium, is sent to a distillation unit to produce reactor grade heavy water: i.e., 99.75% deuterium oxide.

The ammonia - hydrogen exchange process can extract deuterium from synthesis gas through contact with liquid ammonia in the presence of a catalyst. The synthesis gas is fed into exchange towers and then to an ammonia converter. Inside the towers the gas flows from the bottom to the top while the liquid ammonia flows from the top to the bottom. The deuterium is stripped from the hydrogen in the synthesis gas and concentrated in the ammonia. The ammonia then flows into an ammonia cracker at the bottom of the tower while the gas flows into an ammonia converter at the top. Further enrichment takes place in subsequent stages and reactor grade heavy water is produced through final distillation. The synthesis gas feed can be provided by an ammonia plant that, in turn, can be constructed in association with a heavy water ammonia-hydrogen exchange plant. The ammonia - hydrogen exchange process can also use ordinary water as a feed source of deuterium.

Many of the key equipment items for heavy water production plants using the GS or the ammonia - hydrogen exchange processes are common to several segments of the chemical and petroleum industries. This is particularly so for small plants using the GS process. However, few of the items are available “off-the-shelf”. The GS and the ammonia - hydrogen processes require the handling of large quantities of flammable, corrosive and toxic fluids at elevated pressures. Accordingly, in establishing the design and operating standards for plants and equipment using these processes, careful attention to the materials selection and specifications is required to ensure long service life with high safety and reliability factors. The choice of scale is primarily a function of economics and need. Thus, most of the equipment items would be prepared according to the requirements of the customer. Finally, it should be noted that, in both the GS and the ammonia - hydrogen exchange processes, items of equipment which individually are not especially designed or prepared for heavy water production can be assembled into systems which are especially designed or prepared for producing heavy water. The catalyst production system used in the ammonia -hydrogen exchange process and water distillation systems

used for the final concentration of heavy water to reactor-grade in either process are examples of such systems.

The items of equipment which are especially designed or prepared for the production of heavy water utilizing either the water - hydrogen sulphide exchange process or the ammonia - hydrogen exchange process include the following:

6.1. Water - hydrogen sulphide exchange towers

Exchange towers fabricated from fine carbon steel (such as ASTM A516) with diameters of 6 m (20 ft) to 9 m (30 ft), capable of operating at pressures greater than or equal to 2 MPa (300 psi) and with a corrosive allowance of 6 mm or greater, especially designed or prepared for heavy water production utilizing the water-hydrogen sulphide exchange process.

6.2. Blowers and compressors

Single stage, low head (i.e., 0.2 MPa or 30 psi) centrifugal blowers or compressors for hydrogen-sulphide gas circulation (i.e.. gas containing more than 70% H_2S) especially designed or prepared for heavy water production utilizing the water-hydrogen sulphide exchange process. These blowers or compressors have a throughput capacity greater than or equal to 56 m^3 /second (120,000 SCFM) while operating at pressures greater than or equal to 1.8 MPa (260 psi) suction and have seals designed for wet H_2S service.

6.3. Ammonia - hydrogen exchange towers

Ammonia-hydrogen exchange towers greater than or equal to 35 m (114.3 ft) in height with diameters of 1.5 m (4.9 ft) to 2.5 m (8.2 ft) capable of operating at pressures greater than 15 Mpa (2225 psi) especially designed or prepared for heavy water production utilizing the ammonia -hydrogen exchange process. These towers also have at least one flanged, axial opening of the same diameter as the cylindrical part through which the tower internals can be inserted or withdrawn.

6.4. Tower internals and stage pumps

Tower internals and stage pumps especially designed or prepared for towers for heavy water production utilizing the ammonia-hydrogen exchange process. Tower internals include especially designed stage contactors which promote intimate gas/liquid contact. Stage pumps include especially designed submersible pumps for circulation of liquid ammonia within a contacting stage internal to the stage towers.

6.5. Ammonia crackers

Ammonia crackers with operating pressures greater than or equal to 3 MPa (450 psi) especially designed or prepared for heavy water production utilizing the ammonia - hydrogen exchange process.

6.6. Infrared absorption analyzers

Infrared absorption analyzers capable of “on-line” hydrogen/deuterium ratio analysis where deuterium concentrations are equal to or greater than 90%.

6.7. Catalytic burners

Catalytic burners for the conversion of enriched deuterium gas into heavy water especially designed or prepared for heavy water production utilizing the ammonia -hydrogen exchange process.

6.8. Complete heavy water upgrade systems or columns therefore

Complete heavy water upgrade systems, or columns therefore, especially designed or prepared for the upgrade of heavy water to reactor-grade deuterium concentration.

EXPLANATORY NOTE

These systems, which usually employ water distillation to separate heavy water from light water, are especially designed or prepared to produce reactor-grade heavy water (i.e. typically 99.75% deuterium oxide) from heavy water feedstock of lesser concentration.

7. Plants for the conversion of uranium and plutonium for use in the fabrication of fuel elements and the separation of uranium isotopes as defined in sections 4 and 5 respectively, and equipment especially designed or prepared therefor

EXPORTS

The export of the whole set of major items within this boundary will take place only in accordance with the procedures of the Memorandum. All of the plants, systems, and especially designed or prepared equipment within this boundary can be used for the processing, production, or use of special fissionable material.

7.1 Plants for the conversion of uranium and equipment especially designed or prepared therefor

INTRODUCTORY NOTE

Uranium conversion plants and systems may perform one or more transformations from one uranium chemical species to another, including: conversion of UO_3 to UO_2, conversion of uranium oxides to UF_4, UF_6 or UCL_4, conversion of UF_4 to UF_6, conversion of UF_6 to UF_4, conversion of UF_4 to uranium metal, and conversion of uranium fluorides to UO_2. Many of the key equipment items for uranium conversion plants are common to several segments of the chemical process industry. For example, the types of equipment employed in these processes may include: furnaces, rotary kilns, fluidized bed reactors, flame tower reactors, liquid centrifuges, distillation columns and liquid-liquid extraction columns. However, few of the items are available “off the shelf”; most would be prepared according to the requirements and specifications of the customer. In some instances, special design and construction considerations are required to address the corrosive properties of some of the chemicals handled (HF, F_2, CIF_3, and uranium fluorides) as well as nuclear criticality concerns. Finally, it should be noted that, in all of the uranium conversion processes, items of equipment which individually are not especially

designed or prepared for uranium conversion can be assembled into systems which are especially designed or prepared for use in uranium conversion.

7.1.1. Especially designed or prepared systems for the conversion of UO_3 to UF_6

EXPLANATORY NOTE

Conversion of UO_3 to UF_6 can be performed directly by fluorination. The process requires a source of fluorine gas or chlorine trifluoride.

7.1.2. Especially designed or prepared systems for the conversion of UO_3 to UO_2

EXPLANATORY NOTE

Conversion of UO_3 to UO_2 can be performed through reduction of UO_3 with cracked ammonia gas or hydrogen.

7.1.3. Especially designed or prepared systems for the conversion of UO_2 to UF_4

EXPLANATORY NOTE

Conversion of UO_2 to UF_4 can be performed by reacting UO_2 with hydrogen fluoride gas (HF) at 300-500°C.

7.1.4. Especially designed or prepared systems for the conversion of UF_4 to UF_6

EXPLANATORY NOTE

Conversion of UF_4 to UF_6 is performed by exothermic reaction with fluorine in a tower reactor. UF_6 is condensed from the hot effluent gases by passing the effluent stream through a cold trap cooled to -10°C. The process requires a source of fluorine gas.

7.1.5. Especially designed or prepared systems for the conversion of UF_4 to U metal

EXPLANATORY NOTE

Conversion of UF_4 to U metal is performed by reduction with magnesium (large batches) or calcium (small batches). The reaction is carried out at temperatures above the melting point of uranium (1130°C).

7.1.6. Especially designed or prepared systems for the conversion of UF_6 to UO_2

EXPLANATORY NOTE

Conversion of UF_6 to UO_2 can be performed by one of three processes. In the first, UF_6 is reduced and hydrolyzed to UO_2 using hydrogen and steam. In the second, UF_6 is hydrolyzed by solution in water, ammonia is added to precipitate ammonium diuranate, and the diuranate is reduced to UO_2 with hydrogen at 820°C. In the third process, gaseous UF_6, CO_2, and NH_3 are combined in water, precipitating ammonium uranyl carbonate. The ammonium uranyl cabonate is combined with steam and hydrogen at 500-600 °C to yield UO_2.

UF_6 to UO_2 conversion is often performed as the first stage of a fuel fabrication plant.

7.1.7. Especially designed or prepared systems for the conversion of UF_6 to UF_4

EXPLANATORY NOTE

Conversion of UF_6 to UF_4 is performed by reduction with hydrogen.

7.1.8. Especially designed or prepared systems for the conversion of UO_2 to UCI_4

EXPLANATORY NOTE

Conversion of UO_2 to UCI_4 can be performed by one of two processes. In the first, UO_2 is reacted with carbon tetrachloride (CCI_4) at approximately 400°C. In the second, UO_2 is reacted at approximately 700°C in the presence of carbon black (CAS 1333-86-4), carbon monoxide, and chlorine to yield UCI_4.

7.2 Plants for the conversion of plutonium and equipment especially designed or prepared therefor

INTRODUCTORY NOTE

Plutonium conversion plants and systems perform one or more transformations from one plutonium chemical species to another, including: conversion of plutonium nitrate to PuO_2, conversion of PuO_2 to PuF_4, and conversion of PuF_4 to plutonium metal. Plutonium conversion plants are usually associated with reprocessing facilities, but may also be associated with plutonium fuel fabrication facilities. Many of the key equipment items for plutonium conversion plants are common to several segments of the chemical process industry. For example, the types of equipment employed in these processes may include: furnaces, rotary kilns, fluidized bed reactors, flame tower reactors, liquid centrifuges, distillation columns and liquid-liquid extraction columns. Hot cells, glove boxes and remote manipulators may also be required. However, few of the items are available "off the shelf"; most would be prepared according to the requirements and specifications of the customer. Particular care in designing for the special radiological, toxicity and criticality hazards associated with plutonium is essential. In some instances, special design and construction considerations are required to address the corrosive properties of some of the chemicals handled (e.g. HF). Finally, it should be noted that, for all plutonium conversion processes, items of equipment which individually are not especially designed or prepared for plutonium conversion can be assembled into systems which are especially designed or prepared for use in plutonium conversion.

7.2.1 Especially designed or prepared systems for the conversion of plutonium nitrate to oxide

EXPLANATORY NOTE

The main functions involved in this process are: process feed storage and adjustment, precipitation and solid/liquor separation, calcination, product handling, ventilation, waste management, and process control. The process systems are particularly adapted so as to avoid criticality and radiation effects and to minimize toxicity hazards. In most reprocessing facilities, this process involves the conversion of plutonium nitrate to plutonium dioxide. Other processes can involve the precipitation of plutonium oxalate or plutonium peroxide.

7.2.2. Especially designed or prepared systems for plutonium metal production

EXPLANATORY NOTE

This process usually involves the fluorination of plutonium dioxide, normally with highly corrosive hydrogen fluoride, to produce plutonium fluoride, which is subse-

quently reduced using high purity calcium metal to produce metallic plutonium and a calcium fluoride slag. The main functions involved in this process are fluorination (e.g. involving equipment fabricated or lined with a precious metal), metal reduction (e.g. employing ceramic crucibles), slag recovery, product handling, ventilation, waste management and process control. The process systems are particularly adapted so as to avoid criticality and radiation effects and to minimize toxicity hazards. Other processes include the fluorination of plutonium oxalate or plutonium peroxide followed by reduction to metal.

ANNEX C

CRITERIA FOR LEVELS OF PHYSICAL PROTECTION

1. The purpose of physical protection of nuclear materials is to prevent unauthorized use and handling of these materials. Paragraph 3(a) of the Guidelines document calls for agreement among suppliers on the levels of protection to be ensured in relation to the type of materials, and equipment and facilities containing these materials, taking account of international recommendations.

2. Paragraph 3(b) of the Guidelines document states that implementation of measures of physical protection in the recipient country is the responsibility of the Government of that country. However, the levels of physical protection on which these measures have to be based should be the subject of an agreement between supplier and recipient. In this context these requirements should apply to all States.

3. The document INFCIRC/225 of the International Atomic Energy Agency entitled "The Physical Protection of Nuclear Material" and similar documents which from time to time are prepared by international groups of experts and updated as appropriate to account for changes in the state of the art and state of knowledge with regard to physical protection of nuclear material are a useful basis for guiding recipient States in designing a system of physical protection measures and procedures.

4. The categorization of nuclear material presented in the attached table or as it may be updated from time to time by mutual agreement of suppliers shall serve as the agreed basis for designating specific levels of physical protection in relation to the type of materials, and equipment and facilities containing these materials, pursuant to paragraph 3(a) and 3(b) of the Guidelines document.

5. The agreed levels of physical protection to be ensured by the competent national authorities in the use, storage and transportation of the materials listed in the attached table shall as a minimum include protection characteristics as follows:

CATEGORY III

Use and storage within an area to which access is controlled.

Transportation under special precautions including prior arrangements among sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

CATEGORY II

Use and storage within a protected area to which access is controlled, i.e., an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection.

Transportation under special precautions including prior arrangements among sender, recipient, and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

CATEGORY I

Materials in this category shall be protected with highly reliable systems against unauthorized use as follows:

Use and storage within a highly protected area, i.e., a protected area as defined for Category II above, to which, in addition, access is restricted to persons whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces.

Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of material.

Transportation under special precautions as identified above for transportation of Category II and III materials and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces.

6. Suppliers should request identification by recipients of those agencies or authorities having responsibility for ensuring that levels of protection are adequately met and having responsibility for internally co-ordinating response/recovery operations in the event of unauthorized use or handling of protected materials. Suppliers and recipients should also designate points of contact within their national authorities to co-operate on matters of out-of-country transportation and other matters of mutual concern.

6. Export Controls for Dual-Use Items Through the Nuclear Suppliers Group: Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology (INFCIRC 254/Rev 7, part 2, as of February 2006)

OBJECTIVE

1. With the objective of averting the proliferation of nuclear weapons and preventing acts of nuclear terrorism, suppliers have had under consideration procedures in relation to the transfer of certain equipment, materials, software, and related technology that could make a major contribution to a "nuclear explosive activity," an "unsafeguarded nuclear fuel- cycle activity" or acts of nuclear terrorism. In this connection, suppliers have agreed on the following principles, common definitions, and an export control list of equipment, materials, software, and related technology. The Guidelines are not designed to impede international co-operation as long as such co-operation will not contribute to a nuclear explosive activity, an unsafeguarded nuclear fuel- cycle activity or acts of nuclear terrorism. Suppliers intend to implement the Guidelines in accordance with national legislation and relevant international commitments.

BASIC PRINCIPLE

2. Suppliers should not authorize transfers of equipment, materials, software, or related technology identified in the Annex:

- for use in a non-nuclear-weapon state in a nuclear explosive activity or an unsafeguarded nuclear fuel- cycle activity, or

- in general, when there is an unacceptable risk of diversion to such an activity, or when the transfers are contrary to the objective of averting the proliferation of nuclear weapons, or

- when there is an unacceptable risk of diversion to acts of nuclear terrorism.

EXPLANATION OF TERMS

3. (a) "Nuclear explosive activity" includes research on or development, design, manufacture, construction, testing or maintenance of any nuclear explosive device or components or subsystems of such a device.

(b) "Unsafeguarded nuclear fuel-cycle activity" includes research on or development, design, manufacture, construction, operation or maintenance of any reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, plant for the separation of isotopes of source or special fissionable material, or separate storage installation, where there is no obligation to accept International Atomic Energy Agency (IAEA) safeguards at the relevant facility or installation, existing or future, when it contains any source or special fissionable material; or of any heavy water production plant where there is no obligation to accept IAEA safeguards on any nuclear material produced by or

used in connection with any heavy water produced therefrom; or where any such obligation is not met.

ESTABLISHMENT OF EXPORT LICENSING PROCEDURES

4. Suppliers should have in place legal measures to ensure the effective implementation of the Guidelines, including export licensing regulations, enforcement measures, and penalties for violations. In considering whether to authorize transfers, suppliers should exercise prudence in order to carry out the Basic Principle and should take relevant factors into account, including:

(a) Whether the recipient state is a party to the Nuclear Non-Proliferation Treaty (NPT) or to the Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco), or to a similar international legally- binding nuclear non- proliferation agreement, and has an IAEA safeguards agreement in force applicable to all its peaceful nuclear activities;

(b) Whether any recipient state that is not party to the NPT, Treaty of Tlatelolco, or a similar international legally- binding nuclear non-proliferation agreement has any facilities or installations listed in paragraph 3(b) above that are operational or being designed or constructed that are not, or will not be, subject to IAEA safeguards;

(c) Whether the equipment, materials, software, or related technology to be transferred is appropriate for the stated end-use and whether that stated end-use is appropriate for the end-user;

(d) Whether the equipment, materials, software, or related technology to be transferred is to be used in research on or development, design, manufacture, construction, operation, or maintenance of any reprocessing or enrichment facility;

(e) Whether governmental actions, statements, and policies of the recipient state are supportive of nuclear non-proliferation and whether the recipient state is in compliance with its international obligations in the field of non- proliferation;

(f) Whether the recipients have been engaged in clandestine or illegal procurement activities; and

(g) Whether a transfer has not been authorized to the end-user or whether the end-user has diverted for purposes inconsistent with the Guidelines any transfer previously authorized.

(h) Whether there is reason to believe that there is a risk of diversion to acts of nuclear terrorism.

(i) Whether there is a risk of retransfers of equipment, material, software, or related technology identified in the Annex or of transfers of any replica thereof contrary to the Basic Principle, as a result of a failure by the recipient State to develop and maintain appropriate, effective national export and transshipment controls, as identified by UNSC Resolution 1540.

5. Suppliers should ensure that their national legislation requires an authorisation for the transfer of items not listed in the Annex if the items in question are or may be intended, in their entirety or in part, for use in connection with a “nuclear explosive activity.” Suppliers will implement such an authorisation requirement in accordance

with their domestic licensing practices. Suppliers are encouraged to share information on "catch all" denials.

CONDITIONS FOR TRANSFERS

6. In the process of determining that the transfer will not pose any unacceptable risk of diversion, in accordance with the Basic Principle and to meet the objectives of the Guidelines, the supplier should obtain, before authorizing the transfer and in a manner consistent with its national law and practices, the following:

(a) a statement from the end- user specifying the uses and end- use locations of the proposed transfers; and

(b) an assurance explicitly stating that the proposed transfer or any replica thereof will not be used in any nuclear explosive activity or unsafeguarded nuclear fuel- cycle activity.

CONSENT RIGHTS OVER RETRANSFERS

7. Before authorizing the transfer of equipment, materials, software, or related technology identified in the Annex to a country not adhering to the Guidelines, suppliers should obtain assurances that their consent will be secured, in a manner consistent with their national law and practices, prior to any retransfer to a third country of the equipment, materials, software, or related technology, or any replica thereof.

CONCLUDING PROVISIONS

8. The supplier reserves to itself discretion as to the application of the Guidelines to other items of significance in addition to those identified in the Annex, and as to the application of other conditions for transfer that it may consider necessary in addition to those provided for in paragraph 5 of the Guidelines.

9. In furtherance of the effective implementation of the Guidelines, suppliers should, as necessary and appropriate, exchange relevant information and consult with other states adhering to the Guidelines.

10. In the interest of international peace and security, the adherence of all states to the Guidelines would be welcome.

ANNEX: LIST OF NUCLEAR-RELATED DUAL-USE EQUIPMENT, MATERIALS, SOFTWARE, AND RELATED TECHNOLOGY

ANNEX

Note: The International System of Units (SI) is used in this Annex. In all cases the physical quantity defined in SI units should be considered the official recommended control value. However, some machine tool parameters are given in their customary units, which are not SI.

Commonly used abbreviations (and their prefixes denoting size) in this Annex are as follows:

A	ampere(s)
Bq	becquerel(s)
ºC	degree(s) Celsius
CAS	chemical abstracts service
Ci	curie(s)
cm	centimeter(s)
dB	decibel(s)
dBm	decibel referred to 1 milliwatt
g	gram(s); also, acceleration of gravity (9.81 m/s2)
GBq	gigabecquerel(s)
GHz	gigahertz
GPa	gigapascal(s)
Gy	gray
h	hour(s)
Hz	hertz
J	joule(s)
K	kelvin
keV	thousand electron volt(s)
kg	kilogram(s)
kHz	kilohertz
kN	kilonewton(s)
kPa	kilopascal(s)
kV	kilovolt(s)
kW	kilowatt(s)
m	meter(s)
mA	milliampere(s)
MeV	million electron volt(s)
MHz	megahertz
ml	milliliter(s)
mm	millimeter(s)
MPa	megapascal(s)
mPa	millipascal(s)

MW	megawatt(s)
µF	microfarad(s)
µm	micrometer(s)
µs	microsecond(s)
N	newton(s)
nm	nanometer(s)
ns	nanosecond(s)
nH	nanohenry(ies)
ps	picosecond(s)
RMS	root mean square
rpm	- revolutions per minute
s	second(s)
T	tesla(s)
TIR	total indicator reading
V	volt(s)
W	watt(s)

GENERAL NOTE

The following paragraphs are applied to the List of Nuclear-Related Dual-Use Equipment, Material, Software, and Related Technology.

1. The description of any item on the List includes that item in either new or second-hand condition.

2. When the description of any item on the List contains no qualifications or specifications, it is regarded as including all varieties of that item. Category captions are only for convenience in reference and do not affect the interpretation of item definitions.

3. The object of these controls should not be defeated by the transfer of any non-controlled item (including plants) containing one or more controlled components when the controlled component or components are the principal element of the item and can feasibly be removed or used for other purposes.

> Note: In judging whether the controlled component or components are to be considered the principal element, governments should weigh the factors of quantity, value, and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the item being procured.

4. The object of these controls should not be defeated by the transfer of component parts. Each government will take such action as it can to achieve this aim and will continue to seek a workable definition for component parts, which could be used by all the suppliers.

TECHNOLOGY CONTROLS

The transfer of "technology" is controlled according to the Guidelines and as described in each section of the Annex. "Technology" directly associated with any item in the Annex will be subject to as great a degree of scrutiny and control as will the item itself, to the extent permitted by national legislation.

The approval of any Annex item for export also authorizes the export to the same end user of the minimum "technology" required for the installation, operation, maintenance, and repair of the item.

Note: Controls on "technology" transfer do not apply to information "in the public domain" or to "basic scientific research".

GENERAL SOFTWARE NOTE

The transfer of "software" is controlled according to the Guidelines and as described in the Annex.

Note: Controls on "software" transfers do not apply to "software" as follows:

1. Generally available to the public by being:

a. Sold from stock at retail selling points without restriction; and

b. Designed for installation by the user without further substantial support by the supplier; or

2. "In the public domain".

DEFINITIONS

"Accuracy" --

Usually measured in terms of inaccuracy, defined as the maximum deviation, positive or negative, of an indicated value from an accepted standard or true value.

"Angular position deviation" --

The maximum difference between angular position and the actual, very accurately measured angular position after the workpiece mount of the table has been turned out of its initial position. (Ref. VDI/VDE 2617 Draft: "Rotary table on coordinate measuring machines").

"Basic scientific research" --

Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena and observable facts, not primarily directed toward a specific practical aim or objective.

"Contouring control" --

Two or more "numerically controlled" motions operating in accordance with instructions that specify the next required position and the required feed rates to that position. These feed rates are varied in relation to each other so that a desired contour is generated. (Ref. ISO 2806-1980 as amended)

"Development" --

is related to all phases before "production" such as:

- design
- design research
- design analysis
- design concepts
- assembly and testing of prototypes
- pilot production schemes
- design data
- process of transforming design data into a product
- configuration design
- integration design
- layouts

"Fibrous or filamentary materials" --

means continuous ´monofilaments´, ´yarns´, ´rovings´, ´tows´ or ´tapes´.

N.B.:

1. ´Filament´ or ´monofilament´ --
is the smallest increment of fiber, usually several µm in diameter.
2. ´Roving´ - -
is a bundle (typically 12-120) of approximately parallel ´strands´.
3. ´Strand´ --
is a bundle of ´filaments´ (typically over 200) arranged approximately parallel.
4. ´Tape´ --
is a material constructed of interlaced or unidirectional ´filaments´, ´strands´, ´rovings´, ´tows´ or ´yarns´, etc., usually preimpregnated with resin.
5. ´Tow´ --
is a bundle of ´filaments´, usually approximately parallel.
6. ´Yarn´ --
is a bundle of twisted ´strands´.
'Filament' --
See "Fibrous or filamentary materials".

"In the public domain" --

"In the public domain", as it applies herein, means "technology" or "software" that has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove "technology" or "software" from being "in the public domain".)

"Linearity" --

(Usually measured in terms of non- linearity) is the maximum deviation of the actual characteristic (average of upscale and downscale readings), positive or negative, from a straight line so positioned as to equalize and minimize the maximum deviations.

"Measurement uncertainty" --

The characteristic parameter which specifies in what range around the output value the correct value of the measurable variable lies with a confidence level of 95%. It includes the uncorrected systematic deviations, the uncorrected backlash, and the random deviations. (Ref. VDI/VDE 2617)

"Microprogram" --

A sequence of elementary instructions, maintained in a special storage, the execution of which is initiated by the introduction of its reference instruction into an instruction register.

'Monofilament' --

See "Fibrous or filamentary materials".

"Numerical control" --

The automatic control of a process performed by a device that makes use of numeric data usually introduced as the operation is in progress. (Ref. ISO 2382)

"Positioning accuracy" --

of "numerically controlled" machine tools is to be determined and presented in accordance with Item 1.B.2., in conjunction with the requirements below:

(a) Test conditions (ISO 230/2 (1988), paragraph 3):

(1) For 12 hours before and during measurements, the machine tool and accuracy measuring equipment will be kept at the same ambient temperature. During the premeasurement time, the slides of the machine will be continuously cycled identically to the way they will be cycled during the accuracy measurements;

(2) The machine shall be equipped with any mechanical, electronic, or software compensation to be exported with the machine;

(3) Accuracy of measuring equipment for the measurements shall be at least four times more accurate than the expected machine tool accuracy;

(4) Power supply for slide drives shall be as follows:

(i) Line voltage variation shall not be greater than ± 10% of nominal rated voltage;

(ii) Frequency variation shall not be greater than ± 2 Hz of normal frequency;

(iii) Lineouts or interrupted service are not permitted.

(b) Test Program (paragraph 4):

(1) Feed rate (velocity of slides) during measurement shall be the rapid traverse rate;

N.B.: In the case of machine tools which generate optical quality surfaces, the feed rate shall be equal to or less than 50 mm per minute;

(2) Measurements shall be made in an incremental manner from one limit of the axis travel to the other without returning to the starting position for each move to the target position;

(3) Axes not being measured shall be retained at mid-travel during test of an axis.

(c) Presentation of the test results (paragraph 2):

The results of the measurements must include:

(1) "positioning accuracy" (A) and

(2) The mean reversal error (B).

"Production" --

means all production phases such as:

- construction
- production engineering
- manufacture
- integration
- assembly (mounting)
- inspection
- testing
- quality assurance

"Program" --

A sequence of instructions to carry out a process in, or convertible into, a form executable by an electronic computer.

"Resolution" --

The least increment of a measuring device; on digital instruments, the least significant bit. (Ref. ANSI B-89.1.12)

“Roving” --

See "Fibrous or filamentary materials".

"Software" --

A collection of one or more "programs" or "microprograms" fixed in any tangible medium of expression.

'Strand' --

See "Fibrous or filamentary materials".

'Tape" --

See "Fibrous or filamentary materials".

"Technical assistance" --

"Technical assistance" may take forms such as: instruction, skills, training, working knowledge, consulting services.

Note: "Technical assistance" may involve transfer of "technical data".

"Technical data" --

"Technical data" may take forms such as blueprints, plans, diagrams, models, formulae, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

"Technology" --

means specific information required for the "development", "production", or "use" of any item contained in the List. This information may take the form of "technical data" or "technical assistance".

"Tow" --

See "Fibrous or filamentary materials".

"Use" --

Operation, installation (including on- site installation), maintenance (checking), repair, overhaul, and refurbishing.

"Yarn" --

See "Fibrous or filamentary materials".

ANNEX CONTENTS

1. INDUSTRIAL EQUIPMENT

1.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

3. URANIUM ISOTOPE SEPARATION EQUIPMENT AND COMPONENTS

(Other than Trigger List Items)

3.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

3.B. TEST AND PRODUCTION EQUIPMENT

6. COMPONENTS FOR NUCLEAR EXPLOSIVE DEVICES

6.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

6.C. MATERIALS

1. INDUSTRIAL EQUIPMENT

1.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

1.A.1. High-density (lead glass or other) radiation shielding windows, having all of the following characteristics, and specially designed frames therefor:

a. A `cold area´ greater than 0.09 m^2 ;

b. A density greater than 3 g/cm^3 ; and

c. A thickness of 100 mm or greater.

Technical Note: In Item 1.A.1.a. the term `cold area' means the viewing area of the window exposed to the lowest level of radiation in the design application.

1.A.2. Radiation-hardened TV cameras, or lenses therefor, specially designed or rated as radiation hardened to withstand a total radiation dose greater than 5 x 10 4 Gy (silicon) without operational degradation.

Technical Note: The term Gy (silicon) refers to the energy in Joules per kilogram absorbed by an unshielded silicon sample when exposed to ionizing radiation.

1.A.3. 'Robots', 'end-effectors' and control units as follows:

a. 'Robots' or 'end-effectors' having either of the following characteristics:

1. Specially designed to comply with national safety standards applicable to handling high explosives (for example, meeting electrical code ratings for high explosives); or

2. Specially designed or rated as radiation hardened to withstand a total radiation dose greater than 5 x 10^4 Gy (silicon) without operational degradation;

Technical Note: The term Gy (silicon) refers to the energy in Joules per kilogram absorbed by an unshielded silicon sample when exposed to ionizing radiation.

b. Control units specially designed for any of the 'robots' or 'end-effectors' specified in Item 1.A.3.a.

Note: Item 1.A.3. does not control 'robots' specially designed for non-nuclear industrial applications such as automobile paint-spraying booths.

Technical Notes:

1. ´Robots´

In Item 1.A.3. 'robot' means a manipulation mechanism, which may be of the continuous path or of the point-to-point variety, may use ´sensors´, and has all of the following characteristics:

(a) is multifunctional;

(b) is capable of positioning or orienting material, parts, tools, or special devices through variable movements in three-dimensional space;

(c) incorporates three or more closed or open loop servo-devices which may include stepping motors; and

(d) has ´user-accessible programmability´ by means of teach/playback method or by means of an electronic computer which may be a programmable logic controller, i.e., without mechanical intervention.

N.B.1:

In the above definition ´sensors´ means detectors of a physical phenomenon, the output of which (after conversion into a signal that can be interpreted by a control unit) is able to generate "programs" or modify programmed instructions or numerical "program" data. This includes 'sensors' with machine vision, infrared imaging, acoustical imaging, tactile feel, inertial position measuring, optical or acoustic ranging or force or torque measuring capabilities.

N.B.2:

In the above definition ´user-accessible programmability´ means the facility allowing a user to insert, modify or replace "programs" by means other than:

(a) a physical change in wiring or interconnections; or

(b) the setting of function controls including entry of parameters.

N.B.3:

The above definition does not include the following devices:

(a) Manipulation mechanisms which are only manually/teleoperator controllable;

(b) Fixed sequence manipulation mechanisms which are automated moving devices operating according to mechanically fixed programmed motions. The "program" is mechanically limited by fixed stops, such as pins or cams. The sequence of motions and the selection of paths or angles are not variable or changeable by mechanical, electronic, or electrical means;

(c) Mechanically controlled variable sequence manipulation mechanisms which are automated moving devices operating according to mechanically fixed programmed motions. The "program" is mechanically limited by fixed, but adjustable, stops such as pins or cams. The sequence of motions and the selection of paths or angles are variable within the fixed "program" pattern. Variations or modifications of the "program" pattern (e.g., changes of pins or exchanges of cams) in one or more motion axes are accomplished only through mechanical operations;

(d) Non-servo-controlled variable sequence manipulation mechanisms which are automated moving devices, operating according to mechanically

fixed programmed motions. The "program" is variable but the sequence proceeds only by the binary signal from mechanically fixed electrical binary devices or adjustable stops;

(e) Stacker cranes defined as Cartesian coordinate manipulator systems manufactured as an integral part of a vertical array of storage bins and designed to access the contents of those bins for storage or retrieval.

2. 'End-effectors'

In Item 1.A.3. 'end-effectors' are grippers, ´active tooling units´, and any other tooling that is attached to the base plate on the end of a 'robot' manipulator arm.

N.B.:

In the above definition ´active tooling units´ is a device for applying motive power, process energy or sensing to the work piece.

1.A.4. Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells, having either of the following characteristics:

a. A capability of penetrating 0.6 m or more of hot cell wall (through-the-wall operation); or

b. A capability of bridging over the top of a hot cell wall with a thickness of 0.6 m or more (over-the-wall operation).

Technical Note: Remote manipulators provide translation of human operator actions to a remote operating arm and terminal fixture. They may be of a master/slave type or operated by joystick or keypad.

1.B. TEST AND PRODUCTION EQUIPMENT

1.B.1. Flow-forming machines, spin-forming machines capable of flow-forming functions, and mandrels, as follows:

a. Machines having both of the following characteristics:

1. Three or more rollers (active or guiding); and

2. Which, according to the manufacturer’s technical specification, can be equipped with "numerical control" units or a computer control;

b. Rotor-forming mandrels designed to form cylindrical rotors of inside diameter between 75 and 400 mm.

Note: Item 1.B.1.a. includes machines which have only a single roller designed to deform metal plus two auxiliary rollers which support the mandrel, but do not participate directly in the deformation process.

1.B.2. Machine tools, as follows, and any combination thereof, for removing or cutting metals, ceramics, or composites, which, according to the manufacturer’s technical specifications, can be equipped with electronic devices for simultaneous "contouring control" in two or more axes:

N.B.: For "numerical control" units controlled by their associated "software", see Item 1.D.3.

a. Machine tools for turning, that have "positioning accuracies" with all compensations available better (less) than 6 µm according to ISO 230/2 (1988) along any linear axis (overall positioning) for machines capable of machining diameters greater than 35 mm;

Note: Item 1.B.2.a. does not control bar machines (Swissturn), limited to machining only bar feed thru, if maximum bar diameter is equal to or less than 42 mm and there is no capability of mounting chucks. Machines may have drilling and/or milling capabilities for machining parts with diameters less than 42 mm.

b. Machine tools for milling, having any of the following characteristics:

1. "Positioning accuracies" with all compensations available better (less) than 6 µm according to ISO 230/2 (1988) along any linear axis (overall positioning); or

2. Two or more contouring rotary axes;

3. Five or more axes which can be coordinated simultaneously for “contouring control”.

Note: Item 1.B.2.b. does not control milling machines having both of the following characteristics:

1. X-axis travel greater than 2 m; and

2. Overall "positioning accuracy" on the x-axis worse (more) than 30 µm according to ISO 230/2 (1988).

c. Machine tools for grinding, having any of the following characteristics:

1. "Positioning accuracies" with all compensations available better (less) than 4 µm according to ISO 230/2 (1988) along any linear axis (overall positioning); or

2. Two or more contouring rotary axes;

3. Five or more axes which can be coordinated simultaneously for “contouring control”.

Note: Item 1.B.2.c. does not control grinding machines as follows:

1. Cylindrical external, internal, and external-internal grinding machines having all the following characteristics:

a. Limited to a maximum workpiece capacity of 150 mm outside diameter or length; and;

b. Axes limited to x, z and c.

2. Jig grinders that do not have a z-axis or a w-axis with an overall positioning accuracy less (better) than 4 microns. Positioning accuracy is according to ISO 230/2 (1988).

d. Non-wire type Electrical Discharge Machines (EDM) that have two or more contouring rotary axes and that can be coordinated simultaneously for "contouring control".

Notes:

1. Stated "positioning accuracy" levels derived under the following procedures from measurements made according to ISO 230/2 (1988) or national equivalents may be used for each machine tool model if provided to, and accepted by, national authorities instead of individual machine tests.

Stated "positioning accuracy" are to be derived as follows:

a. Select five machines of a model to be evaluated;

b. Measure the linear axis accuracies according to ISO 230/2 (1988);

c. Determine the accuracy values (A) for each axis of each machine. The method of calculating the accuracy value is described in the ISO 230/2 (1988) standard;

d. Determine the average accuracy value of each axis. This average value becomes the stated "positioning accuracy" of each axis for the model ($\hat{A}_x$, $\hat{A}_y$...);

e. Since Item 1.B.2. refers to each linear axis, there will be as many stated "positioning accuracy" values as there are linear axes;

f. If any axis of a machine tool not controlled by Items 1.B.2.a., 1.B.2.b., or 1.B.2.c. has a stated "positioning accuracy" of 6 µm or better (less) for grinding machines, and 8 µm or better (less) for milling and turning machines, both according to ISO 230/2 (1988), then the builder should be required to reaffirm the accuracy level once every eighteen months.

2. Item 1.B.2. does not control special purpose machine tools limited to the manufacture of any of the following parts:

a. Gears

b. Crankshafts or cam shafts

c. Tools or cutters

d. Extruder worms

Technical Notes:

1. Axis nomenclature shall be in accordance with International Standard ISO 841, "Numerical Control Machines - Axis and Motion Nomenclature".

2. Not counted in the total number of contouring axes are secondary parallel contouring axes (e.g., the w-axis on horizontal boring mills or a secondary rotary axis the centerline of which is parallel to the primary rotary axis).

3. Rotary axes do not necessarily have to rotate over 360 degrees. A rotary axis can be driven by a linear device, e.g., a screw or a rack-and-pinion.

4. For the purposes of 1.B.2. the number of axes which can be coordinated simultaneously for "contouring control" is the number of axes along or around which, during processing of the workpiece, simultaneous and interrelated motions are performed between the workpiece and a tool. This does not include any additional axes along or around which other relative motions within the machine are performed, such as:

a. Wheel-dressing systems in grinding machines;

b Parallel rotary axes designed for mounting of separate workpieces;

c. Co-linear rotary axes designed for manipulating the same workpiece by holding it in a chuck from different ends.

5. A machine tool having at least 2 of the 3 turning, milling or grinding capabilities (e.g., a turning machine with milling capability) must be evaluated against each applicable entry, 1.B.2.a., 1.B.2.b. and 1.B.2.c.

6. Items 1.B.2.b.3 and 1.B.2.c.3 include machines based on a parallel linear kinematic design (e.g., hexapods) that have 5 or more axes none of which are rotary axes.

1.B.3. Dimensional inspection machines, instruments, or systems, as follows:

a. Computer controlled or numerically controlled dimensional inspection machines having both of the following characteristics:

1. Two or more axes; and

2. A one-dimensional length "measurement uncertainty" equal to or better (less) than (1.25 + L/1000) μm tested with a probe of an "accuracy" of better (less) than 0.2 μm (L is the measured length in millimeters) (Ref: VDI/VDE 2617 parts 1 and 2);

b. 'Linear displacement' measuring instruments, as follows:

1. Non-contact type measuring systems with a "resolution" equal to or better (less) than 0.2 μm within a measuring range up to 0.2 mm;

2. Linear variable differential transformer (LVDT) systems having both of the following characteristics:

a. "Linearity" equal to or better (less) than 0.1% within a measuring range up to 5 mm; and

b. Drift equal to or better (less) than 0.1% per day at a standard ambient test room temperature ± 1 K;

3. Measuring systems having both of the following characteristics:

a. Contain a laser; and

b. Maintain for at least 12 hours, over a temperature range of ± 1 K around a standard temperature and a standard pressure:

1. A "resolution" over their full scale of 0.1 μm or better; and

2. With a "measurement uncertainty" equal to or better (less) than (0.2 + L/2000) μm (L is the measured length in millimeters);

Note: Item 1.B.3.b.3. does not control measuring interferometer systems, without closed or open loop feedback, containing a laser to measure slide movement errors of machine tools, dimensional inspection machines, or similar equipment.
Technical Note: In Item 1.B.3.b. 'linear displacement' means the change of distance between the measuring probe and the measured object.

c. Angular displacement measuring instruments having an "angular position deviation" equal to or better (less) than 0.00025°;

Note: Item 1.B.3.c. does not control optical instruments, such as autocollimators, using collimated light (e.g., laser light) to detect angular displacement of a mirror.

d. Systems for simultaneous linear-angular inspection of hemishells, having both of the following characteristics:

1. "Measurement uncertainty" along any linear axis equal to or better (less) than 3.5 μm per 5 mm; and

2. "Angular position deviation" equal to or less than 0.02°.

Notes:
1. Item 1.B.3. includes machine tools that can be used as measuring machines if they meet or exceed the criteria specified for the measuring machine function.
2. Machines described in Item 1.B.3. are controlled if they exceed the threshold specified anywhere within their operating range.
Technical Notes:
1. The probe used in determining the measurement uncertainty of a dimensional inspection system shall be as described in VDI/VDE 2617 parts 2, 3 and 4.

2. All parameters of measurement values in this item represent plus/minus, i.e., not total band.

1.B.4. Controlled atmosphere (vacuum or inert gas) induction furnaces, and power supplies therefor, as follows:

a. Furnaces having all of the following characteristics:

1. Capable of operation at temperatures above 1123 K (850 °C);

2. Induction coils 600 mm or less in diameter; and

3. Designed for power inputs of 5 kW or more;
Note: Item 1.B.4.a. does not control furnaces designed for the processing of semiconductor wafers.

b. Power supplies, with a specified output power of 5 kW or more, specially designed for furnaces specified in Item 1.B.4.a.

1.B.5. ´Isostatic presses´, and related equipment, as follows:

a. ´Isostatic presses´ having both of the following characteristics:

1. Capable of achieving a maximum working pressure of 69 MPa or greater; and

2. A chamber cavity with an inside diameter in excess of 152 mm;

b. Dies, molds, and controls specially designed for the ´isostatic presses´ specified in Item 1.B.5.a.

Technical Notes:
1. In Item 1.B.5. ´Isostatic presses' means equipment capable of pressurizing a closed cavity through various media (gas, liquid, solid particles, etc.) to create equal pressure in all directions within the cavity upon a workpiece or material.
2. In Item 1.B.5. the inside chamber dimension is that of the chamber in which both the working temperature and the working pressure are achieved and does not include fixtures. That dimension will be the smaller of either the inside diameter of the pressure chamber or the inside diameter of the insulated furnace chamber, depending on which of the two chambers is located inside the other.

1.B.6. Vibration test systems, equipment, and components as follows:

a. Electrodynamic vibration test systems, having all of the following characteristics:

1. Employing feedback or closed loop control techniques and incorporating a digital control unit;

2. Capable of vibrating at 10 g RMS or more between 20 and 2000 Hz; and

3. Capable of imparting forces of 50 kN or greater measured ´bare table´;

b. Digital control units, combined with "software" specially designed for vibration testing, with a real-time bandwidth greater than 5 kHz and being designed for a system specified in Item 1.B.6.a.;

c. Vibration thrusters (shaker units), with or without associated amplifiers, capable of imparting a force of 50 kN or greater measured ´bare table´, which are usable for the systems specified in Item 1.B.6.a.;

d. Test piece support structures and electronic units designed to combine multiple shaker units into a complete shaker system capable of providing an effective combined force of 50 kN or greater, measured ´bare table´, which are usable for the systems specified in Item 1.B.6.a.

Technical Note: In Item 1.B.6. ´bare table´ means a flat table, or surface, with no fixtures or fittings.

1.B.7. Vacuum or other controlled atmosphere metallurgical melting and casting furnaces and related equipment, as follows:

a. Arc remelt and casting furnaces having both of the following characteristics:

1. Consumable electrode capacities between 1000 and 20000 cm^3 ; and

2. Capable of operating with melting temperatures above 1973 K (1700 °C);

b. Electron beam melting furnaces and plasma atomization and melting furnaces, having both of the following characteristics:

1. A power of 50 kW or greater; and

2. Capable of operating with melting temperatures above 1473 K (1200 °C);

c. Computer control and monitoring systems specially configured for any of the furnaces specified in Item 1.B.7.a. or 1.B.7.b.

1.C. MATERIALS

None.

1.D. SOFTWARE

1.D.1. "Software" specially designed for the "use" of equipment specified in Item 1.A.3., 1.B.1., 1.B.3., 1.B.5., 1.B.6.a., 1.B.6.b., 1.B.6.d. or 1.B.7.

Note: "Software" specially designed for systems specified in Item 1.B.3.d. includes "software" for simultaneous measurements of wall thickness and contour.

1.D.2. "Software" specially designed or modified for the "development", "production", or "use" of equipment specified in Item 1.B.2.

1.D.3. "Software" for any combination of electronic devices or systems enabling such device(s) to function as a "numerical control" unit capable of controlling five or more interpolating axes that can be coordinated simultaneously for "contouring control".

Notes:

1. "Software" is controlled whether exported separately or residing in a "numerical control" unit or any electronic device or system.

2. Item 1.D.3. does not control "software" specially designed or modified by the manufacturers of the control unit or machine tool to operate a machine tool that is not specified in Item 1.B.2.

1.E. TECHNOLOGY

1.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 1.A. through 1.D.

2. MATERIALS

2.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

2.A.1. Crucibles made of materials resistant to liquid actinide metals, as follows:

a. Crucibles having both of the following characteristics:

1. A volume of between 150 cm^3 (150 ml) and 8000 cm^3 (8 liters); and

2. Made of or coated with any of the following materials, having a purity of 98% or greater by weight:

a. Calcium fluoride (CaF_2);

b. Calcium zirconate (metazirconate) ($CaZrO_3$);

c. Cerium sulfide (Ce_2S_3);

d. Erbium oxide (erbia) (Er_2O_3);

e. Hafnium oxide (hafnia) (HfO_2);

f. Magnesium oxide (MgO);

g. Nitrided niobium-titanium-tungsten alloy (approximately 50% Nb, 30% Ti, 20% W);

h. Yttrium oxide (yttria) (Y_2O_3); or

i. Zirconium oxide (zirconia) (ZrO_2);

b. Crucibles having both of the following characteristics:

1. A volume of between 50 cm^3 (50 ml) and 2000 cm^3 (2 liters); and

2. Made of or lined with tantalum, having a purity of 99.9% or greater by weight;

c. Crucibles having all of the following characteristics:

1. A volume of between 50 cm^3 (50 ml) and 2000 cm^3 (2 liters);

2. Made of or lined with tantalum, having a purity of 98% or greater by weight; and

3. Coated with tantalum carbide, nitride, boride, or any combination thereof.

2.A.2. Platinized catalysts specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water for the recovery of tritium from heavy water or for the production of heavy water.

2.A.3. Composite structures in the form of tubes having both of the following characteristics:

a. An inside diameter of between 75 and 400 mm; and

b. Made with any of the "fibrous or filamentary materials" specified in Item 2.C.7.a. or carbon prepreg materials specified in Item 2.C.7.c.

2.B. TEST AND PRODUCTION EQUIPMENT

2.B.1. Tritium facilities or plants, and equipment therefor, as follows:

a. Facilities or plants for the production, recovery, extraction, concentration or handling of tritium;

b. Equipment for tritium facilities or plants, as follows:

1. Hydrogen or helium refrigeration units capable of cooling to 23 K (-250 ºC) or less, with heatremoval capacity greater than 150 W;

2. Hydrogen isotope storage or purification systems using metal hydrides as the storage or purification medium.

2.B.2. Lithium isotope separation facilities or plants, and equipment therefor, as follows:

a. Facilities or plants for the separation of lithium isotopes;

b. Equipment for the separation of lithium isotopes, as follows:

1. Packed liquid-liquid exchange columns specially designed for lithium amalgams;

2. Mercury or lithium amalgam pumps;

3. Lithium amalgam electrolysis cells;

4. Evaporators for concentrated lithium hydroxide solution.

2.C. MATERIALS

2.C.1. Aluminium alloys having both of the following characteristics:

a. 'Capable of' an ultimate tensile strength of 460 MPa or more at 293 K (20 °C); and

b. In the form of tubes or cylindrical solid forms (including forgings) with an outside diameter of more than 75 mm.

Technical Note: In Item 2.C.1. the phrase 'capable of' encompasses aluminium alloys before or after heat treatment.

2.C.2. Beryllium metal, alloys containing more than 50% beryllium by weight, beryllium compounds, manufactures thereof, and waste or scrap of any of the foregoing.

Note: Item 2.C.2. does not control the following:

a. Metal windows for X-ray machines or for bore-hole logging devices;

b. Oxide shapes in fabricated or semi-fabricated forms specially designed for electronic component parts or as substrates for electronic circuits;

c. Beryl (silicate of beryllium and aluminium) in the form of emeralds or aquamarines.

2.C.3. Bismuth having both of the following characteristics:

a. A purity of 99.99% or greater by weight; and

b. Containing less than 10 parts per million by weight of silver.

2.C.4. Boron enriched in the boron-10 (^{10}B) isotope to greater than its natural isotopic abundance, as follows: elemental boron, compounds, mixtures containing boron, manufactures thereof, waste or scrap of any of the foregoing.

Note: In Item 2.C.4. mixtures containing boron include boron loaded materials.

Technical Note: The natural isotopic abundance of boron-10 is approximately 18.5 weight percent (20 atom percent).

2.C.5. Calcium having both of the following characteristics:

a. Containing less than 1000 parts per million by weight of metallic impurities other than magnesium; and

b. Containing less than 10 parts per million by weight of boron.

2.C.6. Chlorine trifluoride (ClF_3).

2.C.7. "Fibrous or filamentary materials", and prepregs, as follows:

a. Carbon or aramid "fibrous or filamentary materials" having either of the following characteristics:

1. A ´specific modulus´ of 12.7×10^6 m or greater; or

2. A ´specific tensile strength´ of 23.5×10^4 m or greater;
Note: Item 2.C.7.a. does not control aramid "fibrous or filamentary materials" having 0.25% or more by weight of an ester based fiber surface modifier.

b. Glass "fibrous or filamentary materials" having both of the following characteristics:

1. A ´specific modulus´ of 3.18×10^6 m or greater; and

2. A ´specific tensile strength´ of 7.62×10^4 m or greater;

c. Thermoset resin impregnated continuous "yarns", "rovings", "tows" or "tapes" with a width of 15 mm or less (prepregs), made from carbon or glass "fibrous or filamentary materials" specified in Item 2.C.7.a. or Item 2.C.7.b.
Technical Note: The resin forms the matrix of the composite.
Technical Notes:
1. In Item 2.C.7. ´Specific modulus´ is the Young´s modulus in N/m^2 divided by the specific weight in N/m^3 when measured at a temperature of 296 ± 2 K (23 ± 2 °C) and a relative humidity of 50 ± 5%.
2. In Item 2.C.7. ´Specific tensile strength´ is the ultimate tensile strength in N/m^2 divided by the specific weight in N/m^3 when measured at a temperature of 296 ± 2 K (23 ± 2 °C) and a relative humidity of 50 ± 5%.

2.C.8. Hafnium metal, alloys containing more than 60% hafnium by weight, hafnium compounds containing more than 60% hafnium by weight, manufactures thereof, and waste or scrap of any of the foregoing.

2.C.9. Lithium enriched in the lithium-6 (^6Li) isotope to greater than its natural isotopic abundance and products or devices containing enriched lithium, as follows: elemental lithium, alloys, compounds, mixtures containing lithium, manufactures thereof, waste or scrap of any of the foregoing.

Note: Item 2.C.9. does not control thermoluminescent dosimeters.
Technical Note: The natural isotopic abundance of lithium-6 is approximately 6.5 weight percent (7.5 atom percent).

2.C.10. Magnesium having both of the following characteristics:

a. Containing less than 200 parts per million by weight of metallic impurities other than calcium; and

b. Containing less than 10 parts per million by weight of boron.

2.C.11. Maraging steel 'capable of' an ultimate tensile strength of 2050 MPa or more at 293 K (20 °C).

Note: Item 2.C.11. does not control forms in which all linear dimensions are 75 mm or less.

Technical Note: In Item 2.C.11. the phrase 'capable of' encompasses maraging steel before or after heat treatment.

2.C.12. Radium-226 (^{226}Ra), radium-226 alloys, radium-226 compounds, mixtures containing radium-226, manufactures thereof, and products or devices containing any of the foregoing.

Note: Item 2.C.12. does not control the following:

a. Medical applicators;

b. A product or device containing less than 0.37 GBq of radium-226.

2.C.13. Titanium alloys having both of the following characteristics:

a. 'Capable of' an ultimate tensile strength of 900 MPa or more at 293 K (20 °C); and

b. In the form of tubes or cylindrical solid forms (including forgings) with an outside diameter of more than 75 mm.

Technical Note: In Item 2.C.13. the phrase 'capable of' encompasses titanium alloys before or after heat treatment.

2.C.14. Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight, having both of the following characteristics:

a. In forms with a hollow cylindrical symmetry (including cylinder segments) with an inside diameter between 100 and 300 mm; and

b. A mass greater than 20 kg.

Note: Item 2.C.14. does not control manufactures specially designed as weights or gamma-ray collimators.

2.C.15. Zirconium with a hafnium content of less than 1 part hafnium to 500 parts zirconium by weight, as follows: metal, alloys containing more than 50% zirconium by weight, compounds, manufactures thereof, waste or scrap of any of the foregoing.

Note: Item 2.C.15. does not control zirconium in the form of foil having a thickness of 0.10 mm or less.

2.C.16. Nickel powder and porous nickel metal, as follows:

N.B.: For nickel powders which are especially prepared for the manufacture of gaseous diffusion barriers see INFCIRC/254/Part 1 (as amended).

a. Nickel powder having both of the following characteristics:

1. A nickel purity content of 99.0% or greater by weight; and

2. A mean particle size of less than 10 μm measured by the ASTM B 330 standard;

b. Porous nickel metal produced from materials specified in Item 2.C.16.a.

Note: Item 2.C.16. does not control the following:

a. Filamentary nickel powders;

b. Single porous nickel metal sheets with an area of 1000 cm^2 per sheet or less.

Technical Note: Item 2.C.16.b. refers to porous metal formed by compacting and sintering the material in Item 2.C.16.a. to form a metal material with fine pores interconnected throughout the structure.

2.C.17. Tritium, tritium compounds, mixtures containing tritium in which the ratio of tritium to hydrogen atoms exceeds 1 part in 1000, and products or devices containing any of the foregoing.

Note: Item 2.C.17. does not control a product or device containing less than 1.48 x 10^3 GBq of tritium.

2.C.18. Helium-3 (^{3}He), mixtures containing helium-3, and products or devices containing any of the foregoing.

Note: Item 2.C.18. does not control a product or device containing less than 1 g of helium-3.

2.C.19. Alpha-emitting radionuclides having an alpha half-life of 10 days or greater but less than 200 years, in the following forms:

a. Elemental;

b. Compounds having a total alpha activity of 37 GBq per kg or greater;

c. Mixtures having a total alpha activity of 37 GBq per kg or greater;

d. Products or devices containing any of the foregoing.

Note: Item 2.C.19. does not control a product or device containing less than 3.7 GBq of alpha activity.

2.D. SOFTWARE

None

2.E. TECHNOLOGY

2.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 2.A. through 2.D.

3. URANIUM ISOTOPE SEPARATION EQUIPMENT AND COMPONENTS

(Other than Trigger List Items)

3.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

3.A.1. Frequency changers or generators having all of the following characteristics:

N.B.: Frequency changers and generators especially designed or prepared for the gas centrifuge process are controlled under INFCIRC/254/Part 1 (as amended).

a. Multiphase output capable of providing a power of 40 W or greater;

b. Capable of operating in the frequency range between 600 and 2000 Hz;

c. Total harmonic distortion better (less) than 10%; and

d. Frequency control better (less) than 0.1%.

Technical Note: Frequency changers in Item 3.A.1. are also known as converters or inverters.

3.A.2. Lasers, laser amplifiers and oscillators as follows:

a. Copper vapor lasers having both of the following characteristics:

1. Operating at wavelengths between 500 and 600 nm; and

2. An average output power equal to or greater than 40 W;

b. Argon ion lasers having both of the following characteristics:

1. Operating at wavelengths between 400 and 515 nm; and

2. An average output power greater than 40 W;

c. Neodymium-doped (other than glass) lasers with an output wavelength between 1000 and 1100 nm having either of the following:

1. Pulse-excited and Q-switched with a pulse duration equal to or greater than 1 ns, and having either of the following:

a. A single -transverse mode output with an average output power greater than 40 W; or

b. A multiple-transverse mode output with an average output power greater than 50 W;

or

2. Incorporating frequency doubling to give an output wavelength between 500 and 550 nm with an average output power of greater than 40 W;

d. Tunable pulsed single -mode dye laser oscillators having all of the following characteristics:

1. Operating at wavelengths between 300 and 800 nm;

2. An average output power greater than 1 W;

3. A repetition rate greater than 1 kHz; and

4. Pulse width less than 100 ns;

e. Tunable pulsed dye laser amplifiers and oscillators having all of the following characteristics:

1. Operating at wavelengths between 300 and 800 nm;

2. An average output power greater than 30 W;

3. A repetition rate greater than 1 kHz; and

4. Pulse width less than 100 ns;

Note: Item 3.A.2.e. does not control single mode oscillators.

f. Alexandrite lasers having all of the following characteristics:

1. Operating at wavelengths between 720 and 800 nm;

2. A bandwidth of 0.005 nm or less;

3. A repetition rate greater than 125 Hz; and

4. An average output power greater than 30 W;

g. Pulsed carbon dioxide lasers having all of the following characteristics:

1. Operating at wavelengths between 9000 and 11000 nm;

2. A repetition rate greater than 250 Hz;

3. An average output power greater than 500 W; and

4. Pulse width of less than 200 ns;

Note: Item 3.A.2.g. does not control the higher power (typically 1 to 5 kW) industrial CO_2 lasers used in applications such as cutting and welding, as these latter lasers are either continuous wave or are pulsed with a pulse width greater than 200 ns.

h. Pulsed excimer lasers (XeF, XeCl, KrF) having all of the following characteristics:

1. Operating at wavelengths between 240 and 360 nm;

2. A repetition rate greater than 250 Hz; and

3. An average output power greater than 500 W;

i. Para-hydrogen Raman shifters designed to operate at 16μm output wavelength and at a repetition rate greater than 250 Hz.

3.A.3. Valves having all of the following characteristics:

a. A nominal size of 5 mm or greater;

b. Having a bellows seal; and

c. Wholly made of or lined with aluminium, aluminium alloy, nickel, or nickel alloy containing more than 60% nickel by weight.

Technical Note: For valves with different inlet and outlet diameter, the nominal size parameter in Item 3.A.3.a. refers to the smallest diameter.

3.A.4. Superconducting solenoidal electromagnets having all of the following characteristics:

a. Capable of creating magnetic fields greater than 2 T;

b. A ratio of length to inner diameter greater than 2;

c. Inner diameter greater than 300 mm; and

d. Magnetic field uniform to better than 1% over the central 50% of the inner volume.

Note: Item 3.A.4. does not control magnets specially designed for and exported as part of medical nuclear magnetic resonance (NMR) imaging systems.

N.B.: As *part of, does not necessarily mean physical part in the same shipment. Separate shipments from different sources are allowed, provided the related export documents clearly specify the as part of relationship*.

3.A.5. High-power direct current power supplies having both of the following characteristics:

a. Capable of continuously producing, over a time period of 8 hours, 100 V or greater with current output of 500 A or greater; and

b. Current or voltage stability better than 0.1% over a time period of 8 hours.

3.A.6. High-voltage direct current power supplies having both of the following characteristics:

a. Capable of continuously producing, over a time period of 8 hours, 20 kV or greater with current output of 1 A or greater; and

b. Current or voltage stability better than 0.1% over a time period of 8 hours.

3.A.7. Pressure transducers capable of measuring absolute pressures at any point in the range 0 to 13 kPa and having both of the following characteristics:

a. Pressure sensing elements made of or protected by aluminium, aluminium alloy, nickel, or nickel alloy with more than 60% nickel by weight; and

b. Having either of the following characteristics:

1. A full scale of less than 13 kPa and an "accuracy" of better than ± 1% of full scale; or

2. A full scale of 13 kPa or greater and an "accuracy" of better than ± 130 Pa.

Technical Notes:

1. In Item 3.A.7. pressure transducers are devices that convert pressure measurements into an electrical signal.

2. In Item 3.A.7. "accuracy" includes non-linearity, hysteresis and repeatability at ambient temperature.

3.A.8. Vacuum pumps having all of the following characteristics:

a. Input throat size equal to or greater than 380 mm;

b. Pumping speed equal to or greater than 15 m^3 /s; and

c. Capable of producing an ultimate vacuum better than 13.3 mPa.

Technical Notes:

1. The pumping speed is determined at the measurement point with nitrogen gas or air.

2. The ultimate vacuum is determined at the input of the pump with the input of the pump blocked off.

3.B. TEST AND PRODUCTION EQUIPMENT

3.B.1. Electrolytic cells for fluorine production with an output capacity greater than 250 g of fluorine per hour.

3.B.2. Rotor fabrication or assembly equipment, rotor straightening equipment, bellows-forming mandrels and dies, as follows:

a. Rotor assembly equipment for assembly of gas centrifuge rotor tube sections, baffles, and end caps;

Note: Item 3.B.2.a. includes precision mandrels, clamps, and shrink fit machines.

b. Rotor straightening equipment for alignment of gas centrifuge rotor tube sections to a common axis;

Technical Note: In Item 3.B.2.b. such equipment normally consists of precision measuring probes linked to a computer that subsequently controls the action of, for example, pneumatic rams used for aligning the rotor tube sections.

c. Bellows-forming mandrels and dies for producing single-convolution bellows.

Technical Note: The bellows referred to in Item 3.B.2.c. have all of the following characteristics:

1. Inside diameter between 75 and 400 mm;

2. Length equal to or greater than 12.7 mm;

3. Single convolution depth greater than 2 mm; and

4. Made of high-strength aluminium alloys, maraging steel, or high strength "fibrous or filamentary materials".

3.B.3. Centrifugal multiplane balancing machines, fixed or portable, horizontal or vertical, as follows:

a. Centrifugal balancing machines designed for balancing fle xible rotors having a length of 600 mm or more and having all of the following characteristics:

1. Swing or journal diameter greater than 75 mm;

2. Mass capability of from 0.9 to 23 kg; and

3. Capable of balancing speed of revolution greater than 5000 rpm;

b. Centrifugal balancing machines designed for balancing hollow cylindrical rotor components and having all of the following characteristics:

1. Journal diameter greater than 75 mm;

2. Mass capability of from 0.9 to 23 kg;

3. Capable of bala ncing to a residual imbalance equal to or less than 0.010 kg x mm/kg per plane; and

4. Belt drive type.

3.B.4. Filament winding machines and related equipment, as follows:

a. Filament winding machines having all of the following characteristics:

1. Having motions for positioning, wrapping, and winding fibers coordinated and programmed in two or more axes;

2. Specially designed to fabricate composite structures or laminates from "fibrous or filamentary materials"; and

3. Capable of winding cylindrical rotors of diameter between 75 and 400 mm and lengths of 600 mm or greater;

b. Coordinating and programming controls for the filament winding machines specified in Item 3.B.4.a.;

c. Precision mandrels for the filament winding machines specified in Item 3.B.4.a.

3.B.5. Electromagnetic isotope separators designed for, or equipped with, single or multiple ion sources capable of providing a total ion beam current of 50 mA or greater.

Notes: 1. Item 3.B.5. includes separators capable of enriching stable isotopes as well as those for uranium.

N.B.: A separator capable of separating the isotopes of lead with a one-mass unit difference is inherently capable of enriching the isotopes of uranium with a three-unit mass difference.

2. Item 3.B.5. includes separators with the ion sources and collectors both in the magnetic field and those configurations in which they are external to the field.

Technical Note: A single 50 mA ion source cannot produce more than 3 g of separated highly enriched uranium (HEU) per year from natural abundance feed.

3.B.6. Mass spectrometers capable of measuring ions of 230 atomic mass units or greater and having a resolution of better than 2 parts in 230, as follows, and ion sources therefor:

N.B.: Mass spectrometers especially designed or prepared for analyzing on-line samples of uranium hexafluoride are controlled under INFCIRC/254/Part 1 (as amended).

a. Inductively coupled plasma mass spectrometers (ICP/MS);

b. Glow discharge mass spectrometers (GDMS);

c. Thermal ionization mass spectrometers (TIMS);

d. Electron bombardment mass spectrometers which have a source chamber constructed from, lined with or plated with materials resistant to UF_6;

e. Molecular beam mass spectrometers having either of the following characteristics:

1. A source chamber constructed from, lined with or plated with stainless steel or molybdenum, and equipped with a cold trap capable of cooling to 193 K (-80 °C) or less; or

2. A source chamber constructed from, lined with or plated with materials resistant to UF_6;

f. Mass spectrometers equipped with a microfluorination ion source designed for actinides or actinide fluorides.

3.C. MATERIALS

None.

3.D. SOFTWARE

3.D.1. "Software" specially designed for the "use" of equipment specified in Item 3.B.3. or 3.B.4.

3.E. TECHNOLOGY

3.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 3.A. through 3.D.

4. HEAVY WATER PRODUCTION PLANT RELATED EQUIPMENT

(Other than Trigger List Items)

4.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

4.A.1. Specialized packings which may be used in separating heavy water from ordinary water, having both of the following characteristics:

a. Made of phosphor bronze mesh chemically treated to improve wettability; and

b. Designed to be used in vacuum distillation towers.

4.A.2. Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH_2/NH_3), having all of the following characteristics:

a. Airtight (i.e., hermetically sealed);

b. A capacity greater than 8.5 m^3 /h; and

c. Either of the following characteristics:

1. For concentrated potassium amide solutions (1% or greater), an operating pressure of 1.5 to 60 MPa; or

2. For dilute potassium amide solutions (less than 1%), an operating pressure of 20 to 60 MPa.

4.A.3. Turboexpanders or turboexpander-compressor sets having both of the following characteristics:

a. Designed for operation with an outlet temperature of 35 K (- 238 ºC) or less; and

b. Designed for a throughput of hydrogen gas of 1000 kg/h or greater.

4.B. TEST AND PRODUCTION EQUIPMENT

4.B.1. Water-hydrogen sulfide exchange tray columns and internal contactors, as follows:

N.B.: For columns which are especially designed or prepared for the production of heavy water, see INFCIRC/254/Part 1 (as amended).

a. Water-hydrogen sulfide exchange tray columns, having all of the following characteristics:

1. Can operate at pressures of 2 MPa or greater;

2. Constructed of carbon steel having an austenitic ASTM (or equivalent standard) grain size number of 5 or greater; and

3. With a diameter of 1.8 m or greater;

b. Internal contactors for the water-hydrogen sulfide exchange tray columns specified in Item 4.B.1.a.

Technical Note: Internal contactors of the columns are segmented trays which have an effective assembled diameter of 1.8 m or greater; are designed to facilitate countercurrent contacting and are constructed of stainless steels with a carbon content of 0.03% or less. These may be sieve trays, valve trays, bubble cap trays or turbogrid trays.

4.B.2. Hydrogen-cryogenic distillation columns having all of the following characteristics:

a. Designed for operation at internal temperatures of 35 K (-238 ºC) or less;

b. Designed for operation at internal pressures of 0.5 to 5 MPa;

c. Constructed of either:

1. Stainless steel of the 300 series with low sulfur content and with an austenitic ASTM (or equivalent standard) grain size number of 5 or greater; or

2. Equivalent materials which are both cryogenic and H_2-compatible; and

d. With internal diameters of 1 m or greater and effective lengths of 5 m or greater.

4.B.3. Ammonia synthesis converters or synthesis units, in which the synthesis gas (nitrogen and hydrogen) is withdrawn from an ammonia/hydrogen high-pressure exchange column and the synthesized ammonia is returned to said column.

4.C. MATERIALS

None.

4.D. SOFTWARE

None.

4.E. TECHNOLOGY

4.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 4.A. through 4.D.

5. TEST AND MEASUREMENT EQUIPMENT FOR THE DEVELOPMENT OF NUCLEAR EXPLOSIVE DEVICES

5.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

5.A.1. Photomultiplier tubes having both of the following characteristics:

a. Photocathode area of greater than 20 cm^2 ; and

b. Anode pulse rise time of less than 1 ns.

5.B. TEST AND PRODUCTION EQUIPMENT

5.B.1. Flash X-ray generators or pulsed electron accelerators having either of the following sets of characteristics:

a. 1. An accelerator peak electron energy of 500 keV or greater but less than 25 MeV; and

2. With a figure of merit (K) of 0.25 or greater; or

b. 1. An accelerator peak electron energy of 25 MeV or greater; and

2. A peak power greater than 50 MW.

Note: Item 5.B.1. does not control accelerators that are component parts of devices designed for purposes other than electron beam or X-ray radiation (electron microscopy, for example) nor those designed for medical purposes.

Technical Notes:

1. The figure of merit K is defined as: $K=1.7 \times 10^3 V^{2.65} \times Q$. V is the peak electron energy in million electron volts. If the accelerator beam pulse duration is less than or equal to 1μs, then Q is the total accelerated charge in Coulombs. If the accelerator beam pulse duration is greater than 1 μs, then Q is the maximum accelerated charge in 1 μs. Q equals the integral of i with respect to t, over the lesser of 1 μs or the time duration of the beam pulse ($Q=\Sigma$ idt .) where "i" is beam current in amperes and "t" is the time in seconds.

2. Peak power = (peak potential in volts) x (peak beam current in amperes).

3. In machines based on microwave accelerating cavities, the time duration of the beam pulse is the lesser of 1 μs or the duration of the bunched beam packet resulting from one microwave modulator pulse.

4. In machines based on microwave accelerating cavities, the peak beam current is the average current in the time duration of a bunched beam packet.

5.B.2. Multistage light gas guns or other high-velocity gun systems (coil, electromagnetic, and electrothermal types, and other advanced systems) capable of accelerating projectiles to 2 km/s or greater.

5.B.3. Mechanical rotating mirror cameras, as follows, and specially designed components therefor:

a. Framing cameras with recording rates greater than 225000 frames per second;

b. Streak cameras with writing speeds greater than 0.5 mm/μs.

Note: In Item 5.B.3. components of such cameras include their synchronizing electronics units and rotor assemblies consisting of turbines, mirrors, and bearings.

5.B.4. Electronic streak cameras, electronic framing cameras, tubes and devices, as follows:

a. Electronic streak cameras capable of 50 ns or less time resolution;

b. Streak tubes for cameras specified in Item 5.B.4.a.;

c. Electronic (or electronically shuttered) framing cameras capable of 50 ns or less frame exposure time;

d. Framing tubes and solid-state imaging devices for use with cameras specified in Item 5.B.4.c., as follows:

1. Proximity focused image intensifier tubes having the photocathode deposited on a transparent conductive coating to decrease photocathode sheet resistance;

2. Gate silicon intensifier target (SIT) vidicon tubes, where a fast system allows gating the photoelectrons from the photocathode before they impinge on the SIT plate;

3. Kerr or Pockels cell electro-optical shuttering;

4. Other framing tubes and solid-state imaging devices having a fast image gating time of less than 50 ns specially designed for cameras specified in Item 5.B.4.c.

5.B.5. Specialized instrumentation for hydrodynamic experiments, as follows:

a. Velocity interferometers for measuring velocities exceeding 1 km/s during time intervals of less than 10 μs;

b. Manganin gauges for pressures greater than 10 GPa;

c. Quartz pressure transducers for pressures greater than 10 GPa.

Note: Item 5.B.5.a. includes velocity interferometers such as $VISAR_S$ (Velocity interferometer systems for any reflector) and DLI_S (Doppler laser interferometers).

5.B.6. High-speed pulse generators having both of the following characteristics:

a. Output voltage greater than 6 V into a resistive load of less than 55 ohms; and

b. 'Pulse transition time' less than 500 ps.

Technical Note: In Item 5.B.6.b. 'pulse transition time' is defined as the time interval between 10% and 90% voltage amplitude.

5.C. MATERIALS

None.

5.D. SOFTWARE

None.

5.E. TECHNOLOGY

5.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 5.A. through 5.D.

6. COMPONENTS FOR NUCLEAR EXPLOSIVE DEVICES

6.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

6.A.1. Detonators and multipoint initiation systems, as follows:

a. Electrically driven explosive detonators, as follows:

1. Exploding bridge (EB);

2. Exploding bridge wire (EBW);

3. Slapper;

4. Exploding foil initiators (EFI);

b. Arrangements using single or multiple detonators designed to nearly simultaneously initiate an explosive surface over an area greater than 5000 mm^2 from a single firing signal with an initiation timing spread over the surface of less than 2.5 μs.

Note: Item 6.A.1. does not control detonators using only primary explosives, such as lead azide.

Technical Note: In Item 6.A.1. the detonators of concern all utilize a small electrical conductor (bridge, bridge wire, or foil) that explosively vaporizes when a fast, high-current electrical pulse is passed through it. In nonslapper types, the exploding conductor starts a chemical detonation in a contacting high-explosive material such as PETN (pentaerythritoltetranitrate). In slapper detonators, the

explosive vaporization of the electrical conductor drives a flyer or slapper across a gap, and the impact of the slapper on an explosive starts a chemical detonation. The slapper in some designs is driven by magnetic force. The term exploding foil detonator may refer to either an EB or a slapper-type detonator. Also, the word initiator is sometimes used in place of the word detonator.

6.A.2. Firing sets and equivalent high-current pulse generators, as follows:

a. Explosive detonator firing sets designed to drive multiple controlled detonators specified by Item 6.A.1. above;

b. Modular electrical pulse generators (pulsers) having all of the following characteristics:

1. Designed for portable, mobile, or ruggedized-use;

2. Enclosed in a dust-tight enclosure;

3. Capable of delivering their energy in less than 15 μs;

4. Having an output greater than 100 A;

5. Having a 'rise time' of less than 10 μs into loads of less than 40 ohms;

6. No dimension greater than 25.4 cm;

7. Weight less than 25 kg ; and

8. Specified to operate over an extended temperature range of 223 to 373 K (-50 ºC to 100 ºC) or specified as suitable for aerospace applications.

Note: Item 6.A.2.b. includes xenon flashlamp drivers.

Technical Note: In Item 6.A.2.b.5. 'rise time' is defined as the time interval from 10% to 90% current amplitude when driving a resistive load.

6.A.3. Switching devices as follows:

a. Cold-cathode tubes, whether gas filled or not, operating similarly to a spark gap, having all of the following characteristics:

1. Containing three or more electrodes;

2. Anode peak voltage rating of 2.5 kV or more;

3. Anode peak current rating of 100 A or more; and

4. Anode delay time of 10 μs or less;

Note: Item 6.A.3.a. includes gas krytron tubes and vacuum sprytron tubes.

b. Triggered spark-gaps having both of the following characteristics:

1. Anode delay time of 15 μs or less; and

2. Rated for a peak current of 500 A or more;

c. Modules or assemblies with a fast switching function having all of the following characteristics:

1. Anode peak voltage rating greater than 2 kV;

2. Anode peak current rating of 500 A or more; and

3. Turn-on time of 1 μs or less.

6.A.4. Pulse discharge capacitors having either of the following sets of characteristics:

a. 1. Voltage rating greater than 1.4 kV;

2. Energy storage greater than 10 J;

3. Capacitance greater than 0.5 μF; and

4. Series inductance less than 50 nH; or

b. 1. Voltage rating greater than 750 V;

2. Capacitance greater than 0.25 μF; and

3. Series inductance less than 10 nH.

6.A.5. Neutron generator systems, including tubes, having both of the following characteristics:

a. Designed for operation without an external vacuum system; and

b. Utilizing electrostatic acceleration to induce a tritium-deuterium nuclear reaction.

6.B. TEST AND PRODUCTION EQUIPMENT

None.

6.C. MATERIALS

6.C.1. High explosive substances or mixtures, containing more than 2 % by weight of any of the following:

a. Cyclotetramethylenetetranitramine (HMX) (CAS 2691-41-0);

b. Cyclotrimethylenetrinitramine (RDX) (CAS 121-82-4);

c. Triaminotrinitrobenzene (TATB) (CAS 3058-38-6);

d. Hexanitrostilbene (HNS) (CAS 20062-22-0); or

e. Any explosive with a crystal density greater than 1.8 g/cm^3 and having a detonation velocity greater than 8000 m/s.

6.D. SOFTWARE

None.

6.E. TECHNOLOGY

6.E.1. "Technology" according to the Technology Controls for the "development", "production" or "use" of equipment, material or "software" specified in 6.A. through 6.D.

7. The Convention on the Physical Protection of Nuclear Material (3 March 1980)[1]

The States Parties to this Convention,

Recognizing the right of all States to develop and apply nuclear energy for peaceful purposes and their legitimate interests in the potential benefits to be derived from the peaceful application of nuclear energy,

Convinced of the need for facilitating international co-operation in the peaceful application of nuclear energy,

Desiring to avert the potential dangers posed by the unlawful taking and use of nuclear material,

Convinced that offences relating to nuclear material are a matter of grave concern and that there is an urgent need to adopt appropriate and effective measures to ensure the prevention, detection and punishment of such offences,

Aware of the need for international co-operation to establish, in conformity with the national law of each State Party and with this Convention, effective measures for the physical protection of nuclear material,

Convinced that this Convention should facilitate the safe transfer of nuclear material,

Stressing also the importance of the physical protection of nuclear material in domestic use, storage and transport,

Recognizing the importance of effective physical protection of nuclear material used for military purposes, and understanding that such material is and will continue to be accorded stringent physical protection,

Have agreed as follows:

Article 1

For the purposes of this Convention:

a) "nuclear material" means plutonium except that with isotopic concentration exceeding 80% in plutonium-238; uranium-233; uranium enriched in the isotope 235 or 233; uranium containing the mixture of isotopes as occurring in nature other than in the form of ore or ore-residue; any material containing one or more of the foregoing;

b) "uranium enriched in the isotope 235 or 233" means uranium containing the isotope 235 or 233 or both in an amount such that the abundance ratio of the sum of these isotopes to the isotope 238 is greater than the ratio of the isotope 235 to the isotope 238 occurring in nature;

[1] In July 2005 a revised version of this Convention was agreed upon by a group of member states, which is open for signature and ratification since that. The necessary number of ratifications has not yet been reached; hence the old convention is being printed here. It is intended to include the revised version in a later edition of this documentation.

c) "international nuclear transport" means the carriage of a consignment of nuclear material by any means of transportation intended to go beyond the territory of the State where the shipment originates beginning with the departure from a facility of the shipper in that State and ending with the arrival at a facility of the receiver within the State of ultimate destination.

Article 2

1. This Convention shall apply to nuclear material used for peaceful purposes while in international nuclear transport.

2. With the exception of articles 3 and 4 and paragraph 3 of article 5, this Convention shall also apply to nuclear material used for peaceful purposes while in domestic use, storage and transport.

3. Apart from the commitments expressly undertaken by States Parties in the articles covered by paragraph 2 with respect to nuclear material used for peaceful purposes while in domestic use, storage and transport, nothing in this Convention shall be interpreted as affecting the sovereign rights of a State regarding the domestic use, storage and transport of such nuclear material.

Article 3

Each State Party shall take appropriate steps within the framework of its national law and consistent with international law to ensure as far as practicable that, during international nuclear transport, nuclear material within its territory, or on board a ship or aircraft under its jurisdiction insofar as such ship or aircraft is engaged in the transport to or from that State, is protected at the levels described in Annex I.

Article 4

1. Each State Party shall not export or authorize the export of nuclear material unless the State Party has received assurances that such material will be protected during the international nuclear transport at the levels described in Annex I.

2. Each State Party shall not import or authorize the import of nuclear material from a State not party to this Convention unless the State Party has received assurances that such material will during the international nuclear transport be protected at the levels described in Annex I.

3. A State Party shall not allow the transit of its territory by land or internal waterways or through its airports or seaports of nuclear material between States that are not parties to this Convention unless the State Party has received assurances as far as practicable that this nuclear material will be protected during international nuclear transport at the levels described in Annex I.

4. Each State Party shall apply within the framework of its national law the levels of physical protection described in Annex I to nuclear material being transported from a part of that State to another part of the same State through international waters or airspace.

5. The State Party responsible for receiving assurances that the nuclear material will be protected at the levels described in Annex I according to paragraphs 1 to 3 shall identify and inform in advance States which the nuclear material is expected to transit by land or internal waterways, or whose airports or seaports it is expected to enter.

6. The responsibility for obtaining assurances referred to in paragraph 1 may be transferred, by mutual agreement, to the State Party involved in the transport as the importing State.

7. Nothing in this article shall be interpreted as in any way affecting the territorial sovereignty and jurisdiction of a State, including that over its airspace and territorial sea.

Article 5

1. States Parties shall identify and make known to each other directly or through the International Atomic Energy Agency their central authority and point of contact having responsibility for physical protection of nuclear material and for co-ordinating recovery and response operations in the event of any unauthorized removal, use or alteration of nuclear material or in the event of credible threat thereof.

2. In the case of theft, robbery or any other unlawful taking of nuclear material or of credible threat thereof, States Parties shall, in accordance with their national law, provide co-operation and assistance to the maximum feasible extent in the recovery and protection of such material to any State that so requests. In particular:

a) a State Party shall take appropriate steps to inform as soon as possible other States, which appear to it to be concerned, of any theft, robbery or other unlawful taking of nuclear material or credible threat thereof and to inform, where appropriate, international organizations;

b) as appropriate, the States Parties concerned shall exchange information with each other or international organizations with a view to protecting threatened nuclear material, verifying the integrity of the shipping container, or recovering unlawfully taken nuclear material and shall:

i. co-ordinate their efforts through diplomatic and other agreed channels;

ii. render assistance; if requested;

iii. ensure the return of nuclear material stolen or missing as a consequence of the above-mentioned events.

The means of implementation of this co-operation shall be determined by the States Parties concerned.

3. States Parties shall co-operate and consult as appropriate, with each other directly or through international organizations, with a view to obtaining guidance on the design, maintenance and improvement of systems of physical protection of nuclear material in international transport.

Article 6

1. States Parties shall take appropriate measures consistent with their national law to protect the confidentiality of any information which they receive in confidence by virtue

of the provisions of this Convention form another State Party or through participation in an activity carried out for the implementation of this Convention. If States Parties provide information to international organizations in confidence, steps shall be taken to ensure that the confidentiality of such information is protected.

2. States Parties shall not be required by this Convention to provide any information which they are not permitted to communicate pursuant to national law or which would jeopardize the security of the State concerned or the physical protection of nuclear material.

Article 7

1. The intentional commission of:

a) an act without lawful authority which constitutes the receipt, possession, use, transfer, alteration, disposal or dispersal of nuclear material and which causes or is likely to cause death or serious injury to any person or substantial damage to property;

b) a theft of robbery of nuclear material;

c) an embezzlement or fraudulent obtaining of nuclear material;

d) an act constituting a demand for nuclear material by threat or use of force or by any other form of intimidation;

e) a threat:

i. to use nuclear material to cause death or serious injury to any person or substantial property damage, or

ii. to commit an offence described in sub-paragraph (b) in order to compel a natural or legal person, international organization or State to do or to refrain from doing any act;

f) an attempt to commit any offence described in paragraphs (a), (b) or (c); and

g) an act which constitutes participation in any offence described in paragraphs (a) to (f)

shall be made a punishable offence by each State Party under its national law.

2. Each State Party shall make the offences described in this article punishable by appropriate penalties which take into account their grave nature.

Article 8

1. Each State Party shall take such measures as may be necessary to establish its jurisdiction over the offences set forth in article 7 in the following cases;

a) when the offence is committed in the territory of that State or on board a ship or aircraft registered in that State;

b) when the alleged offender is a national of that State.

2. Each State Party shall likewise take such measures as may be necessary to establish its jurisdiction over these offences in cases where the alleged offender is presented in its

territory and it does not extradite him pursuant to article 11 to any of the States mentioned in paragraph 1.

3. This Convention does not exclude any criminal jurisdiction exercised in accordance with national law.

4. In addition to the States Parties mentioned in paragraphs 1 and 2, each State Party may, consistent with international law, establish its jurisdiction over the offences set forth in article 7 when it is involved in international nuclear transport as the exporting or importing State.

Article 9

Upon being satisfied that the circumstances so warrant, the State Party in whose territory the alleged offender is present shall take appropriate measures, including detention, under its national law to ensure his presence for the purpose of prosecution or extradition. Measures taken according to this article shall be notified without delay to the States required to establish jurisdiction pursuant to article 8 and, where appropriate, all other States concerned.

Article 10

The State Party in whose territory the alleged offender is present shall, if it does not extradite him, submit, without exception whatsoever and without undue delay, the case to its competent authorities for the purpose of prosecution, through proceedings in accordance with the laws of that State.

Article 11

1. The offences in article 7 shall be deemed to be included as extraditable offences in any extradition treaty existing between States Parties. States Parties undertake to include those offences as extraditable offences in every future extradition treaty to be concluded between them.

2. If a State Party which makes extradition conditional on the existence of a treaty receives a request for extradition from another State Party with which it has no extradition treaty, it may at its option consider this Convention as the legal basis for extradition in respect of those offences. Extradition shall be subject to the other conditions provided by the law of the requested State.

3. States Parties which do not make extradition conditional on the existence of a treaty shall recognize those offences as extraditable offences between themselves subject to the conditions provided by the law of the requested State.

4. Each of the offences shall be treated, for the purpose of extradition between States Parties, as if it had been committed not only in the place in which it occurred but also in the territories of the States Parties required to establish their jurisdiction in accordance with paragraph 1 of article 8.

Article 12

Any person regarding whom proceedings are being carried out in connection with any of the offences set forth in article 7 shall be guaranteed fair treatment at all stages of the proceedings.

Article 13

1. States Parties shall afford one another the greatest measure of assistance in connection with criminal proceedings brought in respect of the offences set forth in article 7, including the supply of evidence at their disposal necessary for the proceedings. The law of the State requested shall apply in all cases.

2. The provisions of paragraph 1 shall not affect obligations under any other treaty, bilateral or multilateral, which governs or will govern, in whole or in part, mutual assistance in criminal matters.

Article 14

1. Each State Party shall inform the depositary of its laws and regulations which give effect to this Convention. The depositary shall communicate such information periodically to all States Parties.

2. The State Party where an alleged offender is prosecuted shall, wherever practicable, first communicate the final outcome of the proceedings to the States directly concerned. The State Party shall also communicate the final outcome to the depositary who shall inform all States.

3. Where an offence involves nuclear material used for peaceful purposes in domestic use, storage or transport, and both the alleged offender and the nuclear material remain in the territory of the State Party in which the offence was committed, nothing in this Convention shall be interpreted as requiring that State Party to provide information concerning criminal proceedings arising out of such an offence.

Article 15

The Annexes constitute an integral part of this Convention.

Article 16

1. A conference of States Parties shall be convened by the depositary of five years after the entry into force of this Convention to review the implementation of the Convention and its adequacy as concerns the preamble, the whole of the operative part and the annexes in the light of the then prevailing situation.

2. At intervals of not less than five years thereafter, the majority of States Parties may obtain, by submitting a proposal to this effect to the depositary, the convening of further conferences with the same objective.

Article 17

1. In the event of a dispute between two or more States Parties concerning the interpretation or application of this Convention, such States Parties shall consult with a view to the settlement of the dispute by negotiation, or by any other peaceful means of settling disputes acceptable to all parties to the dispute.

2. Any dispute of this character which cannot be settled in the manner prescribed in paragraph 1 shall, at the request of any party to such dispute, be submitted to arbitration or referred to the International Court of Justice for decision. Where a dispute is submitted to arbitration, if, within six months from the date of the request, the parties to the dispute are unable to agree on the organization of the arbitration, a party may request the President of the International Court of Justice or the Secretary-General of the United Nations to appoint one or more arbitrators. In case of conflicting requests by the parties to the dispute, the request to the Secretary-General of the United Nations shall have priority.

3. Each State Party may at the time of signature, ratification, acceptance or approval of this Convention or accession thereto declare that it does not consider itself bound by either or both of the dispute settlement procedures provided for in paragraph 2. The other States Parties shall not be bound by a dispute settlement procedure provided for in paragraph 2, with respect to a State Party which has made a reservation to that procedure.

4. Any State Party which has made a reservation in accordance with paragraph 3 may at any time withdraw that reservation by notification to the depositary.

Article 18

1. This Convention shall be open for signature by all States at the Headquarters of the International Atomic Energy Agency in Vienna and at the Headquarters of the United Nations in New York from 3 March 1980 until its entry into force.

2. This Convention is subject to ratification, acceptance or approval by the signatory States.

3. After its entry into force, this Convention will be open for accession by all States.

4.

a) This Convention shall be open for signature or accession by international organizations and regional organizations of an integration or other nature, provided that any such organization is constituted by sovereign States and has competence in respect of the negotiation, conclusion and application of international agreements in matters covered by this Convention.

b) In matters within their competence, such organizations shall, on their own behalf, exercise the rights and fulfil the responsibilities which this Convention attributes to States Parties.

c) When becoming party to this Convention such an organization shall communicate to the depository a declaration indicating which States are members thereof and which articles of this Convention do not apply to it.

d) Such an organization shall not hold any vote additional to those of its Member States.

5. Instruments of ratification, acceptance, approval or accession shall be deposited with depositary.

Article 19

1. This Convention shall enter into force on the thirtieth day following the date of deposit of the twenty-first instrument of ratification, acceptance or approval with the depositary.

2. For each State ratifying, accepting, approving or acceding to the Convention after the date of deposit of the twenty-first instrument of ratification, acceptance or approval, the Convention shall enter into force on the thirtieth day after the deposit by such State of its instrument of ratification, acceptance, approval or accession.

Article 20

1. Without prejudice to article 16 a State Party may propose amendments to this Convention. The proposed amendment shall be submitted to the depositary who shall circulate it immediately to all States Parties. If a majority of States Parties request the depositary to convene a conference to consider the proposed amendments, the depositary shall invite all States Parties to attend such a conference to being not sooner than thirty days after the invitations are issued. Any amendment adopted at the conference by a two-thirds majority of all States Parties shall be promptly circulated by the depositary to all States Parties.

2. The amendment shall enter into force for each State Party that deposits its instrument of ratification, acceptance or approval of the amendment on the thirtieth day after the date on which two thirds of the States Parties have deposited their instruments of ratification, acceptance or approval with the depositary. Thereafter, the amendment shall enter into force for nay other State Party on the day on which that State Party deposits its instrument of ratification, acceptance or approval of the amendment.

Article 21

1. Any State Party any denounce this Convention by written notification to the depositary.

2. Denunciation shall take effect one hundred and eighty days following the date on which notification is received by the depositary.

Article 22

The depositary shall promptly notify all States of:

a) each signature of this Convention;

b) each deposit of an instrument of ratification, acceptance, approval or accession;

c) any reservation or withdrawal in accordance with article 17;

d) any communication made by an organization in accordance with paragraph 4(c) of article 18;

e) the entry into force of this Convention;

f) the entry into force of any amendment to this Convention; and

g) any denunciation made under article 21.

Article 23

The original of this Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Director General of the International Atomic Energy Agency who shall send certified copies thereof to all States.

Annex I: Levels of Physical Protection to be Applied in International Transport of Nuclear Materials as Categorized in Annex II

1. Levels of physical protection for nuclear material during storage incidental to international nuclear transport include:

a) For Category III materials, storage within an area to which access is controlled;

b) For Category II materials, storage within an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control or any area with an equivalent level of physical protection;

c) For Category I material, storage within a protected area as defined for Category II above, to which, in addition, access is restricted to persons whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate responses forces. Specific measures taken in this context should have as their object the detection and prevention of any assault, unauthorized access or unauthorized removal of material.

2. Levels of physical protection for nuclear material during international transport include:

a) For Category II and III materials, transportation shall take place under special precautions including prior arrangements among sender, receiver, and carrier, and prior agreement between natural or legal persons subject to the jurisdiction and regulation of exporting and importing States, specifying time, place and procedures for transferring transport responsibility;

b) For Category I materials, transportation shall take place under special precautions identified above for transportation of Category II and III materials, and in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces;

c) For natural uranium other than in the form of ore or ore-residue; transportation protection for quantities exceeding 500 kilograms uranium shall include advance notification of shipment specifying mode of transport, expected time of arrival and confirmation of receipt of shipment.

Annex II: Table Categorization of Nuclear Material

Material	Form	Category		
		I	II	III[c/]
1. Plutonium[a/]	Unirradiated[b/]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less but more than 15 g
2. Uranium-235	Unirradiated[b/] • uranium enriched to 20% ^{235}U or more • uranium enriched to 10% ^{235}U but less than 20% • uranium enriched above natural, but less than 10% ^{235}U	5 kg or more	Less than 5 kg but more than 1 kg 10 kg or more	1 kg or less but more than 15 g Less than 10 kg but more than 1 kg 10 kg or more
3. Uranium-233	Unirradiated[b/]	2 kg or more	Less than 2 kg but more than 500 kg	500 g or less but more than 15 g
4. Irradiated fuel			Depleted or natural urnaium, thorium or low-enriched fuel (less than 10% fossile content)[d/e/]	

[a/] All plutonium except that with isotopic concentration exceeding 80% in plutonium-238.

[b/] Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one metr unshielded.

[c/] Quantities not falling in Category III and natural uranium should be protected in accordance with prudent management practice.

[d/] Although this level of protection is recommended, it would be open to States, upon evaluation of the specific circumstances, to assign a different category of physical protection.

[e/]Other fuel which by virtue of its original fissile material content is classified as Category I and II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 100 rads/hour at one metre unshielded.

C. Preventing the Proliferation of Missiles and Missile Technology

1. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (27 January 1967)

The States Parties to this Treaty,

Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,

Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,

Believing that the exploration and use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development,

Desiring to contribute to broad international co-operation in the scientific as well as the legal aspects of the exploration and use of outer space for peaceful purposes,

Believing that such co-operation will contribute to the development of mutual understanding and to the strengthening of friendly relations between States and peoples,

Recalling resolution 1962 (XVIII), entitled "Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space," which was adopted unanimously by the United Nations General Assembly on 13 December 1963,

Recalling resolution 1884 (XVIII), calling upon States to refrain from placing in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction or from installing such weapons on celestial bodies, which was adopted unanimously by the United Nations General Assembly on 17 October 1963,

Taking account of United Nations General Assembly resolution 110 (II) of 3 November 1947, which condemned propaganda designed or likely to provoke or encourage any threat to the peace, breach of the peace or act of aggression, and considering that the aforementioned resolution is applicable to outer space,

Convinced that a Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, will further the Purposes and Principles of the Charter of the United Nations,

Have agreed on the following:

Article I

The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.

Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.

There shall be freedom of scientific investigation in outer space, including the Moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation.

Article II

Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

Article III

States Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.

Article IV

States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.

The Moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited.

Article V

States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party or on the high seas. When astronauts make such a landing, they shall be safely and promptly returned to the State of registry of their space vehicle.

In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States Parties.

States Parties to the Treaty shall immediately inform the other States Parties to the Treaty or the Secretary-General of the United Nations of any phenomena they discover in outer space, including the Moon and other celestial bodies, which could constitute a danger to the life or health of astronauts.

Article VI

States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the Moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty. When activities are carried on in outer space, including the Moon and other celestial bodies, by an international organization, responsibility for compliance with this Treaty shall be borne both by the international organization and by the States Parties to the Treaty participating in such organization.

Article VII

Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the Moon and other celestial bodies, and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air space or in outer space, including the Moon and other celestial bodies.

Article VIII

A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth. Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State Party, which shall, upon request, furnish identifying data prior to their return.

Article IX

In the exploration and use of outer space, including the Moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty. States Parties to the Treaty shall pursue studies of outer space, including the Moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose. If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer

space, including the Moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, may request consultation concerning the activity or experiment.

Article X

In order to promote international co-operation in the exploration and use of outer space, including the Moon and other celestial bodies, in conformity with the purposes of this Treaty, the States Parties to the Treaty shall consider on a basis of equality any requests by other States Parties to the Treaty to be afforded an opportunity to observe the flight of space objects launched by those States.

The nature of such an opportunity for observation and the conditions under which it could be afforded shall be determined by agreement between the States concerned.

Article XI

In order to promote international co-operation in the peaceful exploration and use of outer space, States Parties to the Treaty conducting activities in outer space, including the Moon and other celestial bodies, agree to inform the Secretary-General of the United Nations as well as the public and the international scientific community, to the greatest extent feasible and practicable, of the nature, conduct, locations and results of such activities. On receiving the said information, the Secretary-General of the United Nations should be prepared to disseminate it immediately and effectively.

Article XII

All stations, installations, equipment and space vehicles on the Moon and other celestial bodies shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity. Such representatives shall give reasonable advance notice of a projected visit, in order that appropriate consultations may be held and that maximum precautions may be taken to assure safety and to avoid interference with normal operations in the facility to be visited.

Article XIII

The provisions of this Treaty shall apply to the activities of States Parties to the Treaty in the exploration and use of outer space, including the Moon and other celestial bodies, whether such activities are carried on by a single State Party to the Treaty or jointly with other States, including cases where they are carried on within the framework of international intergovernmental organizations.

Any practical questions arising in connection with activities carried on by international inter-governmental organizations in the exploration and use of outer space, including the Moon and other celestial bodies, shall be resolved by the States Parties to the Treaty

either with the appropriate international organization or with one or more States members of that international organization, which are Parties to this Treaty.

Article XIV

1. This Treaty shall be open to all States for signature. Any State which does not sign this Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force upon the deposit of instruments of ratification by five Governments including the Governments designated as Depositary Governments under this Treaty.

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification of and accession to this Treaty, the date of its entry into force and other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article XV

Any State Party to the Treaty may propose amendments to this Treaty. Amendments shall enter into force for each State Party to the Treaty accepting the amendments upon their acceptance by a majority of the States Parties to the Treaty and thereafter for each remaining State Party to the Treaty on the date of acceptance by it.

Article XVI

Any State Party to the Treaty may give notice of its withdrawal from the Treaty one year after its entry into force by written notification to the Depositary Governments. Such withdrawal shall take effect one year from the date of receipt of this notification.

Article XVII

This Treaty, of which the English, Russian, French, Spanish and Chinese texts are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

Legal Status of the Outer Space Treaty

Opened for signature at London, Moscow and Washington: 27 January 1967, Entered into force: 10 October 1967; Depositary Governments: Russian Federation, United Kingdom of Great Britain and Northern Ireland and United States of America

Signatures : 88, deposits : 99

State	**Signature**	**Deposit of ratification**
Afghanistan	27 January 1967	17 March 1988
Algeria		27 January 1992(a)
Antigua and Barbuda		16 November 1988(s) *
Argentina	27 January 1967	26 March 1969
Australia	27 January 1967	10 October 1967
Austria	20 February 1967	26 February 1968
Bahamas		11 August 1976 (s)
Bangladesh		14 January 1986(a)
Barbados		12 September 1968(a)
Belarus	10 February 1967 *	31 October 1967 *
Belgium	27 January 1967	30 March 1973
Benin		19 June 1986
Bolivia	27 January 1967 (W)	
Botswana	27 January 1967	
Brazil	30 January 1967	5 March 1969* ,
Bulgaria	27 January 1967 ,	28 January 1967
Burkina Faso	3 March 1967	18 June 1968
Burundi	27 January 1967	
Cameroon	27 January 1967	
Canada	27 January 1967,	10 October 1967,
Central African Republic	27 January 1967	
Chile	27 January 1967	8 October 1981
China		30 December 1983(a)*
Colombia	27 January 1967	
Cuba		3 June 1977(a)*
Cyprus	27 January 1967	5 July 1972
Czech Republic		1 January 1993 (s) *
Democratic Republic of the Congo	27 January 1967	

Denmark	27 January 1967,	10 October 1967,
Dominican Republic	27 January 1967	21 November 1968
Ecuador	27 January 1967	7 March 1969
Egypt	27 January 1967	10 October 1967
El Salvador	27 January 1967	15 January 1969
Equatorial Guinea		16 January 1989(a)
Ethiopia	27 January 1967	
Fiji		18 July 1972(s)*)
Finland	27 January 1967	12 July 1967
France	25 September 1967	5 August 1970
Gambia	2 June 1967	
Germany	27 January 1967	10 February 1971**
Ghana	27 January 1967	
Greece	27 January 1967	19 January 1971
Guinea-Bissau		20 August 1976(a)
Guyana	3 February 1967	
Haiti	27 January 1967	
Holy See	5 April 1967	
Honduras	27 January 1967	
Hungary	27 January 1967	26 June 1967
Iceland	27 January 1967	5 February 1968
India	3 March 1967	18 January 1982
Indonesia	27 January 1967	25 June 2002
Iran (Islamic Republic of)	27 January 1967	
Iraq	27 February 1967	4 December 1968
Ireland	27 January 1967	17 July 1968
Israel	27 January 1967	18 February 1977)
Italy	27 January 1967	4 May 1972
Jamaica	29 June 1967	6 August 1970
Japan	27 January 1967	10 October 1967
Jordan	2 February 1967	
Kazakhstan		11 June 1998(a)
Kenya		19 January 1984(a)
Kuwait		7 June 1972(a)*
Lao People's Democratic Republic	27 January 1967	27 November 1972
Lebanon	23 February 1967	31 March 1969

Lesotho	27 January 1967	
Libyan Arab Jamahiriya		3 July 1968(a)
Luxembourg	27 January 1967	17 January 2006
Madagascar		22 August 1968(a)*
Malaysia	20 February 1967)	
Mali		11 June 1968(a)
Mauritius		7 April 1969(s)*
Mexico	27 January 1967,	31 January 1968,
Mongolia	27 January 1967	10 October 1967
Morocco		21 December 1967(a)
Myanmar	22 May 1967	18 March 1970
Nepal	3 February 1967	10 October 1967
Netherlands	10 February 1967	10 October 1969*
New Zealand	27 January 1967	31 May 1968
Nicaragua	27 January 1967	
Niger	1 February 1967	17 April 1967
Nigeria		14 November 1967(a)
Norway	3 February 1967	1 July 1969
Pakistan	12 September 1967	8 April 1968
Panama	27 January 1967	
Papua New Guinea		27 October 1980(s)
Peru		28 February 1979
Philippines	27 January 1967	
Poland	27 January 1967	30 January 1968
Portugal		29 May 1996(a)
Republic of Korea	27 January 1967*	13 October 1967
Romania	27 January 1967	9 April 1968
Russian Federation	27 January 1967	10 October 1967
Rwanda	27 January 1967	
Saint Vincent and the Grena-dines		13 May 1999 (s)
San Marino	21 April 1967	29 October 1968
Saudi Arabia		17 December 1976(a)
Seychelles		5 January 1978(a)
Sierra Leone	27 January 1967	13 July 1967
Singapore		10 September 1976(a)
Slovakia		1 January 1993(s)

Somalia	2 February 1967	
South Africa	1 March 1967	30 September 1968
Spain		27 November 1968(a)
Sri Lanka	10 March 1967	18 November 1986
Sweden	27 January 1967	11 October 1967
Switzerland	27 January 1967	18 December 1969
Syrian Arab Republic		14 November 1968(a)*
Thailand	27 January 1967	5 September 1968
Togo	27 January 1967	26 June 1989
Tonga		7 July 1971(s)
Trinidad and Tobago	24 July 1967	
Tunisia	27 January 1967)	28 March 1968 (
Turkey	27 January 1967	27 March 1968
Uganda		24 April 1968(a)
Ukraine	10 February 1967	31 October 1967
United Arab Emirates		4 October 2000 (a)
United Kingdom of Great Britain and Northern Ireland	27 January 1967	10 October 1967
United States of America	27 January 1967	10 October 1967
Uruguay	27 January 1967	31 August 1970
Venezuela	27 January 1967	3 March 1970
Viet Nam		20 June 1980(a)
Yemen		1 June 1979(a)
Yugoslavia	27 January 1967	
Zambia		20 August 1973(a)
Total	**88**	**98**

On 24 July 1970 Taiwan deposited an instrument of ratification in the name of the Republic of China. The government of Taiwan considers itself to be bound by the Treaty.
(a): accession
(s): accession by state succession
Dates given are the earliest dates on which states signed the agreement or deposited their ratifications or accessions
* declaration made on the occasion of signature or deposit
** additional statement made on the occasion of signature or deposit
*** reservation made on the occasion of signature or deposit

2. Missile Technology Control Regime (MTCR): Guidelines for Sensitive Missile-Relevant Transfers (as of 23 September 2003)[1]

1. The purpose of these Guidelines is to limit the risks of proliferation of weapons of mass destruction (i.e. nuclear, chemical and biological weapons), by controlling transfers that could make a contribution to delivery systems (other than manned aircraft) for such weapons. The Guidelines are also intended to limit the risk of controlled items and their technology falling into the hands of terrorist groups and individuals. The Guidelines are not designed to impede national space programs or international cooperation in such programs as long as such programs could not contribute to delivery systems for weapons of mass destruction. These Guidelines, including the attached Annex, form the basis for controlling transfers to any destination beyond the Government's jurisdiction or control of all delivery systems (other than manned aircraft) capable of delivering weapons of mass destruction, and of equipment and technology relevant to missiles whose performance in terms of payload and range exceeds stated parameters. Restraint will be exercised in the consideration of all transfers of items within the Annex and all such transfers will be considered on a case-by-case basis. The Government will implement the Guidelines in accordance with national legislation.

2. The Annex consists of two categories of items, which term includes equipment and technology. Category I items, all of which are in Annex items 1 and 2, are those items of greatest sensitivity. If a Category I item is included in a system, that system will also be considered as Category I, except when the incorporated item cannot be separated, removed or duplicated. Particular restraint will be exercised in the consideration of Category I transfers regardless of their purpose, and there will be a strong presumption to deny such transfers. Particular restraint will also be exercised in the consideration of transfers of any items in the Annex, or of any missiles (whether or not in the Annex), if the Government judges, on the basis of all available, persuasive information, evaluated according to factors including those in paragraph 3, that they are intended to be used for the delivery of weapons of mass destruction, and there will be a strong presumption to deny such transfers. Until further notice, the transfer of Category I production facilities will not be authorised. The transfer of other Category I items will be authorised only on rare occasions and where the Government (A) obtains binding government-to-government undertakings embodying the assurances from the recipient government called for in paragraph 5 of these Guidelines and (B) assumes responsibility for taking all steps necessary to ensure that the item is put only to its stated end-use. It is understood that the decision to transfer remains the sole and sovereign judgement of the Government.

[1] The following states are partners to the MTCR: Argentina (1993); Australia (1990); Austria (1991); Belgium (1990); Brazil (1995); Bulgaria (2004); Canada (1987); Czech Republic (1998); Denmark (1990); Finland (1991); France (1987); Germany (1987); Greece (1992); Hungary (1993); Iceland (1993); Ireland (1992); Italy (1987); Japan (1987); Luxembourg (1990); Netherlands(1990); New Zealand (1991); Norway (1990); Poland (1998); Portugal (1992); Republic of Korea (2001); Russian Federation (1995); South Africa (1995); Spain (1990); Sweden (1991); Switzerland (1992); Turkey (1997); Ukraine (1998); United Kingdom (1987); United States of America (1987).

3. In the evaluation of transfer applications for Annex items, the following factors will be taken into account:

A. Concerns about the proliferation of weapons of mass destruction;

B. The capabilities and objectives of the missile and space programs of the recipient state;

C. The significance of the transfer in terms of the potential development of delivery systems (other than manned aircraft) for weapons of mass destruction;

D. The assessment of the end use of the transfers, including the relevant assurances of the recipient states referred to in sub paragraphs 5.A and 5.B below;

E. The applicability of relevant multilateral agreements.

F. The risk of controlled items falling into the hands of terrorist groups and individuals.

4. The transfer of design and production technology directly associated with any items in the Annex will be subject to as great a degree of scrutiny and control as will the equipment itself, to the extent permitted by national legislation.

5. Where the transfer could contribute to a delivery system for weapons of mass destruction, the Government will authorize transfers of items in the Annex only on receipt of appropriate assurances from the government of the recipient state that:

A. The items will be used only for the purpose stated and that such use will not be modified nor the items modified or replicated without the prior consent of the Government;

B. Neither the items nor replicas nor derivatives thereof will be re transferred without the consent of the Government.

6. In furtherance of the effective operation of the Guidelines, the Government will, as necessary and appropriate, exchange relevant in formation with other governments applying the same Guidelines.

7. The Government will:

A. provide that its national export controls require an authorisation for the transfer of non-listed items if the exporter has been informed by the competent authorities of the Government that the items may be intended, in their entirety or part, for use in connection with delivery systems for weapons of mass destruction other than manned aircraft ;

B. and, if the exporter is aware that non-listed items are intended to contribute to such activities, in their entirety or part, provide, to the extent compatible with national export controls, for notification by the exporter to the authorities referred to above, which will decide whether or not it is appropriate to make the export concerned subject to authorisation.

8. The adherence of all States to these Guidelines in the interest of international peace and security would be welcome.

3. Missile Technology Control Regime (MTCR): Equipment, Software and Technology Annex (as of 17 November 2005)

1. Introduction

(a) This Annex consists of two categories of items, which term includes equipment, materials, "software" or "technology". Category I items, all of which are in Annex Items 1 and 2, are those items of greatest sensitivity. If a Category I item is included in a system, that system will also be considered as Category I, except when the incorporated item cannot be separated, removed or duplicated. Category II items are those items in the Annex not designated Category I.

(b) In reviewing the proposed applications for transfers of complete rocket and unmanned aerial vehicle systems described in Items 1 and 19, and of equipment, materials, "software" or "technology" which is listed in the Technical Annex, for potential use in such systems, the Government will take account of the ability to trade off range and payload.

(c) General Technology Note: The transfer of "technology" directly associated with any goods controlled in the Annex is controlled according to the provisions in each Item to the extent permitted by national legislation. The approval of any Annex item for export also authorizes the export to the same end-user of the minimum "technology" required for the installation, operation, maintenance, and repair of the item.

Note: Controls do not apply to "technology" "in the public domain" or to "basic scientific research".

(d) General Software Note: The Annex does not control "software" which is either:

1. Generally available to the public by being:

   a. Sold from stock at retail selling points without restriction, by means of:

      1. Over-the-counter transactions;

      2. Mail order transactions; or

      3. Telephone call transactions; and

   b. Designed for installation by the user without further substantial support by the supplier; or

2. "In the public domain".

Note: The General Software Note only applies to general purpose, mass market "software".

(e) Chemical Abstracts Service (CAS) Numbers:

In some instances chemicals are listed by name and CAS number. Chemicals of the same structural formula (including hydrates) are controlled regardless of name or CAS number. CAS numbers are shown to assist in identifying whether a particular chemical or mixture is controlled, irrespective of nomenclature. CAS numbers cannot be used as unique identifiers because some forms of the listed chemical have different CAS numbers, and mixtures containing a listed chemical may also have different CAS numbers.

2. Definitions

For the purpose of this Annex, the following definitions apply:

"Basic scientific research"

Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not primarily directed towards a specific practical aim or objective.

"Development"

Is related to all phases prior to "production" such as:

- design
- design research
-design analysis
- design concepts
- assembly and testing of prototypes
- pilot production schemes
- design data
- process of transforming design data into a product
- configuration design
- integration design
- layouts

"In the public domain"

This means "software" or "technology" which has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove "software" or "technology" from being "in the public domain".)

"Microcircuit"

A device in which a number of passive and/or active elements are considered as indivisibly associated on or within a continuous structure to perform the function of a circuit.

"Microprogrammes"

A sequence of elementary instructions maintained in a special storage, the execution of which is initiated by the introduction of its reference instruction register.

"Payload"

The total mass that can be carried or delivered by the specified rocket system or unmanned aerial vehicle (UAV) system that is not used to maintain flight.

Note: The particular equipment, subsystems, or components to be included in the payload depends on the type and configuration of the vehicle under consideration.

Technical Notes:

1. Ballistic Missiles

a. "Payload" for systems with separating re-entry vehicles (RVs) includes:

1. The RVs, including:

a. Dedicated guidance, navigation, and control equipment;

b. Dedicated countermeasures equipment;

2. Munitions of any type (e.g., explosive or non-explosive);

3. Supporting structures and deployment mechanisms for the munitions (e.g., hardware used to attach to, or separate the RV from, the bus/post-boost vehicle) that can be removed without violating the structural integrity of the vehicle;

4. Mechanisms and devices for safing, arming, fuzing or firing;

5. Any other countermeasures equipment (e.g., decoys, jammers or chaff dispensers) that separate from the RV bus/post-boost vehicle;

6. The bus/post-boost vehicle or Altitude control/velocity trim module not including systems/subsystems essential to the operation of the other stages.

b. "Payload" for systems with non-separating re-entry vehicles includes:

1. Munitions of any type (e.g., explosive or non-explosive);

2. Supporting structures and deployment mechanisms for the munitions that can be removed without violating the structural integrity of the vehicle;

3. Mechanisms and devices for safing, arming, fuzing or firing;

4. Any countermeasures equipment (e.g., decoys, jammers or chaff dispensers) that can be removed without violating the structural integrity of the vehicle.

2. Space Launch Vehicles

"Payload" includes:

a. Satellites (single or multiple);

b. Satellite-to-launch vehicle adapters including, if applicable, apogee/perigee kick motors or similar manoeuvering systems.

3. Sounding Rockets

"Payload" includes:

a. Equipment required for a mission, such as data gathering, recording or transmitting devices for mission-specific data;

b. Recovery equipment (e.g., parachutes) that can be removed without violating the structural integrity of the vehicle.

4. Cruise Missiles

"Payload" includes:

a. Munitions of any type (e.g., explosive or non-explosive);

b. Supporting structures and deployment mechanisms for the munitions that can be removed without violating the structural integrity of the vehicle;

c. Mechanisms and devices for safing, arming, fuzing or firing;

d. Countermeasures equipment (e.g., decoys, jammers or chaff dispensers) that can be removed without violating the structural integrity of the vehicle;

e. Signature alteration equipment that can be removed without violating the structural integrity of the vehicle.

5. Other UAVs

"Payload" includes:

a. Munitions of any type (e.g., explosive or non-explosive);

b. Mechanisms and devices for safing, arming, fuzing or firing;

c. Countermeasures equipment (e.g., decoys, jammers or chaff dispensers) that can be removed without violating the structural integrity of the vehicle;

d. Signature alteration equipment that can be removed without violating the structural integrity of the vehicle;

e. Equipment required for a mission such as data gathering, recording or transmitting devices for mission-specific data;

f. Recovery equipment (e.g., parachutes) that can be removed without violating the structural integrity of the vehicle.

"Production"

Means all production phases such as:

- production engineering
- manufacture
- integration
- assembly (mounting)
- inspection
- testing
- quality assurance

"Production equipment"

Means tooling, templates, jigs, mandrels, moulds, dies, fixtures, alignment mechanisms, test equipment, other machinery and components therefor, limited to those specially designed or modified for "development" or for one or more phases of "production".

"Production facilities"

Means equipment and specially designed "software" therefor integrated into installations for "development" or for one or more phases of "production".

"Programmes"

A sequence of instructions to carry out a process in, or convertible into, a form executable by an electronic computer.

"Radiation hardened"

Means that the component or equipment is designed or rated to withstand radiation levels which meet or exceed a total irradiation dose of 5×10^5 rads (Si).

"Range"

The maximum distance that the specified rocket system or unmanned aerial vehicle (UAV) system is capable of travelling in the mode of stable flight as measured by the projection of its trajectory over the surface of the Earth.

Technical Notes:

1. The maximum capability based on the design characteristics of the system, when fully loaded with fuel or propellant, will be taken into consideration in determining "range".

2. The "range" for both rocket systems and UAV systems will be determined independently of any external factors such as operational restrictions, limitations imposed by telemetry, data links or other external constraints.

3. For rocket systems, the "range" will be determined using the trajectory that maximises range, assuming ICAO standard atmosphere with zero wind.

4. For UAV systems, the range will be determined for a one-way distance using the most fuel-efficient flight profile (e.g., cruise speed and altitude), assuming ICAO standard atmosphere with zero wind.

"Software"

A collection of one or more "programmes", or "micro-programmes", fixed in any tangible medium of expression.

"Technology"

Means specific information which is required for the "development", "production" or "use" of a product. The information may take the form of "technical data" or "technical assistance".

"Technical assistance"

May take forms such as:

- instruction
- skills
- training
- working knowledge
- consulting services

"Technical data"

May take forms such as:

- blueprints
- plans
- diagrams
- models
- formulae
- engineering designs and specifications
- manuals and instructions written or recorded on other media or devices such as:
    - disk
    - tape
    - read-only memories

"Use"

Means:

- operation
- installation (including on-site installation)
- maintenance
- repair
- overhaul
- refurbishing

3. Terminology

Where the following terms appear in the text, they are to be understood according to the explanations below:

(a) "Specially designed" describes equipment, parts, components or "software" which, as a result of "development", have unique properties that distinguish them for certain predetermined purposes. For example, a piece of equipment that is "specially designed" for use in a missile will only be considered so if it has no other function or use. Similarly, a piece of manufacturing equipment that is "specially designed" to produce a certain type of component will only be considered such if it is not capable of producing other types of components.

(b) "Designed or modified" describes equipment, parts or components which, as a result of "development," or modification, have specified properties that make them fit for a particular application. " Designed or modified" equipment, parts, components or "software" can be used for other applications. For example, a titanium coated pump designed for a missile may be used with corrosive fluids other than propellants.

(c) "Usable in" or "capable of" describes equipment, parts, components or "software" which are suitable for a particular purpose. There is no need for the equipment, parts, components or "software" to have been configured, modified or specified for the par-

ticular purpose. For example, any military specification memory circuit would be "capable of" operation in a guidance system.

(d) "Modified" in the context of "software" describes "software" which has been intentionally changed such that it has properties that make it fit for specified purposes or applications. Its properties may also make it suitable for purposes or applications other than those for which it was "modified".

CATEGORY I

ITEM 1: COMPLETE DELIVERY SYSTEMS

1.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

1.A.1. Complete rocket systems (including ballistic missile systems, space launch vehicles, and sounding rockets) capable of delivering at least a 500 kg "payload" to a "range" of at least 300 km.

1.A.2. Complete unmanned aerial vehicle systems (including cruise missile systems, target drones and reconnaissance drones) capable of delivering at least a 500 kg "payload" to a "range" of at least 300 km.

1.B. TEST AND PRODUCTION EQUIPMENT

1.B.1. "Production facilities" specially designed for the systems specified in 1.A.

1.C. MATERIALS

None.

1.D. SOFTWARE

1.D.1. "Software" specially designed or modified for the "use" of "production facilities" specified in 1.B.

1.D.2. "Software" which coordinates the function of more than one subsystem, specially designed or modified for "use" in systems specified in 1.A.

1.E. TECHNOLOGY

1.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 1.A., 1.B., or 1.D.

ITEM 2: COMPLETE SUBSYSTEMS USABLE FOR COMPLETE DELIVERY SYSTEMS

2.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

2.A.1. Complete subsystems usable in the systems specified in 1.A., as follows:

a. Individual rocket stages usable in the systems specified in 1.A.;

b. Re-entry vehicles, and equipment designed or modified therefor, usable in the systems specified in 1.A., as follows, except as provided in the Note below 2.A.1. for those designed for non-weapon payloads:

1. Heat shields, and components thereof, fabricated of ceramic or ablative materials;

2. Heat sinks and components thereof fabricated of light-weight, high heat capacity materials;

3. Electronic equipment specially designed for re-entry vehicles;

c. Solid propellant rocket motors or liquid propellant rocket engines, usable in the systems specified in 1.A., having a total impulse capacity of 1.1 x 10^6 Ns;
Note: Liquid propellant apogee engines specified in 2.A.1.c., designed or modified for satellite applications, may be treated as Category II, if the subsystem is exported subject to end-use statements and quantity limits appropriate for the excepted end-use stated above, when having all of the following parameters:
a. nozzle throat diameter of 20 mm or less; and
b. Combustion chamber pressure equal to or less than 15 bar.

d. 'Guidance sets', usable in the systems specified in 1.A., capable of achieving system accuracy of 3.33% or less of the "range" (e.g., a ´CEP´ of 10 km or less at a "range" of 300 km), except as provided in the Note below 2.A.1. for those designed for missiles with a "range" under 300 km or manned aircraft;
Technical Notes: 1. A ´guidance set´ integrates the process of measuring and computing a vehicle's position and velocity (i.e. navigation) with that of computing and sending commands to the vehicle's flight control systems to correct the trajectory.
2. ´CEP´ (circle of equal probability) is a measure of accuracy, defined as the radius of the circle centred at the target, at a specific range, in which 50% of the payloads impact.

e. Thrust vector control sub-systems, usable in the systems specified in 1.A., except as provided in the Note below 2.A.1. for those designed for rocket systems that do not exceed the "range"/"payload" capability of systems specified in 1.A.;
Technical Note: 2.A.1.e. includes the following methods of achieving thrust vector control:
a. Flexible nozzle;
b. Fluid or secondary gas injection;
c. Movable engine or nozzle;
d. Deflection of exhaust gas stream (jet vanes or probes);
e. Use of thrust tabs.

f. Weapon or warhead safing, arming, fuzing, and firing mechanisms, usable in the systems specified in 1.A., except as provided in the Note below 2.A.1. for those designed for systems other than those specified in 1.A.
Note: The exceptions in 2.A.1.b., 2.A.1.d., 2.A.1.e. and 2.A.1.f. above may be treated as Category II if the subsystem is exported subject to end-use statements and quantity limits appropriate for the excepted end-use stated above.

2.B. TEST AND PRODUCTION EQUIPMENT

2.B.1. "Production facilities" specially designed for the subsystems specified in 2.A.

2.B.2. "Production equipment" specially designed for the subsystems specified in 2.A.

2.C. MATERIALS

None.

2.D. SOFTWARE

2.D.1. "Software" specially designed or modified for the "use" of "production facilities" specified in 2.B.1.

2.D.2. "Software" specially designed or modified for the "use" of rocket motors or engines specified in 2.A.1.c.

2.D.3. "Software", specially designed or modified for the "use" of 'guidance sets' specified in 2.A.1.d.

Note: 2.D.3. includes "software", specially designed or modified to enhance the performance of ´guidance sets´ to achieve or exceed the accuracy specified in 2.A.1.d.

2.D.4. "Software" specially designed or modified for the "use" of subsystems or equipment specified in 2.A.1.b.3.

2.D.5. "Software" specially designed or modified for the "use" of systems in 2.A.1.e.

2.D.6. "Software" specially designed or modified for the "use" of systems in 2.A.1.f.

Note: Subject to end-use statements appropriate for the excepted end-use, "software" controlled by 2.D.2. - 2.D.6. may be treated as Category II as follows:

1. Under 2.D.2. if specially designed or modified for liquid propellant apogee engines, designed or modified for satellite applications as specified in the Note to 2.A.1.c.;

2. Under 2.D.3. if designed for missiles with a "range" of under 300 km or manned aircraft;

3. Under 2.D.4. if specially designed or modified for re-entry vehicles designed for non-weapon payloads;

4. Under 2.D.5. if designed for rocket systems that do not exceed the "range" "payload" capability of systems specified in 1.A.;

5. Under 2.D.6. if designed for systems other than those specified in 1.A.

2.E. TECHNOLOGY

2.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 2.A., 2.B. or 2.D.

CATEGORY II

ITEM 3: PROPULSION COMPONENTS AND EQUIPMENT

3.A.. EQUIPMENT, ASSEMBLIES AND COMPONENTS

3.A.1. Lightweight turbojet and turbofan engines (including turbocompound engines), usable in the systems specified in 1.A., that are small and fuel efficient, as follows:

a. Engines having both of the following characteristics :

1. Maximum thrust value greater than 400 N (achieved un-installed) excluding civil certified engines with a maximum thrust value greater than 8.89 kN (achieved un-installed); and

2. Specific fuel consumption of 0.15 kg N^{-1} h^{-1} or less (at maximum continuous power at sea level static and standard conditions);

b. Engines designed or modified for systems specified in 1.A., regardless of thrust or specific fuel consumption.

Note: Engines specified in 3.A.1. may be exported as part of a manned aircraft or in quantities appropriate for replacement parts for a manned aircraft.

3.A.2. Ramjet/scramjet/pulse jet/combined cycle engines, including devices to regulate combustion, and specially designed components therefor, usable in the systems specified in 1.A.

3.A.3. Rocket motor cases, 'insulation' components and nozzles therefor, usable in the systems specified in 1.A.

Technical Note: In 3.A.3. ´insulation´ intended to be applied to the components of a rocket motor, i.e., the case, nozzle inlets, case closures, includes cured or semi-cured compounded rubber components comprising sheet stock containing an insulating or refractory material. It may also be incorporated as stress relief boots or flaps.

Note: Refer to 3.C.2. for ´insulation´ material in bulk or sheet form.

3.A.4. Staging mechanisms, separation mechanisms, and interstages therefor, usable in the systems specified in 1.A.

3.A.5. Liquid and slurry propellant (including oxidisers) control systems, and specially designed components therefor, usable in the systems specified in 1.A., designed or modified to operate in vibration environments of more than 10 g rms between 20 Hz and 2 kHz.

Notes:

1. The only servo valves and pumps specified in 3.A.5. are the following:

a. Servo valves designed for flow rates equal to or greater than 24 litres per minute, at an absolute pressure equal to or greater than 7 MPa, that have an actuator response time of less than 100 ms;

b. Pumps, for liquid propellants, with shaft speeds equal to or greater than 8,000 rpm or with discharge pressures equal to or greater than 7 MPa.

2. Systems and components specified in 3.A.5. may be exported as part of a satellite.

3.A.6. Hybrid rocket motors and specially designed components therefor, usable in the systems specified in 1.A., 19.A.1. or 19.A.2.

3.A.7. Radial ball bearings having all tolerances specified in accordance with ISO 492 Tolerance Class 2 (or ANSI/ABMA Std 20 Tolerance Class ABEC-9 or other national equivalents), or better and having all the following characteristics:

a. An inner ring bore diameter between 12 and 50 mm;

b. An outer ring outside diameter between 25 and 100 mm; and

c. A width between 10 and 20 mm.

3.A.8. Liquid propellant tanks specially designed for the propellants controlled in Item 4.C. or other liquid propellants used in the systems specified in 1.A.1.

3.B. TEST AND PRODUCTION EQUIPMENT

3.B.1. "Production facilities" specially designed for equipment or materials specified in 3.A.1., 3.A.2., 3.A.3., 3.A.4., 3.A.5., 3.A.6. or 3.C.

3.B.2. "Production equipment" specially designed for equipment or materials specified in 3.A.1., 3.A.2., 3.A.3., 3.A.4., 3.A.5., 3.A.6. or 3.C.

3.B.3. Flow-forming machines, and specially designed components therefor, which:

a. according to the manufacturers technical specification can be equipped with numerical control units or a computer control, even when not equipped with such units at delivery; and

b. have more than two axes which can be co-ordinated simultaneously for contouring control.

Technical Note: Machines combining the function of spin-forming and flow-forming are, for the purpose of this item, regarded as flow-forming machines.

Note: This item does not include machines that are not usable in the "production" of propulsion components and equipment (e.g. motor cases) for systems specified in 1.A.

3.C. MATERIALS

3.C.1. 'Interior lining' usable for rocket motor cases in the systems specified in 1.A. or specially designed for systems specified in 19.A.1. or 19.A.2.

Technical Note: In 3.C.1. ´interior lining´ suited for the bond interface between the solid propellant and the case or insulating liner is usually a liquid polymer based dispersion of refractory or insulating materials e.g., carbon filled HTPB or other polymer with added curing agents to be sprayed or screeded over a case interior.

3.C.2. 'Insulation' material in bulk form usable for rocket motor cases in the systems specified in 1.A. or specially designed for systems specified in 19.A.1. or 19.A.2.

Technical Note: In 3.C.2. ´insulation´ intended to be applied to the components of a rocket motor, i.e., the case, nozzle inlets, case closures, includes cured or semi-cured compounded rubber sheet stock containing an insulating or refractory material. It may also be incorporated as stress relief boots or flaps specified in 3.A.3.

3.D. SOFTWARE

3.D.1. "Software" specially designed or modified for the "use" of "production facilities" and flow forming machines specified in 3.B.1. or 3.B.3.

3.D.2. "Software" specially designed or modified for the "use" of equipment specified in 3.A.1., 3.A.2., 3.A.4., 3.A.5. or 3.A.6.

Notes:

1. "Software" specially designed or modified for the "use" of engines specified in 3.A.1. may be exported as part of a manned aircraft or as replacement "software" therefor.

2. "Software" specially designed or modified for the "use" of propellant control systems specified in 3.A.5. may be exported as part of a satellite or as replacement "software" therefor.

3.D.3. "Software" specially designed or modified for the "development" of equipment specified in 3.A.2., 3.A.3. or 3.A.4.

3.E. TECHNOLOGY

3.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment, materials or "software" specified in 3.A.1., 3.A.2., 3.A.3., 3.A.4., 3.A.5., 3.A.6., 3.B., 3.C. or 3.D.

ITEM 4: PROPELLANTS, CHEMICALS AND PROPELLANT PRODUCTION

4.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

None.

4.B. TEST AND PRODUCTION EQUIPMENT

4.B.1. "Production equipment", and specially designed components therefor, for the "production", handling or acceptance testing of liquid propellants or propellant constituents specified in 4.C.

4.B.2. "Production equipment", other than that described in 4.B.3., and specially designed components therefor, for the production, handling, mixing, curing, casting, pressing, machining, extruding or acceptance testing of solid propellants or propellant constituents specified in 4.C.

4.B.3. Equipment as follows, and specially designed components therefor:

a. Batch mixers with provision for mixing under vacuum in the range of zero to 13.326 kPa and with temperature control capability of the mixing chamber and having all of the following:

1. A total volumetric capacity of 110 litres or more; and

2. At least one mixing/kneading shaft mounted off centre;

b. Continuous mixers with provision for mixing under vacuum in the range of zero to 13.326 kPa and with a temperature control capability of the mixing chamber having any of the following:

1. two or more mixing/kneading shafts; or

2. A single rotating shaft which oscillates and having kneading teeth/pins on the shaft as well as inside the casing of the mixing chamber.

c. Fluid energy mills usable for grinding or milling substances specified in 4.C.;

d. Metal powder "production equipment" usable for the "production", in a controlled environment, of spherical or atomised materials specified in 4.C.2.c., 4.C.2.d. or 4.C.2.e.

Note: 4.B.3.d. includes:

a. Plasma generators (high frequency arc-jet) usable for obtaining sputtered or spherical metallic powders with organization of the process in an argon-water environment;
b. Electroburst equipment usable for obtaining sputtered or spherical metallic powders with organization of the process in an argon-water environment;
c. Equipment usable for the "production" of spherical aluminium powders by powdering a melt in an inert medium (e.g. nitrogen).
Notes: 1. The only batch mixers, continuous mixers, usable for solid propellants or propellants constituents specified in 4.C., and fluid energy mills specified in 4.B., are those specified in 4.B.3.
2. Forms of metal powder "production equipment" not specified in 4.B.3.d. are to be evaluated in accordance with 4.B.2.

4.C. MATERIALS

4.C.1. Composite and composite modified double base propellants.

4.C.2. Fuel substances as follows:

a. Hydrazine with a concentration of more than 70%;

b. Hydrazine derivatives as follows:

1. Monomethylhydrazine (MMH);

2. Unsymmetrical dimethylhydrazine (UDMH);

3. Hydrazine nitrate;

4. Other Hydrazine derivatives usable as rocket fuel substances;

Note: 4.C.2.b does not control the following derivatives

1. Aromatic Hydrazines and their salts;

2. Adipic Acid Dihydrazide [CAS 1071-93-8]

c. Spherical aluminium powder with particles of uniform diameter of less than 200×10^{-6} m (200 µm) and an aluminium content of 97% by weight or more, if at least 10% of the total weight is made up of particles of less than 63 µm, according to ISO 2591:1988 or national equivalents such as JIS Z8820;
Technical Note: A particle size of 63 µm (ISO R-565) corresponds to 250 mesh (Tyler) or 230 mesh (ASTM standard E-11).

d. Zirconium, beryllium, magnesium and alloys of these in particle size less than 60×10^{-6} m (60 µm), whether spherical, atomised, spheroidal, flaked or ground, consisting of 97% by weight or more of any of the above mentioned metals;
Technical Note: The natural content of hafnium in the zirconium (typically 2% to 7%) is counted with the zirconium.

e. Boron and boron alloys in particle size less than 60×10^{-6} m (60 µm), whether spherical, atomised, spheroidal, flaked or ground with a purity of 85% by weight or more;

f. High energy density materials such as boron slurry, having an energy density of 40×10^{6} J/kg or greater.

4.C.3. Oxidisers/Fuels as follows:

Perchlorates, chlorates or chromates mixed with powdered metals or other high energy fuel components.

4.C.4. Oxidiser substances as follows:

a. Liquid oxidiser substances as follows:

1. Dinitrogen trioxide;

2. Nitrogen dioxide/dinitrogen tetroxide;

3. Dinitrogen pentoxide;

4. Mixed Oxides of Nitrogen (MON);

5. Inhibited Red Fuming Nitric Acid (IRFNA);

6. Compounds composed of fluorine and one or more of other halogens, oxygen or nitrogen.

Technical Note: Mixed Oxides of Nitrogen (MON) are solutions of Nitric Oxide (NO) in Dinitrogen Tetroxide/Nitrogen Dioxide (N_2O_4/NO_2) that can be used in missile systems. There are a range of compositions that can be denoted as MONi or MONij where i and j are integers representing the percentage of Nitric Oxide in the mixture (e.g., MON3 contains 3% Nitric Oxide, MON25 25% Nitric Oxide. An upper limit is MON40, 40% by weight).

Note: Item 4.C.4.a.6. does not control Nitrogen Trifluoride (NF_3) in a gaseous state as it is not usable for missile applications.

b. Solid oxidiser substances as follows:

1. Ammonium perchlorate;

2. Ammonium dinitramide (ADN);

3. Nitro-amines (cyclotetramethylene - tetranitramine (HMX); cyclotrimethylene - trinitramine (RDX);

4. Hydrazinium nitroformate (HNF) [CAS 20773-28-8].

4.C.5. Polymeric substances, as follows:

a. Carboxy - terminated polybutadiene (CTPB);

b. Hydroxy - terminated polybutadiene (HTPB);

c. Glycidyl azide polymer (GAP);

d. Polybutadiene - Acrylic Acid (PBAA);

e. Polybutadiene - Acrylic Acid - Acrylonitrile (PBAN).

4.C.6 Other propellant additives and agents as follows:

a. Bonding agents as follows:

1. Tris (1-(2-methyl)aziridinyl) phosphine oxide (MAPO);

2. Trimesoyl-1 (2-ethyl) aziridine (HX-868, BITA);

3. Tepanol (HX878), reaction product of tetraethlylenepentamine, acrylonitrile and glycidol;

4. Tepan (HX-879), reaction product of tetraethlylenepentamine and acrylonitrile;

5. Polyfunctional aziridine amides with isophthalic, trimesic, isocyanuric, or trimethyladipic backbone also having a 2-methyl or 2-ethyl aziridine group (HX-752, HX-874 and HX-877);

b. Curing agent and catalysts as follows: Triphenyl bismuth (TPB);

c. Burning rate modifiers, as follows:

1. Carboranes, decaboranes, pentaboranes and derivatives thereof;

2. Ferrocene derivatives, as follows:

a. Catocene;

b. Ethyl ferrocene;

c. Propyl ferrocene;

d. n-Butyl ferrocene;

e. Pentyl ferrocene;

f. Dicyclopentyl ferrocene;

g. Dicyclohexyl ferrocene;

h. Diethyl ferrocene;

i. Dipropyl ferrocene;

j. Dibutyl ferrocene;

k. Dihexyl ferrocene;

l. Acetyl ferrocenes;

m. Ferrocene Carboxylic acids;

n. Butacene;

o. Other ferrocene derivatives usable as rocket propellant burning rate modifiers.

d. Nitrate esters and nitrated plasticisers as follows:

1. Triethylene glycol dinitrate (TEGDN);

2. Trimethylolethane trinitrate (TMETN);

3. 1,2,4-butanetriol trinitrate (BTTN);

4. Diethylene glycol dinitrate (DEGDN);

e. Stabilisers as follows:

1. 2-Nitrodiphenylamine;

2. N-methyl-p-nitroaniline.

4.D. SOFTWARE

4.D.1. "Software" specially designed or modified for the "use" of equipment specified in 4.B. for the "production" and handling of materials specified in 4.C.

4.E TECHNOLOGY

4.E.1 "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or materials specified in 4.B. and 4.C.

(RESERVED FOR FUTURE USE)

ITEM 6.: PRODUCTION OF STRUCTURAL COMPOSITES, PYROLYTIC DEPOSITION AND DENSIFICATION, AND STRUCTURAL MATERIALS

6.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

6.A.1. Composite structures, laminates, and manufactures thereof, specially designed for use in the systems specified in 1.A. and the subsystems specified in 2.A.

6.A.2. Resaturated pyrolised (i.e. carbon-carbon) components having all of the following:

a. Designed for rocket systems; and

b. Usable in the systems specified in 1.A.

6.B. TEST AND PRODUCTION EQUIPMENT

6.B.1. Equipment for the "production" of structural composites, fibres, prepregs or preforms, usable in the systems specified in 1.A., as follows, and specially designed components, and accessories therefor:

a. Filament winding machines of which the motions for positioning, wrapping and winding fibres can be co-ordinated and programmed in three or more axes, designed to fabricate composite structures or laminates from fibrous or filamentary materials, and co-ordinating and programming controls;

b. Tape-laying machines of which the motions for positioning and laying tape and sheets can be co-ordinated and programmed in two or more axes, designed for the manufacture of composite airframes and missile structures;

c. Multi-directional, multi-dimensional weaving machines or interlacing machines, including adapters and modification kits for weaving, interlacing or braiding fibres to manufacture composite structures;
Note: 6.B.1.c. does not control textile machinery not modified for the end-uses stated.

d. Equipment designed or modified for the production of fibrous or filamentary materials as follows:

1. Equipment for converting polymeric fibres (such as polyacrylonitrile, rayon, or polycarbosilane) including special provision to strain the fibre during heating;

2. Equipment for the vapour deposition of elements or compounds on heated filament substrates;

3. Equipment for the wet-spinning of refractory ceramics (such as aluminium oxide);

e. Equipment designed or modified for special fibre surface treatment or for producing prepregs and preforms, including rollers, tension stretchers, coating equipment, cutting equipment and clicker dies.

Note: Examples of components and accessories for the machines specified in 6.B.1. are moulds, mandrels, dies, fixtures and tooling for the preform pressing, curing, casting, sintering or bonding of composite structures, laminates and manufactures thereof.

6.B.2. Nozzles specially designed for the processes referred to in 6.E.3.

6.B.3. Isostatic presses having all of the following characteristics:

a. Maximum working pressure equal to or greater than 69 MPa;

b. Designed to achieve and maintain a controlled thermal environment of 600°C or greater; and

c. Possessing a chamber cavity with an inside diameter of 254 mm or greater.

6.B.4. Chemical vapour deposition furnaces designed or modified for the densification of carbon-carbon composites.

6.B.5 Equipment and process controls, other than those specified in 6.B.3. or 6.B.4., designed or modified for densification and pyrolysis of structural composite rocket nozzles and re-entry vehicle nose tips.

6.C. MATERIALS

6.C.1. Resin impregnated fibre prepregs and metal coated fibre preforms, for the goods specified in 6.A.1., made either with organic matrix or metal matrix utilising fibrous or filamentary reinforcements having a specific tensile strength greater than 7.62×10^4 m and a specific modulus greater than 3.18×10^6 m.

Note: The only resin impregnated fibre prepregs specified in 6.C.1. are those using resins with a glass transition temperature (Tg), after cure, exceeding 145°C as determined by ASTM D4065 or national equivalents.

6.C.2. Resaturated pyrolised (i.e. carbon-carbon) materials having all of the following:

a. Designed for rocket systems; and

b. Usable in the systems specified in 1.A.

6.C.3. Fine grain graphites with a bulk density of at least 1.72 g/cc measured at 15ºC and having a grain size of 100 x 10-6 m (100 µm) or less, usable for rocket nozzles and re-entry vehicle nose tips, which can be machined to any of the following products:

a. Cylinders having a diameter of 120 mm or greater and a length of 50 mm or greater;

b. Tubes having an inner diameter of 65 mm or greater and a wall thickness of 25 mm or greater and a length of 50 mm or greater; or

c. Blocks having a size of 120 mm x 120 mm x 50 mm or greater.

6.C.4. Pyrolytic or fibrous reinforced graphites usable for rocket nozzles and re-entry vehicle nose tips usable in systems specified in 1.A.

6.C.5. Ceramic composite materials (dielectric constant less than 6 at frequencies from 100 Hz to 10 GHz) for use in missile radomes usable in systems specified in 1.A.

6.C.6. Bulk machinable silicon-carbide reinforced unfired ceramic usable for nose tips usable in systems specified in 1.A.

6.C.7. Tungsten, molybdenum, and alloys of these metals in the form of uniform spherical or atomised particles of 500 x 10^{-6} m (500 µm) diameter or less with a purity of 97% or higher for fabrication of rocket motor components, i.e., heat shields, nozzle substrates, nozzle throats, and thrust vector control surfaces, usable in systems specified in 1.A.

6.C.8. Maraging steels having an ultimate Tensile Strength equal to or greater than 1.5 GPa, measured at 20°C, in the form of sheet, plate or tubing with a wall or plate thickness equal to or less than 5.0 mm usable in systems specified in 1.A.

Technical Note: Maraging steels are generally characterised by high nickel, very low carbon content and use substitutional elements or precipitates to produce age-hardening.

6.C.9. Titanium-stabilized duplex stainless steel (Ti-DSS) usable in the systems specified in 1.A. and having all of the following:

a. Having all of the following characteristics:

1. Containing 17.0 - 23.0 weight percent chromium and 4.5 - 7.0 weight percent nickel;

2. Having a titanium content of greater than 0.10 weight percent nickel; and

3. A ferritic-austenitic microstructure (also referred to as a two-phase microstructure) of which at least 10% is austenite by volume (according to ASTM E-1181-87 or national equivalents); and

b. Any of the following forms:

1. Ingots or bars having a size of 100 mm or more in each dimension;

2. Sheets having a width of 600 mm or more and a thickness of 3 mm or less; or

3. Tubes having an outer diameter of 600 mm or more and a wall thickness of 3 mm or less.

6.D SOFTWARE

6.D.1. "Software" specially designed or modified for the "use" of equipment specified in 6.B.1.

6.D.2. "Software" specially designed or modified for the equipment specified in 6.B.3., 6.B.4. or 6.B.5.

6.E. TECHNOLOGY

6.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment, materials or "software" specified in 6.A., 6.B., 6.C. or 6.D.

6.E.2. "Technical data" (including processing conditions) and procedures for the regulation of temperature, pressures or atmosphere in autoclaves or hydroclaves when used for the production of composites or partially processed composites, usable for equipment or materials specified in 6.A. or 6.C.

6.E.3. "Technology" for producing pyrolytically derived materials formed on a mould, mandrel or other substrate from precursor gases which decompose in the 1,300°C to 2,900°C temperature range at pressures of 130 Pa (1 mm Hg) to 20 kPa (150 mm Hg) including "technology" for the composition of precursor gases, flow-rates, and process control schedules and parameters.
(RESERVED FOR FUTURE USE)

ITEM 9.:INSTRUMENTATION, NAVIGATION AND DIRECTION FINDING

9.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

9.A.1. Integrated flight instrument systems which include gyrostabilisers or automatic pilots, designed or modified for use in the systems specified in 1.A., and specially designed components therefor.

9.A.2. Gyro-astro compasses and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites, and specially designed components therefor.

9.A.3. Linear accelerometers, designed for use in inertial navigation systems or in guidance systems of all types, usable in the systems specified in 1.A., 19.A.1. or 19.A.2., having all of the following characteristics, and specially designed components therefor:

a. 'Scale factor' 'repeatability' less (better) than 1250 ppm; and

b. 'Bias' 'repeatability' less (better) than 1250 micro g.

Technical Notes:

1. 'Bias' is defined as the accelerometer output when no acceleration is applied.

2. 'Scale factor' is defined as the ratio of change in output to a change in the input.

3. The measurement of 'bias' and 'scale factor' refers to one sigma standard deviation with respect to a fixed calibration over a period of one year.

4. 'Repeatability' is defined according to IEEE Standard 528-2001 as follows:

> *'The closeness of agreement among repeated measurements of the same variable under the same operating conditions when changes in conditions or non-operating periods occur between measurements'.*

Note: Item 9.A.3. does not control accelerometers specially designed and developed as Measurement While Drilling (MWD) sensors for use in downhole well service operations.

9.A.4. All types of gyros usable in the systems specified in 1.A., 19.A.1. or 19.A.2., with a rated 'drift rate' 'stability' of less than 0.5 degrees (1 sigma or rms) per hour in a 1 g environment and specially designed components therefor.

Technical Notes:

1. 'Drift rate' is defined as the time rate of output deviation from the desired output. It consists of random and systematic components and is expressed as an equivalent angular displacement per unit time with respect to inertial space.

2. 'Stability' is defined as the standard deviation (1 sigma) of the variation of a particular parameter from its calibrated value measured under stable temperature conditions. This can be expressed as a function of time.

9.A.5. Continuous output accelerometers or gyros of any type, specified to function at acceleration levels greater than 100 g, and specially designed components therefor.

9.A.6. Inertial or other equipment using accelerometers specified in 9.A.3. or 9.A.5. or gyros specified in 9.A.4. or 9.A.5., and systems incorporating such equipment, and specially designed components therefor.

9.A.7. 'Integrated navigation systems', designed or modified for the systems specified in 1.A., 19.A.1. or 19.A.2. and capable of providing a navigational accuracy of 200 m CEP or less.

Technical Note: An 'integrated navigation system' typically incorporates all of the following components:

a. An inertial measurement device (e.g., an attitude and heading reference system, inertial reference unit, or inertial navigation system);

b. One or more external sensors used to update the position and/or velocity, either periodically or continuously throughout the flight (e.g., satellite navigation receiver, radar altimeter, and/or Doppler radar); and

c. Integration hardware and software.

N.B. For integration "software", see Item 9.D.4.

9.B. TEST AND PRODUCTION EQUIPMENT

9.B.1. "Production equipment", and other test, calibration and alignment equipment, other than that described in 9.B.2., designed or modified to be used with equipment specified in 9.A.

Note: Equipment specified in 9.B.1. includes the following:

a. For laser gyro equipment, the following equipment used to characterise mirrors, having the threshold accuracy shown or better:

1. Scatterometer (10 ppm);

2. Reflectometer (50 ppm);

3. Profilometer (5 Angstroms);

b. For other inertial equipment:

1. Inertial Measurement Unit (IMU Module) Tester;

2. IMU Platform Tester;

3. IMU Stable Element Handling Fixture;

4. IMU Platform Balance Fixture;

5. Gyro Tuning Test Station;

6. Gyro Dynamic Balance Station;

7. Gyro Run-In/Motor Test Station;

8. Gyro Evacuation and Filling Station;

9. Centrifuge Fixture for Gyro Bearings;
10. Accelerometer Axis Align Station;
11. Accelerometer Test Station.

9.B.2. Equipment as follows:

a. Balancing machines having all the following characteristics:

1. Not capable of balancing rotors/assemblies having a mass greater than 3 kg;

2. Capable of balancing rotors/assemblies at speeds greater than 12,500 rpm;

3. Capable of correcting unbalance in two planes or more; and

4. Capable of balancing to a residual specific unbalance of 0.2 g mm per kg of rotor mass;

b. Indicator heads (sometimes known as balancing instrumentation) designed or modified for use with machines specified in 9.B.2.a.;

c. Motion simulators/rate tables (equipment capable of simulating motion) having all of the following characteristics:

1. Two axes or more;

2. Slip rings capable of transmitting electrical power and/or signal information; and

3. Having any of the following characteristics:

a. For any single axis having all of the following:

1. Capable of rates of 400 degrees/s or more, or 30 degrees/s or less; and

2. A rate resolution equal to or less than 6 degrees/s and an accuracy equal to or less than 0.6 degrees/s;

b. Having a worst-case rate stability equal to or better (less) than plus or minus 0.05% averaged over 10 degrees or more; or

c. A positioning accuracy equal to or better than 5 arc second;

d. Positioning tables (equipment capable of precise rotary positioning in any axes) having the following characteristics:

1. Two axes or more; and

2. A positioning accuracy equal to or better than 5 arc second;

e. Centrifuges capable of imparting accelerations above 100 g and having slip rings capable of transmitting electrical power and signal information.

Notes:
1. The only balancing machines, indicator heads, motion simulators, rate tables, positioning tables and centrifuges specified in Item 9 are those specified in 9.B.2.
2. 9.B.2.a. does not control balancing machines designed or modified for dental or other medical equipment.
3. 9.B.2.c. and 9.B.2.d. do not control rotary tables designed or modified for machine tools or for medical equipment.

4. Rate tables not controlled by 9.B.2.c. and providing the characteristics of a positioning table are to be evaluated according to 9.B.2.d.

5. Equipment that has the characteristics specified in 9.B.2.d. which also meets the characteristics of 9.B.2.c. will be treated as equipment specified in 9.B.2.c.

9.C. MATERIALS

None.

9.D. SOFTWARE

9.D.1. "Software" specially designed or modified for the "use" of equipment specified in 9.A. or 9.B.

9.D.2. Integration "software" for the equipment specified in 9.A.1.

9.D.3. Integration "software" specially designed for the equipment specified in 9.A.6.

9.D.4. Integration "software", designed or modified for the 'integrated navigation systems' specified in 9.A.7.

Note: A common form of integration "software" employs Kalman filtering.

9.E. TECHNOLOGY

9.E.1. "Technology" , in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 9.A., 9.B. or 9.D.

Equipment or "software" specified in 9.A. or 9.D. may be exported as part of a manned aircraft, satellite, land vehicle, marine/submarine vessel or geophysical survey equipment or in quantities appropriate for replacement parts for such applications.

ITEM 10.: FLIGHT CONTROL

10.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

10.A.1. Hydraulic, mechanical, electro-optical, or electromechanical flight control systems (including fly-by-wire systems) designed or modified for the systems specified in 1.A.

10.A.2. Altitude control equipment designed or modified for the systems specified in 1.A.

10.A.3. Flight control servo valves designed or modified for the systems in 10.A.1. or 10.A.2., and designed or modified to operate in a vibration environment of more than 10 g rms over the entire range between 20 Hz and 2 kHz.

Note: Systems, equipment or valves specified in 10.A. may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.

10.B. TEST AND PRODUCTION EQUIPMENT

10.B.1. Test, calibration, and alignment equipment specially designed for equipment specified in 10.A.

10.C. MATERIALS

None.

10.D. SOFTWARE

10.D.1. "Software" specially designed or modified for the "use" of equipment specified in 10.A. or 10.B.

Note: "Software" specified in 10.D.1. may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.

10.E. TECHNOLOGY

10.E.1. Design "technology" for integration of air vehicle fuselage, propulsion system and lifting control surfaces, designed or modified for the systems specified in 1.A., to optimise aerodynamic performance throughout the flight regime of an unmanned aerial vehicle.

10.E.2. Design "technology" for integration of the flight control, guidance, and propulsion data into a flight management system, designed or modified for the systems specified in 1.A., for optimisation of rocket system trajectory.

10.E.3. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 10.A., 10.B. or 10.D.

ITEM 11: AVIONICS

11.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

11.A.1. Radar and laser radar systems, including altimeters, designed or modified for use in the systems specified in 1.A.

Technical Note: Laser radar systems embody specialised transmission, scanning, receiving and signal processing techniques for utilisation of lasers for echo ranging, direction finding and discrimination of targets by location, radial speed and body reflection characteristics.

11.A.2. Passive sensors for determining bearings to specific electromagnetic sources (direction finding equipment) or terrain characteristics, designed or modified for use in the systems specified in 1.A.

11.A.3. Receiving equipment for Global Navigation Satellite Systems (GNSS; e,g., GPS, GLONASS or Galileo), having any of the following characteristics, and specially designed components therefor:

a. Designed or modified for use in systems specified in 1.A.; or

b. Designed or modified for airborne applications and having any of the following:

1. Capable of providing navigation information at speeds in excess of 600 m/s;

2. Employing decryption, designed or modified for military or governmental services, to gain access to GNSS secure signal/data; or

3. Being specially designed to employ anti-jam features (e.g. null steering antenna or electronically steerable antenna) to function in an environment of active or passive countermeasures.

Note: 11.A.3.b.2. and 11.A.3.b.3. do not control equipment designed for commercial, civil or 'Safety of Life' (e.g., data integrity, flight safety) GNSS services.

11.A.4. Electronic assemblies and components, designed or modified for use in the systems specified in 1.A. and specially designed for military use and operation at temperatures in excess of 125°C.

Notes: 1. Equipment specified in 11.A. includes the following:

a. Terrain contour mapping equipment;

b. Scene mapping and correlation (both digital and analogue) equipment;

c. Doppler navigation radar equipment;

d. Passive interferometer equipment;

e. Imaging sensor equipment (both active and passive).

2. Equipment specified in 11.A. may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.

11.B. TEST AND PRODUCTION EQUIPMENT

None.

11.C. MATERIALS

None.

11.D. SOFTWARE

11.D.1 "Software" specially designed or modified for the "use" of equipment specified in 11.A.1., 11.A.2. or 11.A.4.

11.D.2. "Software" specially designed for the "use" of equipment specified in 11.A.3.

11.E. TECHNOLOGY

11.E.1. Design "technology" for protection of avionics and electrical subsystems against Electromagnetic Pulse (EMP) and Electromagnetic Interference (EMI) hazards from external sources, as follows:

a. Design "technology" for shielding systems;

b. Design "technology" for the configuration of hardened electrical circuits and subsystems;

c. Design "technology" for determination of hardening criteria for the above.

11.E.2. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 11.A. or 11.D.

ITEM 12: LAUNCH SUPPORT

12.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

12.A.1. Apparatus and devices, designed or modified for the handling, control, activation and launching of the systems specified in 1.A., 19.A.1., or 19.A.2.

12.A.2. Vehicles designed or modified for the transport, handling, control, activation and launching of the systems specified in 1.A.

12.A.3. Gravity meters (gravimeters), gravity gradiometers, and specially designed components therefor, designed or modified for airborne or marine use, and having a static or operational accuracy of 7×10^{-6} m/s^2 (0.7 milligal) or better, with a time to steady-state registration of two minutes or less, usable for systems specified in 1.A.

12.A.4. Telemetry and telecontrol equipment, including ground equipment, designed or modified for systems specified in 1.A., 19.A.1. or 19.A.2.

Notes:

12.A.4. does not control equipment designed or modified for manned aircraft or satellites.

12.A.4. does not control ground based equipment designed or modified for terrestrial or marine applications.

12.A.4. does not control equipment designed for commercial, civil or 'Safety of Life' (e.g. data integrity, flight safety) GNSS services.

12.A.5. Precision tracking systems, usable for systems specified in 1.A., 19.A.1. or 19.A.2. as follows:

a. Tracking systems which use a code translator installed on the rocket or unmanned aerial vehicle in conjunction with either surface or airborne references or navigation satellite systems to provide real-time measurements of inflight position and velocity;

b. Range instrumentation radars including associated optical/infrared trackers with all of the following capabilities:

1. Angular resolution better than 3 mrad (0.5 mils);

2. Range of 30 km or greater with a range resolution better than 10 m rms; and

3. Velocity resolution better than 3 m/s.

12.B TEST AND PRODUCTION EQUIPMENT

None.

12.C. MATERIALS

None.

12.D. SOFTWARE

12.D.1. "Software" specially designed or modified for the "use" of equipment specified in 12.A.1.

12.D.2. "Software" which processes post-flight, recorded data, enabling determination of vehicle position throughout its flight path, specially designed or modified for systems specified in 1.A., 19.A.1. or 19.A.2.

12.D.3. "Software" specially designed or modified for the "use" of equipment specified in 12.A.4. or 12.A.5., usable for systems specified in 1.A., 19.A.1. or 19.A.2.

12.E. TECHNOLOGY

12.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 12.A. or 12.D.

ITEM 13: COMPUTERS

13.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

13.A.1. Analogue computers, digital computers or digital differential analysers, designed or modified for use in the systems specified in 1.A., having any of the following characteristics:

a. Rated for continuous operation at temperatures from below -45°C to above +55°C; or

b. Designed as ruggedised or "radiation hardened".

13.B. TEST AND PRODUCTION EQUIPMENT

None.

13.C MATERIALS

None.

13.D. SOFTWARE

None.

13.E. TECHNOLOGY

13.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 13.A.

Note: Item 13 equipment may be exported as part of a manned aircraft or satellite or in quantities appropriate for replacement parts for manned aircraft.

ITEM 14: ANALOGUE TO DIGITAL CONVERTERS

14.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

14.A.1. Analogue-to-digital converters, usable in the systems specified in 1.A., having any of the following characteristics:

a. Designed to meet military specifications for ruggedised equipment; or

b. Designed or modified for military use and being any of the following types:

1. Analogue-to-digital converter "microcircuits", which are "radiation-hardened" or have all of the following characteristics:

   a. Having a quantisation corresponding to 8 bits or more when coded in the binary system;

   b. Rated for operation in the temperature range from below –54°C to above +125°C ; and

   c. Hermetically sealed; or

2. Electrical input type analogue-to-digital converter printed circuit boards or modules, having all of the following characteristics:

   a. Having a quantisation corresponding to 8 bits or more when coded in the binary system;

   b. Rated for operation in the temperature range from below -45°C to above +55°C; and

   c. Incorporating "microcircuits" specified in 14.A.1.b.1.

14.B. TEST AND PRODUCTION EQUIPMENT

None.

14.C. MATERIALS

None.

14.D. SOFTWARE

None.

14.E. TECHNOLOGY

14.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 14.A.

ITEM 15: TEST FACILITIES AND EQUIPMENT

15.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

None.

15.B. TEST AND PRODUCTION EQUIPMENT

15.B.1. Vibration test equipment, usable for the systems specified in 1.A. or the subsystems specified in 2.A., and components therefor, as follows:

a. Vibration test systems employing feedback or closed loop techniques and incorporating a digital controller, capable of vibrating a system at an acceleration equal to or greater than 10 g rms between 20 Hz and 2 kHz and imparting forces equal to or greater than 50 kN, measured 'bare table';

b Digital controllers, combined with specially designed vibration test "software", with a real-time bandwidth greater than 5 kHz and designed for use with vibration test systems specified in 15.B.1.a.;

c. Vibration thrusters (shaker units), with or without associated amplifiers, capable of imparting a force equal to or greater than 50 kN, measured 'bare table', and usable in vibration test systems specified in 15.B.1.a.;

d. Test piece support structures and electronic units designed to combine multiple shaker units into a complete shaker system capable of providing an effective combined force equal to or greater than 50 kN, measured 'bare table', and usable in vibration test systems specified in 15.B.1.a.

Technical Note: Vibration test systems incorporating a digital controller are those systems, the functions of which are, partly or entirely, automatically controlled by stored and digitally coded electrical signals.

15.B.2. Wind-tunnels for speeds of Mach 0.9 or more, usable for the systems specified in 1.A. or the subsystems specified in 2.A.

15.B.3. Test benches/stands, usable for the systems specified in 1.A. or the subsystems specified in 2.A., which have the capacity to handle solid or liquid propellant rockets, motors or engines of more than 90 kN (20,000 lb) of thrust, or which are capable of simultaneously measuring the three axial thrust components.

15.B.4. Environmental chambers as follows, usable for the systems specified in 1.A. or the subsystems specified in 2.A.:

a. Environmental chambers capable of simulating all of the following flight conditions:

1. Vibration environments equal to or greater than 10 g rms, measured 'bare table', between 20 Hz and 2 kHz imparting forces equal to or greater than 5 kN; and

2. any of the following:

a. Altitude equal to or greater than 15 km; or

b. Temperature range of at least -50°C to 125°C;

b. Environmental chambers capable of simulating all of the following flight conditions:

1. Acoustic environments at an overall sound pressure level of 140 dB or greater (referenced to 2 x 10-5 N/m2) or with a total rated acoustic power output of 4 kW or greater; and

2. Any of the following:

a. Altitude equal to or greater than 15 km; or

b. Temperature range of at least -50°C to 125°C.

Technical Note: Item 15.B.4.a. describes systems that are capable of generating a vibration environment with a single wave (e.g. a sine wave) and systems capable of generating a broad band random vibration (i.e. power spectrum).

15.B.5. Accelerators capable of delivering electromagnetic radiation produced by bremsstrahlung from accelerated electrons of 2 MeV or greater, and equipment containing those accelerators, usable for the systems specified in 1.A. or the subsystems specified in 2.A.

Note: 15.B.5. does not control equipment specially designed for medical purposes.

Technical Note: In Item 15.B. 'bare table' means a flat table, or surface, with no fixture or fittings.

15.C. MATERIALS

None.

15.D. SOFTWARE

15.D.1. "Software" specially designed or modified for the "use" of equipment specified in 15.B. usable for testing systems specified in 1.A. or subsystems specified in 2.A.

15.E. TECHNOLOGY

15.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 15.B. or 15.D.

ITEM 16: MODELLING-SIMULATION AND DESIGN INTEGRATION

16.A EQUIPMENT, ASSEMBLIES AND COMPONENTS

16.A.1. Specially designed hybrid (combined analogue/digital) computers for modelling, simulation or design integration of systems specified in 1.A. or the subsystems specified in 2.A.

Note: This control only applies when the equipment is supplied with "software" specified in 16.D.1.

16.B. TEST AND PRODUCTION EQUIPMENT

None.

16.C. MATERIALS

None.

16.D. SOFTWARE

16.D.1. "Software" specially designed for modelling, simulation, or design integration of the systems specified in 1.A. or the subsystems specified in 2.A.

Technical Note: The modelling includes in particular the aerodynamic and thermodynamic analysis of the systems.

16.E. TECHNOLOGY

16.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 16.A. or 16.D.

ITEM 17: STEALTH

17.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

17.A.1. Devices for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e. stealth technology), for applications usable for the systems specified in 1.A. or the subsystems specified in 2.A.

17.B. TEST AND PRODUCTION EQUIPMENT

17.B.1. Systems, specially designed for radar cross section measurement, usable for the systems specified in 1.A. or the subsystems specified in 2.A.

17.C. MATERIALS

17.C.1. Materials for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e. stealth technology), for applications usable for the systems specified in 1.A. or 19.A. or the subsystems specified in 2.A.

Notes:

1. 17.C.1. includes structural materials and coatings (including paints), specially designed for reduced or tailored reflectivity or emissivity in the microwave, infrared or ultraviolet spectra.

2. 17.C.1. does not control coatings (including paints) when specially used for thermal control of satellites.

17.D. SOFTWARE

17.D.1. Software" specially designed for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures (i.e. stealth technology), for applications usable for the systems specified in 1.A. or 19.A. or the subsystems specified in 2.A.

Note: 17.D.1. includes "software" specially designed for analysis of signature reduction.

17.E. TECHNOLOGY

17.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment, materials or "software" specified in 17.A., 17.B., 17.C. or 17.D.

Note: 17.E.1. includes databases specially designed for analysis of signature reduction.

ITEM 18: NUCLEAR EFFECTS PROTECTION

18.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

18.A.1. "Radiation Hardened" "microcircuits" usable in protecting rocket systems and unmanned aerial vehicles against nuclear effects (e.g., Electromagnetic Pulse [EMP], X-rays, combined blast and thermal effects), and usable for the systems specified in 1.A.

18.A.2. 'Detectors' specially designed or modified to protect rocket systems and unmanned aerial vehicles against nuclear effects (e.g., Electromagnetic Pulse [EMP], X-rays, combined blast and thermal effects), and usable for the systems specified in 1.A.

Technical Note: A ´detector´ is defined as a mechanical, electrical, optical or chemical device that automatically identifies and records, or registers a stimulus such as an environmental change in pressure or temperature, an electrical or electromagnetic signal or radiation from a radioactive material. This includes devices that sense by one time operation or failure.

18.A.3. Radomes designed to withstand a combined thermal shock greater than 4.184×10^6 J/m^2 accompanied by a peak over pressure of greater than 50 kPa, usable in protecting rocket systems and unmanned aerial vehicles against nuclear effects (e.g., Electromagnetic Pulse [EMP], X-rays, combined blast and thermal effects), and usable for the systems specified in 1.A.

18.B. TEST AND PRODUCTION EQUIPMENT

None.

18.C. MATERIALS

None.

18.D. SOFTWARE

None.

18.E. TECHNOLOGY

18.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 18.A.

ITEM 19: OTHER COMPLETE DELIVERY SYSTEMS

19.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

19.A.1. Complete rocket systems (including ballistic missile systems, space launch vehicles, and sounding rockets), not specified in 1.A.1., capable of a "range" equal to or greater than 300 km.

19.A.2. Complete unmanned aerial vehicle systems (including cruise missile systems, target drones and reconnaissance drones), not specified in 1.A.2., capable of a "range" equal to or greater than 300 km.

19.A.3. Complete unmanned aerial vehicle systems, not specified in 1.A.2. or 19.A.2.,

a) Having all of the following:

1. An autonomous flight control and navigation capability; or

2. Capability of controlled flight out of the direct vision range involving a human operator; and

b) Having any of the following:

1. Incorporating an aerosol dispensing system/mechanism with a capacity greater than 20 litres; or

2. Designed or modified to incorporate an aerosol dispensing system/mechanism with a capacity greater than 20 litres.

Technical Notes: 1. An aerosol consists of particulate or liquids other than fuel components, by-products or additives, as part of the payload to be dispersed in the atmosphere. Examples of aerosols include pesticides for crop dusting and dry chemicals for cloud seeding.

2. An aerosol dispensing system/mechanism contains all those devices (mechanical, electrical, hydraulic, etc.), which are necessary for storage and dispersion of an aerosol into the atmosphere. This includes the possibility of aerosol injection into the combustion exhaust vapour and into the propeller slip stream.

Note: Item 19.A.3. does not control model aircraft, specially designed for recreational or competition purposes.

19.B. TEST AND PRODUCTION EQUIPMENT

None.

19.C. MATERIALS

None.

19.D. SOFTWARE

19.D.1. "Software" which coordinates the function of more than one subsystem, specially designed or modified for "use" in the systems specified in 19.A.1 or 19.A.2.

19.E. TECHNOLOGY

19.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment specified in 19.A. 1 or 19.A.2.

ITEM 20: OTHER COMPLETE SUBSYSTEMS

20.A. EQUIPMENT, ASSEMBLIES AND COMPONENTS

20.A.1. Complete subsystems as follows:

a. Individual rocket stages, not specified in 2.A.1., usable in systems specified in 19.A.;

b. Solid propellant rocket motors or liquid propellant rocket engines, not specified in 2.A.1., usable in systems specified in 19.A., having a total impulse capacity equal to or greater than 8.41 x 105 Ns, but less than 1.1 x 106 Ns.

20.B. TEST AND PRODUCTION EQUIPMENT

20.B.1 "Production facilities" specially designed for the subsystems specified in 20.A.

20.B.2."Production equipment" specially designed for the subsystems specified in 20.A.

20.C. MATERIALS

None.

20.D. SOFTWARE

20.D.1. "Software" specially designed or modified for the systems specified in 20.B.1.

20.D.2. "Software", not specified in 2.D.2., specially designed or modified for the "use" of rocket motors or engines specified in 20.A.1.b.

20.E. TECHNOLOGY

20.E.1. "Technology", in accordance with the General Technology Note, for the "development", "production" or "use" of equipment or "software" specified in 20.A., 20.B. or 20.D.

Statement of Understanding

Members agree that, in those cases where the term "national equivalents" are specifically allowed as alternatives to specified International Standards, the technical methods and parameters embodied in the national equivalent would ensure that the requirements of the standard set by the specified International Standards are met.

4. The Hague Code of Conduct against the Proliferation of Ballistic Missiles (25 November 2002)

Preamble

The Subscribing States:

Reaffirming their commitment to the United Nations Charter;

Stressing the role and responsibility of the United Nations in the field of international peace and security;

Recalling the widespread concern about the proliferation of weapons of mass destruction and their means of delivery;

Recognizing the increasing regional and global security challenges caused, inter alia, by the ongoing proliferation of Ballistic Missile systems capable of delivering weapons of mass destruction;

Seeking to promote the security of all states by fostering mutual trust through the implementation of political and diplomatic measures;

Having taken into account regional and national security considerations;

Believing that an International Code of Conduct against Ballistic Missile Proliferation will contribute to the process of strengthening existing national and international security arrangements and disarmament and non-proliferation objectives and mechanisms;

Recognising that subscribing States may wish to consider engaging in co-operative measures among themselves to this end;

1. Adopt this International Code of Conduct against Ballistic Missile Proliferation (hereinafter referred to as "the Code");

2. Resolve to respect the following Principles:

a) Recognition of the need comprehensively to prevent and curb the proliferation of Ballistic Missile systems capable of delivering weapons of mass destruction and the need to continue pursuing appropriate international endeavours, including through the Code;

b) Recognition of the importance of strengthening, and gaining wider adherence to, multilateral disarmament and non-proliferation mechanisms;

c) Recognition that adherence to, and full compliance with, international arms control, disarmament and non-proliferation norms help build confidence as to the peaceful intentions of states;

d) Recognition that participation in this Code is voluntary and open to all States;

e) Confirmation of their commitment to the United Nations Declaration on international Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of all States taking into particular Account the Needs of Developing Countries,

adopted by the United Nations General Assembly (Resolution 51/122 of 13 December 1996);

f) Recognition that states should not be excluded from utilising the benefits of space for peaceful purposes, but that, in reaping such benefits and in conducting related cooperation, they must not contribute to the proliferation of Ballistic Missiles capable of delivering weapons of mass destruction;

g) Recognition that Space Launch Vehicle programmes should not be used to conceal Ballistic Missile programmes;

h) Recognition of the necessity of appropriate transparency measures on Ballistic Missile programmes and Space Launch Vehicle programmes in order to increase confidence and to promote non-proliferation of Ballistic Missiles and Ballistic Missile technology;

3. Resolve to implement the following General Measures:

a) To ratify, accede to or otherwise abide by:

I. the Treaty on principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967),

II. the Convention on International Liability for Damage Caused by Space Objects (1972), and

III. the Convention on Registration of Objects Launched into Outer Space (1974);

b) To curb and prevent the proliferation of Ballistic Missiles capable of delivering weapons of mass destruction, both at a global and regional level**,** through multilateral, bilateral and national endeavours;

c) To exercise maximum possible restraint in the development, testing and deployment of Ballistic Missiles capable of delivering weapons of mass destruction, including, where possible, to reduce national holdings of such missiles, in the interest of global and regional peace and security;

d) To exercise the necessary vigilance in the consideration of assistance to Space Launch Vehicle programmes in any other country so as to prevent contributing to delivery systems for weapons of mass destruction, considering that such programmes may be used to conceal Ballistic Missile programmes;

e) Not to contribute to, support or assist any Ballistic Missile programme in countries which might be developing or acquiring weapons of mass destruction in contravention of norms established by, and of those countries' obligations under**,** international disarmament and non-proliferation treaties;

4. Resolve to implement the following:

a) Transparency measures as follows, with an appropriate and sufficient degree of detail to increase confidence and to promote non-proliferation of Ballistic Missiles capable of delivering weapons of mass destruction:

i) With respect to Ballistic Missile programmes to:

I. make an annual declaration providing an outline of their Ballistic Missile policies. Examples of openness in such declarations might be relevant information on Ballistic Missile systems and land (test-) launch sites;

II. provide annual information on the number and generic class of Ballistic Missiles launched during the preceding year, as declared in conformity with the pre-launch notification mechanism referred to hereunder, in tiret iii);

ii) With respect to expendable Space Launch Vehicle programmes, and consistent with commercial and economic confidentiality principles, to:

I. make an annual declaration providing an outline of their Space Launch Vehicle policies and land (test-) launch sites;

II. provide annual information on the number and generic class of Space Launch Vehicles launched during the preceding year, as declared in conformity with the pre-launch notification mechanism referred to hereunder, in tiret iii);

III. consider, on a voluntary basis (including on the degree of access permitted), inviting international observers to their land (test-) launch sites;

iii) With respect to their Ballistic Missile and Space Launch Vehicle programmes to:

I. exchange pre-launch notifications on their Ballistic Missile and Space Launch Vehicle launches and test flights. These notifications should include such information as the generic class of the Ballistic Missile or Space Launch Vehicle, the planned launch notification window, the launch area and the planned direction;

b) Subscribing States could, as appropriate and on a voluntary basis, develop bilateral or regional transparency measures, in addition to those above.

c) Implementation of the above Confidence Building Measures does not serve as justification for the programmes to which these Confidence Building Measures apply;

5. Organisational aspects

Subscribing States determine to:

a) Hold regular meetings, annually or as otherwise agreed by Subscribing States;

b) Take all decisions, both substantive and procedural, by a consensus of the Subscribing States present;

c) Use these meetings to define, review and further develop the workings of the Code, including in such ways as:

I. establishing procedures regarding the exchange of notifications and other information in the framework of the Code;

II. establishing an appropriate mechanism for the voluntary resolution of questions arising from national declarations, and/or questions pertaining to Ballistic Missile and/or Space Launch Vehicle programmes;

III. naming of a Subscribing State to serve as an immediate central contact for collecting and disseminating Confidence Building Measures submissions, receiving and

announcing the subscription of additional States, and other tasks as agreed by Subscribing States; and

IV. others as may be agreed by the Subscribing States, including possible amendments to the Code.

States supporting the Hague Code of Conduct

1. Afghanistan
2. Albania
3. Andorra
4. Argentina
5. Armenia
6. Australia
7. Austria
8. Azerbaijan
9. Belarus
10. Belgium
11. Benin
12. Bosnia and Herzegovina
13. Bulgaria
14. Burkina Faso
15. Burundi
16. Cambodia
17. Cameroon
18. Canada
19. Cape Verde
20. Chad
21. Chile
22. Colombia
23. Comoros
24. Cook Islands
25. Costa Rica
26. Croatia
27. Cyprus
28. Czech Republic
29. Denmark
30. Ecuador
31. El Salvador
32. Eritrea
33. Estonia
34. Fiji
35. Finland
36. France
37. Gabon
38. Gambia
39. Georgia
40. Germany
41. Ghana
42. Greece
43. Guatemala
44. Guinea
45. Guinea-Bissau
46. Guyana
47. Haiti
48. Holy See
49. Honduras
50. Hungary
51. Iceland
52. Ireland
53. Italy
54. Japan
55. Jordan
56. Kazakhstan
57. Kenya
58. Kiribati
59. Latvia
60. Liberia
61. Libyan Arab Jamahiriya
62. Liechtenstein
63. Lithuania
64. Luxembourg
65. Madagascar
66. Malawi
67. Mali
68. Malta
69. Marshall Islands
70. Mauritania
71. Federated States of Micronesia
72. Moldova
73. Monaco
74. Mongolia
75. Morocco
76. Mozambique
77. Netherlands
78. New Zealand
79. Nicaragua
80. Niger

81. Nigeria
82. Norway
83. Palau
84. Panama
85. Papua New Guinea
86. Paraguay
87. Peru
88. Philippines
89. Poland
90. Portugal
91. Republic of Korea
92. Romania
93. Russian Federation
94. Rwanda
95. Senegal
96. Serbia & Montenegro
97. Seychelles
98. Sierra Leone
99. Slovakia
100. Slovenia
101. South Africa
102. Spain
103. Sudan
104. Suriname
105. Sweden
106. Switzerland
107. Tajikistan
108. Tanzania
109. The Former Yugoslav Republic of Macedonia
110. Timor-Leste
111. Tonga
112. Tunisia
113. Turkey
114. Turkmenistan
115. Tuvalu
116. Uganda
117. Ukraine
118. United Kingdom
119. United States
120. Uruguay
121. Uzbekistan
122. Vanuatu
123. Venezuela
124. Zambia

D. Preventing the Proliferation of Biological and Chemical Weapons

1. Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (17 June 1925)

The Undersigned Plenipotentiaries, in the name of their respective Governments:

Whereas the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilized world; and

Whereas the prohibition of such use has been declared in Treaties to which the majority of Powers of the world are Parties; and

To the end that this prohibition shall be universally accepted as a part of International Law, binding alike the conscience and the practice of nations;

Declare:

That the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.

The High Contracting Parties will exert every effort to induce other States to accede to the present Protocol. Such accession will be notified to the Government of the French Republic, and by the latter to all signatory and acceding Powers, and will take effect on the date of the notification by the Government of the French Republic.

The present Protocol, of which the English and French texts are both authentic, shall be ratified as soon as possible. It shall bear to-day's date.

The ratifications of the present Protocol shall be addressed to the Government of the French Republic, which will at once notify the deposit of such ratification to each of the signatory and acceding Powers.

The instruments of ratification of and accession to the present Protocol will remain deposited in the archives of the Government of the French Republic.

The present Protocol will come into force for each signatory Power as from the date of deposit of its ratification, and, from that moment, each Power will be bound as regards other Powers which have already deposited their ratifications.

In witness whereof the Plenipotentiaries have signed the present Protocol.

Done at Geneva in a single copy, the seventeenth day of June, One Thousand Nine Hundred and Twenty-Five.

Legal Status of the Geneva Protocol of 1925

Signed at Geneva: 17 June 1925; entered into force: for each signatory as from the date of deposit of its ratification; accessions take effect on the date of the notification by the depositary Government; Depos. Government: France , Signature 37; ratification: 144

State	**Signature**	**Ratification/accession**
Afghanistan		9 December 1986(a)
Albania		20 December 1989(a)
Algeria		27 January 1992(a)
Angola		8 December 1990(a)
Antigua and Barbuda		1 January 1989(s)
Argentina		12 May 1969(a)
Australia		24 May 1930(a)***
Austria	17 June 1925	9 May 1928
Bahamas		10 July 1973 ***
Bahrain		9 December 1988(a)
Bangladesh		20 May 1989(a)
Barbados		16 July 1976(s)
Belgium	17 June 1925	4 December 1928 ***
Belize		21 September 1981 ***
Benin		9 December 1986(a)
Bhutan		19 February 1979(a)
Bolivia		14 January 1985(a)
Botswana		30 September 1966***
Brazil	17 June 1925	28 August 1970
Bulgaria	17 June 1925	7 March 1934 ***
Burkina Faso		3 March 1971(a)
Cambodia		15 March 1983(a)
Cameroon		20 July 1989(a)
Canada	17 June 1925	6 May 1930 ***
Cape Verde		15 October 1991(a)
Central African Republic		31 July 1970(a)
Chile	17 June 1925	2 July 1935 ***
China		24 August 1929(a)
Côte d'Ivoire		27 July 1970(a)
Cuba		24 June 1966(a)

Cyprus		12 December 1966(s)
Czech Republic		17 September 1993(s) ***
Democratic People's Republic of Korea		4 January 1989(a)
Denmark	17 June 1925	5 May 1930
Dominica		8 November 1978
Dominican Republic		8 December 1970(a)
Ecuador		16 September 1970(a)
Egypt	17 June 1925	6 December 1928
El Salvador	17 June 1925	
Equatorial Guinea		20 May 1989(a)
Estonia	17 June 1925	28 August 1931 ***
Ethiopia	17 June 1925	7 October 1935
Fiji		21 March 1973(s) ***
Finland	17 June 1925	26 June 1929
France	17 June 1925	10 May 1926 ***
Gambia		5 November 1966(s)
Germany	17 June 1925	25 April 1929
Ghana		3 May 1967(a)
Greece	17 June 1925	30 May 1931
Grenada		20 May 1989(s) ***
Guatemala		3 May 1983(a)
Guinea-Bissau		20 May 1989(a)
Holy See		18 October 1966(a)
Hungary		11 October 1952(a)
Iceland		2 November 1967(a)
India	17 June 1925	9 April 1930 ***
Indonesia		21 January 1971(s)
Iran (Islamic Republic of)		5 November 1929(a)
Iraq		8 September 1931(a) ***
Ireland		29 August 1930(a)
Israel		20 February 1969(a)
Italy	17 June 1925	3 April 1928
Jamaica		28 July 1970(s)
Japan	17 June 1925	21 May 1970
Jordan		20 January 1977(a) ***
Kenya		6 July 1970(a)
Kiribati		12 July 1979

Kuwait		15 December 1971(a) *, ***
Lao People's Democratic Republic		20 May 1989(a)
Latvia	17 June 1925	3 June 1931
Lebanon		17 April 1969(a)
Lesotho		10 March 1972(s)
Liberia		17 June 1927(a)
Libyan Arab Jamahiriya		29 December 1971(a) *, ***
Liechtenstein		6 September 1991(a)
Lithuania	17 June 1925	15 June 1933
Luxembourg	17 June 1925	1 September 1936
Madagascar		2 August 1967(a)
Malawi		14 September 1970(a)
Malaysia		10 December 1970(a)
Maldives		27 December 1966(s)
Mali		19 November 1966
Malta		15 October 1970(s)
Mauritius		8 January 1971(s)
Mexico		28 May 1932(a)
Monaco		6 January 1967(a)
Mongolia		6 December 1968(a) ***
Morocco		13 October 1970(a)
Myanmar		4 January 1948 ***
Nepal		9 May 1969(a)
Netherlands	17 June 1925	31 October 1930 ***
New Zealand		24 May 1930(a) ***
Nicaragua	17 June 1925	5 October 1990
Niger		5 April 1967(s)
Nigeria		15 October 1968(a) ***
Norway	17 June 1925	27 July 1932
Pakistan		15 April 1960(s)
Panama		4 December 1970(a)
Papua New Guinea		2 September 1980(a) ***
Paraguay		22 October 1933(a)
Peru		5 June 1985(a)
Philippines		8 June 1973(a)
Poland	17 June 1925	4 February 1929
Portugal	17 June 1925	1 July 1930 ***

Qatar		18 October 1976(a)
Republic of Korea		4 January 1989(a)***
Romania	17 June 1925	23 August 1929 ***
Russian Federation		5 April 1928(a) ***
Rwanda		11 May 1964(s)
Saint Kitts and Nevis		15 November 1989(s)
Saint Lucia		21 December 1988(s)
Saint Vincent and the Grenadines		24 March 1999 (s)
Saudi Arabia		27 January 1971(a)
Senegal		15 June 1977(a)
Serbia and Montenegro (former Yugo-slavia)	17 June 1925	12 April 1929 ***
Seychelless		29 June 1976 ***
Sierra Leone		20 March 1967(a)
Singapore		9 August 1965 ***
Slovakia		22 September 1993(s)
Solomon Islands		1 June 1981(s)
South Africa		24 May 1930(a) ***
Spain	17 June 1925	22 August 1929 ***
Sri Lanka		20 January 1954(a)
Sudan		17 December 1980(a)
Suriname		25 September 1975***
Swaziland		23 July 1991(a) ***
Sweden	17 June 1925	25 April 1930
Switzerland	17 June 1925	12 July 1932
Syrian Arab Republic		17 December 1968(a) *
Thailand	17 June 1925	6 June 1931
Togo		5 April 1971(a)
Tonga		19 July 1971(s)
Trinidad and Tobago		30 November 1970(s)
Tunisia		12 July 1967(a)
Turkey	17 June 1925	5 October 1929
Tivalu		1 October 1978
Uganda		24 May 1965(a)
Ukraine		7 August 2003 (a)
United Kingdom of Great Britain and Northern Ireland	17 June 1925	9 April 1930 ***

United Republic of Tanzania		22 April 1963(a)
United States of America	17 June 1925	10 April 1975 ***
Uruguay	17 June 1925	12 April 1977
Venezuela	17 June 1925	8 February 1928
Viet Nam		15 December 1980(a)
Yemen		17 March 1971(a)
total	**37**	**144**

(a): accession
(s): accession by state succession
Dates given are the earliest dates on which states signed the agreement or deposited their ratifications or accessions

*	declaration made on the occasion of signature or deposit
**	additional statement made on the occasion of signature or deposit
***	reservation made on the occasion of signature or deposit

2. Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (10 April 1972)

The States Parties to this Convention,

Determined to act with a view to achieving effective progress toward general and complete disarmament, including the prohibition and elimination of all types of weapons of mass destruction, and convinced that the prohibition of the development, production and stockpiling of chemical and bacteriological (biological) weapons and their elimination, through effective measures, will facilitate the achievement of general and complete disarmament under strict and effective control,

Recognizing the important significance 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 June 17, 1925, and conscious also of the contribution which the said Protocol has already made and continues to make, to mitigating the horrors of war,

Reaffirming their adherence to the principles and objectives of that Protocol and calling upon all States to comply strictly with them,

Recalling that the General Assembly of the United Nations has repeatedly condemned all actions contrary to the principles and objectives of the Geneva Protocol of June 17, 1925,

Desiring to contribute to the strengthening of confidence between peoples and the general improvement of the international atmosphere,

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

Convinced of the importance and urgency of eliminating from the arsenals of States, through effective measures, such dangerous weapons of mass destruction as those using chemical or bacteriological (biological) agents,

Recognizing that an agreement on the prohibition of bacteriological (biological) and toxin weapons represents a first possible step towards the achievement of agreement on effective measures also for the prohibition of the development, production and stockpiling of chemical weapons, and determined to continue negotiations to that end,

Determined, for the sake of all mankind, to exclude completely the possibility of bacteriological (biological) agents and toxins being used as weapons,

Convinced that such use would be repugnant to the conscience of mankind and that no effort should be spared to minimize this risk,

Have agreed as follows:

ARTICLE I

Each State Party to this Convention undertakes never in any circumstance to develop, produce, stockpile or otherwise acquire or retain:

Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;

Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

ARTICLE II

Each State Party to this Convention undertakes to destroy, or to divert to peaceful purposes, as soon as possible but not later than nine months after the entry into force of the Convention, all agents, toxins, weapons, equipment and means of delivery specified in article I of the Convention, which are in its possession or under its jurisdiction or control. In implementing the provisions of this article all necessary safety precautions shall be observed to protect populations and the environment.

ARTICLE III

Each State Party to this Convention undertakes not to transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment or means of delivery specified in article I of the Convention.

ARTICLE IV

Each State Party to this Convention shall, in accordance with its constitutional processes, takes any necessary measures to prohibit and prevent the development, production, stockpiling, acquisition or retention of the agents, toxins, weapons, equipment and means of delivery specified in article I of the Convention, within the territory of such State, under its jurisdiction or under its control anywhere.

ARTICLE V

The States Parties to this Convention undertake to consult one another and to cooperate in solving any problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention. Consultation and cooperation pursuant to this article may also be undertaken through appropriate international procedures within the framework of the United Nations and in accordance with its Charter.

ARTICLE VI

(1) Any State Party to this Convention which finds that any other State Party is acting in breach of obligations deriving from the provisions of the Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all possible evidence confirming its validity, as well as a request for its consideration by the Security Council.

(2) Each State Party to this Convention undertakes to cooperate in carrying out any investigation which the Security Council may initiate, in accordance with the provisions of the Charter of the United Nations, on the basis of the complaint received by the

Council. The Security Council shall inform the States Parties to the Convention of the results of the investigation.

ARTICLE VII

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.

ARTICLE VIII

Nothing in this Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any State 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 June 17, 1925.

ARTICLE IX

Each State Party to this Convention affirms the recognized objective of effective prohibition of chemical weapons and, to this end, undertakes to continue negotiations in good faith with a view to reaching early agreement on effective measures for the prohibition of their development, production and stockpiling and for their destruction, and on appropriate measures concerning equipment and means of delivery specifically designed for the production or use of chemical agents for weapons purposes.

ARTICLE X

(1) The States Parties to this Convention undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes. Parties to the Convention in a position to do so shall also cooperate in contributing individually or together with other States or international organizations to the further development and application of scientific discoveries in the field of bacteriology (biology) for prevention of disease, or for other peaceful purposes.

(2) This Convention shall be implemented in a manner designed to avoid hampering the economic or technological development of States Parties to the Convention or international cooperation in the field of peaceful bacteriological (biological) activities, including the international exchange of bacteriological (biological) agents and toxins and equipment for the processing, use or production of bacteriological (biological) agents and toxins for peaceful purposes in accordance with the provisions of the Convention.

ARTICLE XI

Any State Party may propose amendments to this Convention. Amendments shall enter into force for each State Party accepting the amendments upon their acceptance by a majority of the States Parties to the Convention and thereafter for each remaining State Party on the date of acceptance by it.

ARTICLE XII

Five years after the entry into force of this Convention, or earlier if it is requested by a majority of the Parties to the Convention by submitting a proposal to this effect to the Depositary Governments, a conference of States Parties to the Convention shall be held at Geneva, Switzerland, 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, are being realized. Such review shall take into account any new scientific and technological developments relevant to the Convention.

ARTICLE XIII

(1) This Convention shall be of unlimited duration.

(2) Each State Party to this Convention shall in exercising its natural sovereignty have the right to withdraw from the Convention if it decides that extraordinary events, related to the subject matter of the Convention, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other States Parties to the Convention and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

ARTICLE XIV

(1) This Convention shall be open to all States for signature. Any State which does not sign the Convention before its entry into force in accordance with paragraph (3) of this Article may accede to it at any time.

(2) This Convention shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United States of America, the United Kingdom of Great Britain and Northern Ireland and the Union of Soviet Socialist Republics, which are hereby designated the Depositary Governments.

(3) This Convention shall enter into force after the deposit of instruments of ratification by twenty-two Governments, including the Governments designated as Depositaries of the Convention.

(4) For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Convention, it shall enter into force on the date of the deposit of their instrument of ratification or accession.

(5) The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession and the date of the entry into force of this Convention, and of the receipt of other notices.

(6) This Convention shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

ARTICLE XV

This Convention, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of the Convention shall be transmitted by the Depositary Governments of the signatory and acceding States.

Legal Status of the Biological Weapons Convention

Opened for signature at London, Moscow and Washington: 10 April 1972; entered into force: 26 March 1975; Depositary Governments: Russian Federation, United Kingdom of Great Britain and Northern Ireland and United States of America

Signatories: 109, deposit of ratification: 155

State	**Signature**	**Deposit of ratification**
Afghanistan	10 April 1972	6 March 1975
Albania		3 June 1992(a
Algeria	22 July 2001	22 July 2001 (a)
Antigua and Barbuda		29 January 2003
Argentina	1 August 1972	27 November 1979
Armenia		7 June 1994(a)
Australia	10 April 1972	5 October 1977
Austria	10 April 1972	10 August 1973***
Azerbaijan		26 February 2004 (a)
Bahamas		26 November 1986(a)
Bahrain		28 October 1988(a)***
Bangladesh		11 March 1985(a)
Barbados	16 February 1973	16 February 1973
Belarus	10 April 1972	26 March 1975
Belgium	10 April 1972	15 March 1979
Belize		20 October 1986(s)
Benin	10 April 1972	25 April 1975
Bhutan		8 June 1978(a)
Bolivia	10 April 1972	30 October 1975
Bosnia and Herzegovina		15 August 1994(s)
Botswana	10 April 1972	5 February 1992
Brazil	10 April 1972	27 February 1973
Brunei Darussalam		31 January 1991(a)
Bulgaria	10 April 1972	2 August 1972
Burkina Faso		17 April 1991(a)
Burundi	10 April 1972	
Cambodia	10 April 1972	9 March 1983
Canada	10 April 1972	18 September 1972
Cape Verde		20 October 1977(a)

Central African Republic	10 April 1972	
Chile	10 April 1972	22 April 1980
Chile	10 April 1972	22 April 1980
China		15 November 1984(a)*
Colombia	10 April 1972	19 December 1983
Congo		23 October 1978(a)
Costa Rica	10 April 1972	17 December 1973
Côte d'Ivoire	23 May 1972	
Croatia		28 April 1993(s)*
Cuba	12 April 1972	21 April 1976
Cyprus	10 April 1972	6 November 1973
Czech Republic		5 April 1993(s)**
Democratic People's Republic of Korea		13 March 1987(a)
Democratic Republic of the Congo	10 April 1972	16 September 1975
Denmark	10 April 1972	1 March 1973
Dominica		8 November 1978(a)
Dominican Republic	10 April 1972	23 February 1973
Ecuador	14 June 1972	12 March 1975
Egypt	10 April 1972	
El Salvador	10 April 1972	31 December 1991
Equatorial Guinea		16 January 1989
Estonia		21 June 1993(a)
Ethiopia	10 April 1972	26 May 1975
Fiji	22 February 1973	4 September 1973
Finland	10 April 1972	4 February 1974
France		27 September 1984(a)
Gabon	10 April 1972	
Gambia	2 June 1972	21 November 1991
Georgia		22 May 1996(a)
Germany	10 April 1972	7 April 1983
Ghana	10 April 1972	6 June 1975
Greece	10 April 1972	10 December 1975
Grenada		22 October 1986(a)
Guatemala	9 May 1972	19 September 1973
Guinea-Bissau		20 August 1976(a)

Guyana	3 January 1973	
Haiti	10 April 1972	
Holy See		4 January 2002 (a)
Honduras	10 April 1972	14 March 1979
Hungary	10 April 1972	27 December 1972
Iceland	10 April 1972	15 February 1973
India	15 January 1973*	15 July 1974**
Indonesia	20 June 1972	4 February 1992
Iran (Islamic Republic of)	10 April 1972	22 August 1973
Iraq	11 May 1972	19 June 1991
Ireland	10 April 1972*	27 October 1972
Italy	10 April 1972	30 May 1975
Jamaica		13 August 1975(a)
Japan	10 April 1972	8 June 1982
Jordan	10 April 1972	30 May 1975,
Kenya		7 January 1976(a)
Kuwait	14 April 1972)	18 July 1972*
Kyrgyzstan		12 October 2004 (a)
Lao People's Democ. Republic	10 April 1972	20 March 1973
Latvia		6 February 1997(a)
Lebanon	10 April 1972	26 March 1975
Lesotho	10 April 1972	6 September 1977
Liberia	10 April 1972	
Libyan Arab Jamahiriya		19 January 1982(a)
Liechtenstein		30 May 1991(a)
Lithuania		10 February 1998(a)
Luxembourg	10 April 1972	23 March 1976
Madagascar	13 October 1972	
Malawi	10 April 1972	
Malaysia	10 April 1972	6 September 1991*
Maldives		2 August 1993(a)
Mali	10 April 1972	25 November 2002
Malta	11 September 1972	7 April 1975
Mauritius	10 April 1972	7 August 1972
Mexico	10 April 1972	8 April 1974
Monaco		30 April 1999 (s)
Mongolia	10 April 1972	5 September 1972

Morocco	2 May 1972	21 March 2002
Myanmar	10 April 1972	
Nepal	10 April 1972	
Netherlands	10 April 1972	10 April 1972*
New Zealand	10 April 1972	13 December 1972
Nicaragua	10 April 1972 (L)	7 August 1975
Niger	21 April 1972	23 June 1972
Nigeria	3 July 1972	3 July 1973
Norway	10 April 1972	1 August 1973
Oman		31 March 1992(a)
Pakistan	10 April 1972	25 September 1974
Palau		February 2003
Panama	2 May 1972	20 March 1974
Papua New Guinea		27 October 1980(a)
Paraguay		9 June 1976(a)
Peru	10 April 1972	5 June 1985
Philippines	10 April 1972	21 May 1973
Poland	10 April 1972	25 January 1973
Portugal	29 June 1972	15 May 1972
Qatar	14 November 1972	17 April 1975
Republic of Korea	10 April 1972*	25 June 1987
Republic of Moldova		28 January 2005
Romania	10 April 1972	25 July 1979 (W)
Russian Federation	10 April 1972	26 March 1975
Rwanda	10 April 1972	20 May 1975
Saint Kitts and Nevis		2 April 1991(a)
Saint Lucia		26 November 1986(s)
Saint Vincent and Grenadines		13 May 1999 (s)
San Marino	12 September 1972	11 March 1975
Sao Tome and Principe		24 August 1979(a)
Saudi Arabia	12 April 1972	24 May 1972
Senegal	10 April 1972	26 March 1975
Serbia and Montenegro	10 April 1972	25 October 1973
Seychelles		11 October 1979(a)
Sierra Leone	7 November 1972	29 June 1976
Singapore	19 June 1972	2 December 1975
Slovakia		17 May 1993(s)

Slovenia		7 April 1992(s)
Solomon Islands		17 June 1981(s)*
Somalia	3 July 1972	
South Africa	10 April 1972	3 November 1975
Spain	10 April 1972	20 June 1979
Sri Lanka	10 April 1972	18 November 1986
Sudan		17 October 2003 (a)
Suriname		6 January 1993(a)
Swaziland		18 June 1991(a)
Sweden	27 February 1975	5 February 1976
Switzerland	10 April 1972*	4 May 1976**
Syrian Arab Republic	14 April 1972	
Tajikistan		27 June 2005
Thailand	17 January 1973	28 May 1975
Timor Leste		5 May 2003 (a)
the former Yugoslav Republic of Macedonia		24 December 1996(s)*
Togo	10 April 1972	10 November 1976
Tonga		28 September 1976(a)
Tunisia	10 April 1972	18 May 1973
Turkey	10 April 1972	25 October 1974
Turkmenistan		11 January 1996(a)
Uganda		12 May 1992(a)
Ukraine	10 April 1972	26 March 1975
United Arab Emirates	28 September 1972	
United Kingdom of Great Britain and Northern Ireland	10 April 1972	26 March 1975 **
United Republic of Tanzania	16 August 1972	
United States of America	10 April 1972	26 March 1975
Uruguay		6 April 1981(a)
Uzbekistan		12 January 1996(a)
Vanuatu		12 October 1990(a)
Venezuela	10 April 1972	18 October 1978
Viet Nam		20 June 1980(a)
Yemen	26 April 1972	1 June 1979
Zimbabwe		5 November 1990(a)

Taiwan has deposited an instrument of ratification in the name of the Republic of China. The government of Taiwan considers itself to be bound by the Treaty.
(a): accession
(s): accession by state succession
Dates given are the earliest dates on which states signed the agreement or deposited their ratifications or accessions
* declaration made on the occasion of signature or deposit
** additional statement made on the occasion of signature or deposit
*** reservation made on the occasion of signature or deposit

3. Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (13 January 1993)

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 has repeatedly condemned all actions contrary to 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 (the Geneva Protocol of 1925),

Recognizing that this Convention reaffirms principles and objectives of and obligations assumed under the Geneva Protocol of 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 exclude completely 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 1925,

Recognizing the prohibition, embodied in the pertinent agreements and relevant principles of international law, of the use of herbicides as a method of warfare,

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

Desiring to promote free trade in chemicals as well as international cooperation and exchange of scientific and technical information in the field of chemical activities for purposes not prohibited under this Convention in order to enhance the economic and technological development of all States Parties,

Convinced that the complete and effective prohibition of the development, production, acquisition, stockpiling, retention, transfer and use of chemical weapons, and their destruction, represent a necessary step towards the achievement of these common objectives,

Have agreed as follows:

Article I: General Obligations

1. Each State Party to this Convention undertakes never under any circumstances:

(a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;

(b) To use chemical weapons;

(c) To engage in any military preparations to use chemical weapons;

(d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention.

2. Each State Party undertakes to destroy chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention.

3. Each State Party undertakes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention.

4. Each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention.

5. Each State Party undertakes not to use riot control agents as a method of warfare.

Article II: Definitions and Criteria

For the purposes of this Convention:

1. "Chemical Weapons" means the following, together or separately:

(a) Toxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes;

(b) Munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;

(c) Any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b).

2. "Toxic Chemical" means:

Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals. This includes all such chemicals, regardless of their origin or of their method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere.

(For the purpose of implementing this Convention, toxic chemicals which have been identified for the application of verification measures are listed in Schedules contained in the Annex on Chemicals.)

3. "Precursor" means:

Any chemical reactant which takes part at any stage in the production by whatever method of a toxic chemical. This includes any key component of a binary or multicomponent chemical system.

(For the purpose of implementing this Convention, precursors which have been identified for the application of verification measures are listed in Schedules contained in the Annex on Chemicals.)

4. "Key Component of Binary or Multicomponent Chemical Systems" (hereinafter referred to as "key component") means:

The precursor which plays the most important role in determining the toxic properties of the final product and reacts rapidly with other chemicals in the binary or multicomponent system.

5. "Old Chemical Weapons" means:

(a) Chemical weapons which were produced before 1925; or

(b) Chemical weapons produced in the period between 1925 and 1946 that have deteriorated to such extent that they can no longer be used as chemical weapons.

6. "Abandoned Chemical Weapons" means:

Chemical weapons, including old chemical weapons, abandoned by a State after 1 January 1925 on the territory of another State without the consent of the latter.

7. "Riot Control Agent" means:

Any chemical not listed in a Schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure.

8. "Chemical Weapons Production Facility":

(a) Means any equipment, as well as any building housing such equipment, that was designed, constructed or used at any time since 1 January 1946:

(i) As part of the stage in the production of chemicals ("final technological stage") where the material flows would contain, when the equipment is in operation:

(1) Any chemical listed in Schedule 1 in the Annex on Chemicals; or

(2) Any other chemical that has no use, above 1 tonne per year on the territory of a State Party or in any other place under the jurisdiction or control of a State Party, for purposes not prohibited under this Convention, but can be used for chemical weapons purposes;

or

(ii) For filling chemical weapons, including, inter alia, the filling of chemicals listed in Schedule 1 into munitions, devices or bulk storage containers; the filling of chemicals into containers that form part of assembled binary munitions and devices or into chemical submunitions that form part of assembled unitary munitions and devices, and the loading of the containers and chemical submunitions into the respective munitions and devices;

(b) Does not mean:

(i) Any facility having a production capacity for synthesis of chemicals specified in subparagraph (a) (i) that is less than 1 tonne;

(ii) Any facility in which a chemical specified in subparagraph (a) (i) is or was produced as an unavoidable by-product of activities for purposes not prohibited under this Convention, provided that the chemical does not exceed 3 per cent of the total product and that the facility is subject to declaration and inspection under the Annex on Implementation and Verification (hereinafter referred to as "Verification Annex"); or

(iii) The single small-scale facility for production of chemicals listed in Schedule 1 for purposes not prohibited under this Convention as referred to in Part VI of the Verification Annex.

9. "Purposes Not Prohibited Under this Convention" means:

(a) Industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;

(b) Protective purposes, namely those purposes directly related to protection against toxic chemicals and to protection against chemical weapons;

(c) Military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare;

(d) Law enforcement including domestic riot control purposes.

10. "Production Capacity" means:

The annual quantitative potential for manufacturing a specific chemical based on the technological process actually used or, if the process is not yet operational, planned to be used at the relevant facility. It shall be deemed to be equal to the nameplate capacity or, if the nameplate capacity is not available, to the design capacity. The nameplate capacity is the product output under conditions optimized for maximum quantity for the production facility, as demonstrated by one or more test-runs. The design capacity is the corresponding theoretically calculated product output.

11. "Organization" means the Organization for the Prohibition of Chemical Weapons established pursuant to Article VIII of this Convention.

12. For the purposes of Article VI:

(a) "Production" of a chemical means its formation through chemical reaction;

(b) "Processing" of a chemical means a physical process, such as formulation, extraction and purification, in which a chemical is not converted into another chemical;

(c) "Consumption" of a chemical means its conversion into another chemical via a chemical reaction.

Article III: Declarations

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

(a) With respect to chemical weapons:

(i) Declare whether it owns or possesses any chemical weapons, or whether there are any chemical weapons located in any place under its jurisdiction or control;

(ii) Specify the precise location, aggregate quantity and detailed inventory of chemical weapons it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with Part IV (A), paragraphs 1 to 3, of the Verification Annex, except for those chemical weapons referred to in sub-subparagraph (iii);

(iii) Report any chemical weapons on its territory that are owned and possessed by another State and located in any place under the jurisdiction or control of another State, in accordance with Part IV (A), paragraph 4, of the Verification Annex;

(iv) Declare whether it has transferred or received, directly or indirectly, any chemical weapons since 1 January 1946 and specify the transfer or receipt of such weapons, in accordance with Part IV (A), paragraph 5, of the Verification Annex;

(v) Provide its general plan for destruction of chemical weapons that it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with Part IV (A), paragraph 6, of the Verification Annex;

(b) With respect to old chemical weapons and abandoned chemical weapons:

(i) Declare whether it has on its territory old chemical weapons and provide all available information in accordance with Part IV (B), paragraph 3, of the Verification Annex;

(ii) Declare whether there are abandoned chemical weapons on its territory and provide all available information in accordance with Part IV (B), paragraph 8, of the Verification Annex;

(iii) Declare whether it has abandoned chemical weapons on the territory of other States and provide all available information in accordance with Part IV (B), paragraph 10, of the Verification Annex;

(c) With respect to chemical weapons production facilities:

(i) Declare whether it has or has had any chemical weapons production facility under its ownership or possession, or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946;

(ii) Specify any chemical weapons production facility it has or has had under its ownership or possession or that is or has been located in any place under its jurisdiction or control at any time since 1 January 1946, in accordance with Part V, paragraph 1, of the Verification Annex, except for those facilities referred to in sub-subparagraph (iii);

(iii) Report any chemical weapons production facility on its territory that another State has or has had under its ownership and possession and that is or has been located in any place under the jurisdiction or control of another State at any time since 1 January 1946, in accordance with Part V, paragraph 2, of the Verification Annex;

(iv) Declare whether it has transferred or received, directly or indirectly, any equipment for the production of chemical weapons since 1 January 1946 and specify the transfer or receipt of such equipment, in accordance with Part V, paragraphs 3 to 5, of the Verification Annex;

(v) Provide its general plan for destruction of any chemical weapons production facility it owns or possesses, or that is located in any place under its jurisdiction or control, in accordance with Part V, paragraph 6, of the Verification Annex;

(vi) Specify actions to be taken for closure of any chemical weapons production facility it owns or possesses, or that is located in any place under its jurisdiction or control, in accordance with Part V, paragraph 1 (i), of the Verification Annex;

(vii) Provide its general plan for any temporary conversion of any chemical weapons production facility it owns or possesses, or that is located in any place under its jurisdiction or control, into a chemical weapons destruction facility, in accordance with Part V, paragraph 7, of the Verification Annex;

(d) With respect to other facilities:

Specify the precise location, nature and general scope of activities of any facility or establishment under its ownership or possession, or located in any place under its jurisdiction or control, and that has been designed, constructed or used since 1 January 1946 primarily for development of chemical weapons. Such declaration shall include, inter alia, laboratories and test and evaluation sites;

(e) With respect to riot control agents: Specify the chemical name, structural formula and Chemical Abstracts Service (CAS) registry number, if assigned, of each chemical it holds for riot control purposes. This declaration shall be updated not later than 30 days after any change becomes effective.

2. The provisions of this Article and the relevant provisions of Part IV of the Verification Annex shall not, at the discretion of a State Party, apply to chemical weapons buried on its territory before 1 January 1977 and which remain buried, or which had been dumped at sea before 1 January 1985.

Article IV: Chemical Weapons

1. The provisions of this Article and the detailed procedures for its implementation shall apply to all chemical weapons owned or possessed by a State Party, or that are located in any place under its jurisdiction or control, except old chemical weapons and abandoned chemical weapons to which Part IV (B) of the Verification Annex applies.

2. Detailed procedures for the implementation of this Article are set forth in the Verification Annex.

3. All locations at which chemical weapons specified in paragraph 1 are stored or destroyed shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments, in accordance with Part IV (A) of the Verification Annex.

4. Each State Party shall, immediately after the declaration under Article III, paragraph 1 (a), has been submitted, provide access to chemical weapons specified in paragraph 1 for the purpose of systematic verification of the declaration through on-site inspection. Thereafter, each State Party shall not remove any of these chemical weapons, except to a chemical weapons destruction facility. It shall provide access to such chemical weapons, for the purpose of systematic on-site verification.

5. Each State Party shall provide access to any chemical weapons destruction facilities and their storage areas, that it owns or possesses, or that are located in any place under its jurisdiction or control, for the purpose of systematic verification through on-site inspection and monitoring with on-site instruments.

6. Each State Party shall destroy all chemical weapons specified in paragraph 1 pursuant to the Verification Annex and in accordance with the agreed rate and sequence of destruction (hereinafter referred to as "order of destruction"). Such destruction shall begin not later than two years after this Convention enters into force for it and shall finish not later than 10 years after entry into force of this Convention. A State Party is not precluded from destroying such chemical weapons at a faster rate.

7. Each State Party shall:

(a) Submit detailed plans for the destruction of chemical weapons specified in paragraph 1 not later than 60 days before each annual destruction period begins, in accordance with Part IV (A), paragraph 29, of the Verification Annex; the detailed plans shall encompass all stocks to be destroyed during the next annual destruction period;

(b) Submit declarations annually regarding the implementation of its plans for destruction of chemical weapons specified in paragraph 1, not later than 60 days after the end of each annual destruction period; and

(c) Certify, not later than 30 days after the destruction process has been completed, that all chemical weapons specified in paragraph 1 have been destroyed.

8. If a State ratifies or accedes to this Convention after the 10-year period for destruction set forth in paragraph 6, it shall destroy chemical weapons specified in paragraph 1 as soon as possible. The order of destruction and procedures for stringent verification for such a State Party shall be determined by the Executive Council.

9. Any chemical weapons discovered by a State Party after the initial declaration of chemical weapons shall be reported, secured and destroyed in accordance with Part IV (A) of the Verification Annex.

10. Each State Party, during transportation, sampling, storage and destruction of chemical weapons, shall assign the highest priority to ensuring the safety of people and to protecting the environment. Each State Party shall transport, sample, store and destroy chemical weapons in accordance with its national standards for safety and emissions.

11. Any State Party which has on its territory chemical weapons that are owned or possessed by another State, or that are located in any place under the jurisdiction or control of another State, shall make the fullest efforts to ensure that these chemical weapons are removed from its territory not later than one year after this Convention enters into force for it. If they are not removed within one year, the State Party may request the Organization and other States Parties to provide assistance in the destruction of these chemical weapons.

12. Each State Party undertakes to cooperate with other States Parties that request information or assistance on a bilateral basis or through the Technical Secretariat regarding methods and technologies for the safe and efficient destruction of chemical weapons.

13. In carrying out verification activities pursuant to this Article and Part IV (A) of the Verification Annex, the Organization shall consider measures to avoid unnecessary

duplication of bilateral or multilateral agreements on verification of chemical weapons storage and their destruction among States Parties.

To this end, the Executive Council shall decide to limit verification to measures complementary to those undertaken pursuant to such a bilateral or multilateral agreement, if it considers that:

(a) Verification provisions of such an agreement are consistent with the verification provisions of this Article and Part IV (A) of the Verification Annex;

(b) Implementation of such an agreement provides for sufficient assurance of compliance with the relevant provisions of this Convention; and

(c) Parties to the bilateral or multilateral agreement keep the Organization fully informed about their verification activities.

14. If the Executive Council takes a decision pursuant to paragraph 13, the Organization shall have the right to monitor the implementation of the bilateral or multilateral agreement.

15. Nothing in paragraphs 13 and 14 shall affect the obligation of a State Party to provide declarations pursuant to Article III, this Article and Part IV (A) of the Verification Annex.

16. Each State Party shall meet the costs of destruction of chemical weapons it is obliged to destroy. It shall also meet the costs of verification of storage and destruction of these chemical weapons unless the Executive Council decides otherwise. If the Executive Council decides to limit verification measures of the Organization pursuant to paragraph 13, the costs of complementary verification and monitoring by the Organization shall be paid in accordance with the United Nations scale of assessment, as specified in Article VIII, paragraph 7.

17. The provisions of this Article and the relevant provisions of Part IV of the Verification Annex shall not, at the discretion of a State Party, apply to chemical weapons buried on its territory before 1 January 1977 and which remain buried, or which had been dumped at sea before 1 January 1985.

Article V: Chemical Weapons Production Facilities

1. The provisions of this Article and the detailed procedures for its implementation shall apply to any and all chemical weapons production facilities owned or possessed by a State Party, or that are located in any place under its jurisdiction or control.

2. Detailed procedures for the implementation of this Article are set forth in the Verification Annex.

3. All chemical weapons production facilities specified in paragraph 1 shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments in accordance with Part V of the Verification Annex.

4. Each State Party shall cease immediately all activity at chemical weapons production facilities specified in paragraph 1, except activity required for closure.

5. No State Party shall construct any new chemical weapons production facilities or modify any existing facilities for the purpose of chemical weapons production or for any other activity prohibited under this Convention.

6. Each State Party shall, immediately after the declaration under Article III, paragraph 1 (c), has been submitted, provide access to chemical weapons production facilities specified in paragraph 1, for the purpose of systematic verification of the declaration through on-site inspection.

7. Each State Party shall:

(a) Close, not later than 90 days after this Convention enters into force for it, all chemical weapons production facilities specified in paragraph 1, in accordance with Part V of the Verification Annex, and give notice thereof; and

(b) Provide access to chemical weapons production facilities specified in paragraph 1, subsequent to closure, for the purpose of systematic verification through on-site inspection and monitoring with on-site instruments in order to ensure that the facility remains closed and is subsequently destroyed.

8. Each State Party shall destroy all chemical weapons production facilities specified in paragraph 1 and related facilities and equipment, pursuant to the Verification Annex and in accordance with an agreed rate and sequence of destruction (hereinafter referred to as "order of destruction"). Such destruction shall begin not later than one year after this Convention enters into force for it, and shall finish not later than 10 years after entry into force of this Convention. A State Party is not precluded from destroying such facilities at a faster rate.

9. Each State Party shall:

(a) Submit detailed plans for destruction of chemical weapons production facilities specified in paragraph 1, not later than 180 days before the destruction of each facility begins;

(b) Submit declarations annually regarding the implementation of its plans for the destruction of all chemical weapons production facilities specified in paragraph 1, not later than 90 days after the end of each annual destruction period; and

(c) Certify, not later than 30 days after the destruction process has been completed, that all chemical weapons production facilities specified in paragraph 1 have been destroyed.

10. If a State ratifies or accedes to this Convention after the 10-year period for destruction set forth in paragraph 8, it shall destroy chemical weapons production facilities specified in paragraph 1 as soon as possible. The order of destruction and procedures for stringent verification for such a State Party shall be determined by the Executive Council.

11. Each State Party, during the destruction of chemical weapons production facilities, shall assign the highest priority to ensuring the safety of people and to protecting the environment. Each State Party shall destroy chemical weapons production facilities in accordance with its national standards for safety and emissions.

12. Chemical weapons production facilities specified in paragraph 1 may be temporarily converted for destruction of chemical weapons in accordance with Part V, paragraphs 18 to 25, of the Verification Annex. Such a converted facility must be destroyed as soon as

it is no longer in use for destruction of chemical weapons but, in any case, not later than 10 years after entry into force of this Convention.

13. A State Party may request, in exceptional cases of compelling need, permission to use a chemical weapons production facility specified in paragraph 1 for purposes not prohibited under this Convention. Upon the recommendation of the Executive Council, the Conference of the States Parties shall decide whether or not to approve the request and shall establish the conditions upon which approval is contingent in accordance with Part V, Section D, of the Verification Annex.

14. The chemical weapons production facility shall be converted in such a manner that the converted facility is not more capable of being reconverted into a chemical weapons production facility than any other facility used for industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes not involving chemicals listed in Schedule 1.

15. All converted facilities shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments in accordance with Part V, Section D, of the Verification Annex.

16. In carrying out verification activities pursuant to this Article and Part V of the Verification Annex, the Organization shall consider measures to avoid unnecessary duplication of bilateral or multilateral agreements on verification of chemical weapons production facilities and their destruction among States Parties.

To this end, the Executive Council shall decide to limit the verification to measures complementary to those undertaken pursuant to such a bilateral or multilateral agreement, if it considers that:

(a) Verification provisions of such an agreement are consistent with the verification provisions of this Article and Part V of the Verification Annex;

(b) Implementation of the agreement provides for sufficient assurance of compliance with the relevant provisions of this Convention; and

(c) Parties to the bilateral or multilateral agreement keep the Organization fully informed about their verification activities.

17. If the Executive Council takes a decision pursuant to paragraph 16, the Organization shall have the right to monitor the implementation of the bilateral or multilateral agreement.

18. Nothing in paragraphs 16 and 17 shall affect the obligation of a State Party to make declarations pursuant to Article III, this Article and Part V of the Verification Annex.

19. Each State Party shall meet the costs of destruction of chemical weapons production facilities it is obliged to destroy. It shall also meet the costs of verification under this Article unless the Executive Council decides otherwise. If the Executive Council decides to limit verification measures of the Organization pursuant to paragraph 16, the costs of complementary verification and monitoring by the Organization shall be paid in accordance with the United Nations scale of assessment, as specified in Article VIII, paragraph 7.

Article VI: Activities not prohibited under this Convention

1. Each State Party 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 under this Convention.

2. Each State Party shall adopt the necessary measures to ensure that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred, or used within its territory or in any other place under its jurisdiction or control for purposes not prohibited under this Convention. To this end, and in order to verify that activities are in accordance with obligations under this Convention, each State Party shall subject toxic chemicals and their precursors listed in Schedules 1, 2 and 3 of the Annex on Chemicals, facilities related to such chemicals, and other facilities as specified in the Verification Annex, that are located on its territory or in any other place under its jurisdiction or control, to verification measures as provided in the Verification Annex.

3. Each State Party shall subject chemicals listed in Schedule 1 (hereinafter referred to as "Schedule 1 chemicals") to the prohibitions on production, acquisition, retention, transfer and use as specified in Part VI of the Verification Annex. It shall subject Schedule 1 chemicals and facilities specified in Part VI of the Verification Annex to systematic verification through on-site inspection and monitoring with on-site instruments in accordance with that Part of the Verification Annex.

4. Each State Party shall subject chemicals listed in Schedule 2 (hereinafter referred to as "Schedule 2 chemicals") and facilities specified in Part VII of the Verification Annex to data monitoring and on-site verification in accordance with that Part of the Verification Annex.

5. Each State Party shall subject chemicals listed in Schedule 3 (hereinafter referred to as "Schedule 3 chemicals") and facilities specified in Part VIII of the Verification Annex to data monitoring and on-site verification in accordance with that Part of the Verification Annex.

6. Each State Party shall subject facilities specified in Part IX of the Verification Annex to data monitoring and eventual on-site verification in accordance with that Part of the Verification Annex unless decided otherwise by the Conference of the States Parties pursuant to Part IX, paragraph 22, of the Verification Annex.

7. Not later than 30 days after this Convention enters into force for it, each State Party shall make an initial declaration on relevant chemicals and facilities in accordance with the Verification Annex.

8. Each State Party shall make annual declarations regarding the relevant chemicals and facilities in accordance with the Verification Annex.

9. For the purpose of on-site verification, each State Party shall grant to the inspectors access to facilities as required in the Verification Annex.

10. In conducting verification activities, the Technical Secretariat shall avoid undue intrusion into the State Party's chemical activities for purposes not prohibited under this Convention and, in particular, abide by the provisions set forth in the Annex on the Protection of Confidential Information (hereinafter referred to as "Confidentiality Annex").

11. The provisions of this Article shall be implemented in a manner which avoids hampering the economic or technological development of States Parties, and international cooperation in the field of chemical activities for purposes not prohibited under this Convention including the international exchange of scientific and technical information and chemicals and equipment for the production, processing or use of chemicals for purposes not prohibited under this Convention.

Article VII: National Implementation Measures

General undertakings

1. Each State Party shall, in accordance with its constitutional processes, adopt the necessary measures to implement its obligations under this Convention. In particular, it shall:

(a) Prohibit natural and legal persons anywhere on its territory or in any other place under its jurisdiction as recognized by international law from undertaking any activity prohibited to a State Party under this Convention, including enacting penal legislation with respect to such activity;

(b) Not permit in any place under its control any activity prohibited to a State Party under this Convention; and

(c) Extend its penal legislation enacted under subparagraph (a) to any activity prohibited to a State Party under this Convention undertaken anywhere by natural persons, possessing its nationality, in conformity with international law.

2. Each State Party shall cooperate with other States Parties and afford the appropriate form of legal assistance to facilitate the implementation of the obligations under paragraph 1.

3. Each State Party, during the implementation of its obligations under this Convention, shall assign the highest priority to ensuring the safety of people and to protecting the environment, and shall cooperate as appropriate with other States Parties in this regard.

Relations between the State Party and the Organization

4. In order to fulfil its obligations under this Convention, each State Party shall designate or establish a National Authority to serve as the national focal point for effective liaison with the Organization and other States Parties. Each State Party shall notify the Organization of its National Authority at the time that this Convention enters into force for it.

5. Each State Party shall inform the Organization of the legislative and administrative measures taken to implement this Convention.

6. Each State Party shall treat as confidential and afford special handling to information and data that it receives in confidence from the Organization in connection with the implementation of this Convention. It shall treat such information and data exclusively in connection with its rights and obligations under this Convention and in accordance with the provisions set forth in the Confidentiality Annex.

7. Each State Party undertakes to cooperate with the Organization in the exercise of all its functions and in particular to provide assistance to the Technical Secretariat.

Article VIII: The Organization

A. General Provisions

1. The States Parties to this Convention hereby establish the Organization for the Prohibition of Chemical Weapons to achieve the object and purpose of this Convention, to ensure the implementation of its provisions, including those for international verification of compliance with it, and to provide a forum for consultation and cooperation among States Parties.

2. All States Parties to this Convention shall be members of the Organization. A State Party shall not be deprived of its membership in the Organization.

3. The seat of the Headquarters of the Organization shall be The Hague, Kingdom of the Netherlands.

4. There are hereby established as the organs of the Organization: the Conference of the States Parties, the Executive Council, and the Technical Secretariat.

5. The Organization shall conduct its verification activities provided for under this Convention in the least intrusive manner possible consistent with the timely and efficient accomplishment of their objectives. It shall request only the information and data necessary to fulfil its responsibilities under this Convention. It shall take every precaution to protect the confidentiality of information on civil and military activities and facilities coming to its knowledge in the implementation of this Convention and, in particular, shall abide by the provisions set forth in the Confidentiality Annex.

6. In undertaking its verification activities the Organization shall consider measures to make use of advances in science and technology.

7. The costs of the Organization's activities shall be paid by States Parties in accordance with the United Nations scale of assessment adjusted to take into account differences in membership between the United Nations and this Organization, and subject to the provisions of Articles IV and V. Financial contributions of States Parties to the Preparatory Commission shall be deducted in an appropriate way from their contributions to the regular budget. The budget of the Organization shall comprise two separate chapters, one relating to administrative and other costs, and one relating to verification costs.

8. A member of the Organization which is in arrears in the payment of its financial contribution to the Organization shall have no vote in the Organization if the amount of its arrears equals or exceeds the amount of the contribution due from it for the preceding two full years. The Conference of the States Parties may, nevertheless, permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

B. The Conference of the States Parties

Composition, procedures and decision-making

9. The Conference of the States Parties (hereinafter referred to as "the Conference") shall be composed of all members of this Organization. Each member shall have one representative in the Conference, who may be accompanied by alternates and advisers.

10. The first session of the Conference shall be convened by the depositary not later than 30 days after the entry into force of this Convention.

11. The Conference shall meet in regular sessions which shall be held annually unless it decides otherwise.

12. Special sessions of the Conference shall be convened:

(a) When decided by the Conference;

(b) When requested by the Executive Council;

(c) When requested by any member and supported by one third of the members; or

(d) In accordance with paragraph 22 to undertake reviews of the operation of this Convention.

Except in the case of subparagraph (d), the special session shall be convened not later than 30 days after receipt of the request by the Director-General of the Technical Secretariat, unless specified otherwise in the request.

13. The Conference shall also be convened in the form of an Amendment Conference in accordance with Article XV, paragraph 2.

14. Sessions of the Conference shall take place at the seat of the Organization unless the Conference decides otherwise.

15. The Conference 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.

16. A majority of the members of the Organization shall constitute a quorum for the Conference.

17. Each member of the Organization shall have one vote in the Conference.

18. The Conference shall take decisions on questions of procedure by a simple majority of the members present and voting. Decisions on matters of substance should be taken as far as possible by consensus. If consensus is not attainable when an issue comes up for decision, the Chairman shall defer any vote for 24 hours and during this period of deferment shall make every effort to facilitate achievement of consensus, and shall report to the Conference before the end of this period. If consensus is not possible at the end of 24 hours, the Conference shall take the decision by a two-thirds majority of members present and voting unless specified otherwise in this Convention. When the issue arises as to whether the question is one of substance or not, that question shall be treated as a matter of substance unless otherwise decided by the Conference by the majority required for decisions on matters of substance.

Powers and functions

19. The Conference shall be the principal organ of the Organization. It shall consider any questions, matters or issues within the scope of this Convention, including those relating to the powers and functions of the Executive Council and the Technical Secretariat. It may make recommendations and take decisions on any questions, matters or issues related to this Convention raised by a State Party or brought to its attention by the Executive Council.

20. The Conference shall oversee the implementation of this Convention, and act in order to promote its object and purpose. The Conference shall review compliance with this Convention. It shall also oversee the activities of the Executive Council and the Technical Secretariat and may issue guidelines in accordance with this Convention to either of them in the exercise of their functions.

21. The Conference shall:

(a) Consider and adopt at its regular sessions the report, programme and budget of the Organization, submitted by the Executive Council, as well as consider other reports;

(b) Decide on the scale of financial contributions to be paid by States Parties in accordance with paragraph 7;

(c) Elect the members of the Executive Council;

(d) Appoint the Director-General of the Technical Secretariat (hereinafter referred to as "the Director-General");

(e) Approve the rules of procedure of the Executive Council submitted by the latter;

(f) Establish such subsidiary organs as it finds necessary for the exercise of its functions in accordance with this Convention;

(g) Foster international cooperation for peaceful purposes in the field of chemical activities;

(h) Review scientific and technological developments that could affect the operation of this Convention and, in this context, direct the Director-General to establish a Scientific Advisory Board to enable him, in the performance of his functions, to render specialized advice in areas of science and technology relevant to this Convention, to the Conference, the Executive Council or States Parties. The Scientific Advisory Board shall be composed of independent experts appointed in accordance with terms of reference adopted by the Conference;

(i) Consider and approve at its first session any draft agreements, provisions and guidelines developed by the Preparatory Commission;

(j) Establish at its first session the voluntary fund for assistance in accordance with Article X;

(k) Take the necessary measures to ensure compliance with this Convention and to redress and remedy any situation which contravenes the provisions of this Convention, in accordance with Article XII.

22. The Conference shall not later than one year after the expiry of the fifth and the tenth year after the entry into force of this Convention, and at such other times within that

time period as may be decided upon, convene in special sessions to undertake reviews of the operation of this Convention. Such reviews shall take into account any relevant scientific and technological developments. At intervals of five years thereafter, unless otherwise decided upon, further sessions of the Conference shall be convened with the same objective.

C. The Executive Council

Composition, procedure and decision-making

23. The Executive Council shall consist of 41 members. Each State Party shall have the right, in accordance with the principle of rotation, to serve on the Executive Council. The members of the Executive Council shall be elected by the Conference for a term of two years. In order to ensure the effective functioning of this Convention, due regard being specially paid to equitable geographical distribution, to the importance of chemical industry, as well as to political and security interests, the Executive Council shall be composed as follows:

(a) Nine States Parties from Africa to be designated by States Parties located in this region. As a basis for this designation it is understood that, out of these nine States Parties, three members shall, as a rule, be the States Parties with the most significant national chemical industry in the region as determined by internationally reported and published data; in addition, the regional group shall agree also to take into account other regional factors in designating these three members;

(b) Nine States Parties from Asia to be designated by States Parties located in this region. As a basis for this designation it is understood that, out of these nine States Parties, four members shall, as a rule, be the States Parties with the most significant national chemical industry in the region as determined by internationally reported and published data; in addition, the regional group shall agree also to take into account other regional factors in designating these four members;

(c) Five States Parties from Eastern Europe to be designated by States Parties located in this region. As a basis for this designation it is understood that, out of these five States Parties, one member shall, as a rule, be the State Party with the most significant national chemical industry in the region as determined by internationally reported and published data; in addition, the regional group shall agree also to take into account other regional factors in designating this one member;

(d) Seven States Parties from Latin America and the Caribbean to be designated by States Parties located in this region. As a basis for this designation it is understood that, out of these seven States Parties, three members shall, as a rule, be the States Parties with the most significant national chemical industry in the region as determined by internationally reported and published data; in addition, the regional group shall agree also to take into account other regional factors in designating these three members;

(e) Ten States Parties from among Western European and other States to be designated by States Parties located in this region. As a basis for this designation it is understood that, out of these 10 States Parties, 5 members shall, as a rule, be the States Parties with the most significant national chemical industry in the region as determined by interna-

tionally reported and published data; in addition, the regional group shall agree also to take into account other regional factors in designating these five members;

(f) One further State Party to be designated consecutively by States Parties located in the regions of Asia and Latin America and the Caribbean. As a basis for this designation it is understood that this State Party shall be a rotating member from these regions.

24. For the first election of the Executive Council 20 members shall be elected for a term of one year, due regard being paid to the established numerical proportions as described in paragraph 23.

25. After the full implementation of Articles IV and V the Conference may, upon the request of a majority of the members of the Executive Council, review the composition of the Executive Council taking into account developments related to the principles specified in paragraph 23 that are governing its composition.

26. The Executive Council shall elaborate its rules of procedure and submit them to the Conference for approval.

27. The Executive Council shall elect its Chairman from among its members.

28. The Executive Council shall meet for regular sessions. Between regular sessions it shall meet as often as may be required for the fulfilment of its powers and functions.

29. Each member of the Executive Council shall have one vote. Unless otherwise specified in this Convention, the Executive Council shall take decisions on matters of substance by a two-thirds majority of all its members. The Executive Council shall take decisions on questions of procedure by a simple majority of all its members. When the issue arises as to whether the question is one of substance or not, that question shall be treated as a matter of substance unless otherwise decided by the Executive Council by the majority required for decisions on matters of substance.

Powers and functions

30. The Executive Council shall be the executive organ of the Organization. It shall be responsible to the Conference. The Executive Council shall carry out the powers and functions entrusted to it under this Convention, as well as those functions delegated to it by the Conference. In so doing, it shall act in conformity with the recommendations, decisions and guidelines of the Conference and assure their proper and continuous implementation.

31. The Executive Council shall promote the effective implementation of, and compliance with, this Convention. It shall supervise the activities of the Technical Secretariat, cooperate with the National Authority of each State Party and facilitate consultations and cooperation among States Parties at their request.

32. The Executive Council shall:

(a) Consider and submit to the Conference the draft programme and budget of the Organization;

(b) Consider and submit to the Conference the draft report of the Organization on the implementation of this Convention, the report on the performance of its own activities and such special reports as it deems necessary or which the Conference may request;

(c) Make arrangements for the sessions of the Conference including the preparation of the draft agenda.

33. The Executive Council may request the convening of a special session of the Conference.

34. The Executive Council shall:

(a) Conclude agreements or arrangements with States and international organizations on behalf of the Organization, subject to prior approval by the Conference;

(b) Conclude agreements with States Parties on behalf of the Organization in connection with Article X and supervise the voluntary fund referred to in Article X;

(c) Approve agreements or arrangements relating to the implementation of verification activities, negotiated by the Technical Secretariat with States Parties.

35. The Executive Council shall consider any issue or matter within its competence affecting this Convention and its implementation, including concerns regarding compliance, and cases of non-compliance, and, as appropriate, inform States Parties and bring the issue or matter to the attention of the Conference.

36. In its consideration of doubts or concerns regarding compliance and cases of non-compliance, including, inter alia, abuse of the rights provided for under this Convention, the Executive Council shall consult with the States Parties involved and, as appropriate, request the State Party to take measures to redress the situation within a specified time. To the extent that the Executive Council considers further action to be necessary, it shall take, inter alia, one or more of the following measures:

(a) Inform all States Parties of the issue or matter;

(b) Bring the issue or matter to the attention of the Conference;

(c) Make recommendations to the Conference regarding measures to redress the situation and to ensure compliance.

The Executive Council shall, in cases of particular gravity and urgency, bring the issue or matter, including relevant information and conclusions, directly to the attention of the United Nations General Assembly and the United Nations Security Council. It shall at the same time inform all States Parties of this step.

D. The Technical Secretariat

37. The Technical Secretariat shall assist the Conference and the Executive Council in the performance of their functions. The Technical Secretariat shall carry out the verification measures provided for in this Convention. It shall carry out the other functions entrusted to it under this Convention as well as those functions delegated to it by the Conference and the Executive Council.

38. The Technical Secretariat shall:

(a) Prepare and submit to the Executive Council the draft programme and budget of the Organization;

(b) Prepare and submit to the Executive Council the draft report of the Organization on the implementation of this Convention and such other reports as the Conference or the Executive Council may request;

(c) Provide administrative and technical support to the Conference, the Executive Council and subsidiary organs;

(d) Address and receive communications on behalf of the Organization to and from States Parties on matters pertaining to the implementation of this Convention;

(e) Provide technical assistance and technical evaluation to States Parties in the implementation of the provisions of this Convention, including evaluation of scheduled and unscheduled chemicals.

39. The Technical Secretariat shall:

(a) Negotiate agreements or arrangements relating to the implementation of verification activities with States Parties, subject to approval by the Executive Council;

(b) Not later than 180 days after entry into force of this Convention, coordinate the establishment and maintenance of permanent stockpiles of emergency and humanitarian assistance by States Parties in accordance with Article X, paragraphs 7 (b) and (c). The Technical Secretariat may inspect the items maintained for serviceability. Lists of items to be stockpiled shall be considered and approved by the Conference pursuant to paragraph 21 (i) above;

(c) Administer the voluntary fund referred to in Article X, compile declarations made by the States Parties and register, when requested, bilateral agreements concluded between States Parties or between a State Party and the Organization for the purposes of Article X.

40. The Technical Secretariat shall inform the Executive Council of any problem that has arisen with regard to the discharge of its functions, including doubts, ambiguities or uncertainties about compliance with this Convention that have come to its notice in the performance of its verification activities and that it has been unable to resolve or clarify through its consultations with the State Party concerned.

41. The Technical Secretariat shall comprise a Director-General, who shall be its head and chief administrative officer, inspectors and such scientific, technical and other personnel as may be required.

42. The Inspectorate shall be a unit of the Technical Secretariat and shall act under the supervision of the Director-General.

43. The Director-General shall be appointed by the Conference upon the recommendation of the Executive Council for a term of four years, renewable for one further term, but not thereafter.

44. The Director-General shall be responsible to the Conference 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 the Director-General, as 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 necessary for the proper discharge of the responsibilities of the Technical Secretariat.

45. The Director-General shall be responsible for the organization and functioning of the Scientific Advisory Board referred to in paragraph 21 (h). The Director-General shall, in consultation with States Parties, appoint members of the Scientific Advisory Board, who shall serve in their individual capacity. The members of the Board shall be appointed on the basis of their expertise in the particular scientific fields relevant to the implementation of this Convention. The Director-General may also, as appropriate, in consultation with members of the Board, establish temporary working groups of scientific experts to provide recommendations on specific issues. In regard to the above, States Parties may submit lists of experts to the Director-General.

46. In the performance of their duties, the Director-General, 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 Organization. They shall refrain from any action that might reflect on their positions as international officers responsible only to the Conference and the Executive Council.

47. Each State Party shall respect the exclusively international character of the responsibilities of the Director-General, the inspectors and the other members of the staff and not seek to influence them in the discharge of their responsibilities.

E. Privileges and Immunities

48. The Organization shall enjoy on the territory and in any other place under the jurisdiction or control of a State Party such legal capacity and such privileges and immunities as are necessary for the exercise of its functions.

49. Delegates of States Parties, together with their alternates and advisers, representatives appointed to the Executive Council together with their alternates and advisers, the Director-General and the staff of the Organization shall enjoy such privileges and immunities as are necessary in the independent exercise of their functions in connection with the Organization.

50. The legal capacity, privileges, and immunities referred to in this Article shall be defined in agreements between the Organization and the States Parties as well as in an agreement between the Organization and the State in which the headquarters of the Organization is seated. These agreements shall be considered and approved by the Conference pursuant to paragraph 21 (i).

51. Notwithstanding paragraphs 48 and 49, the privileges and immunities enjoyed by the Director-General and the staff of the Technical Secretariat during the conduct of verification activities shall be those set forth in Part II, Section B, of the Verification Annex.

Article IX: Consultations, Cooperation and Fact-Finding

1. States Parties shall consult and cooperate, directly among themselves, or through the Organization 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 object and purpose, or the implementation of the provisions, of this Convention.

2. Without prejudice to the right of any State Party to request a challenge inspection, States Parties should, whenever possible, first make every effort to clarify and resolve, through exchange of information and consultations among themselves, 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 State Party which receives a request from another State Party for clarification of any matter which the requesting State Party believes causes such a doubt or concern shall provide the requesting State Party as soon as possible, but in any case not later than 10 days after the request, with information sufficient to answer the doubt or concern raised along with an explanation of how the information provided resolves the matter. Nothing in this Convention shall affect the right of any two or more States Parties to arrange by mutual consent for inspections or any other procedures among themselves to clarify and resolve any matter which may cause doubt about compliance or gives rise to a concern 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 a concern about the possible non-compliance of another State Party with this Convention. The Executive Council shall provide appropriate information in its possession relevant to such a concern.

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 a concern about its possible non-compliance with this Convention. In such a case, the following shall apply:

(a) The Executive Council shall forward the request for clarification to the State Party concerned through the Director-General not later than 24 hours after its receipt;

(b) The requested State Party shall provide the clarification to the Executive Council as soon as possible, but in any case not later than 10 days after the receipt of the request;

(c) The Executive Council shall take note of the clarification and forward it to the requesting State Party not later than 24 hours after its receipt;

(d) If the requesting State Party deems the clarification to be inadequate, it shall have the right to request the Executive Council to obtain from the requested State Party further clarification;

(e) For the purpose of obtaining further clarification requested under subparagraph (d), the Executive Council may call on the Director-General to establish a group of experts from the Technical Secretariat, or if appropriate staff are not available in the Technical Secretariat, from elsewhere, to examine all available information and data relevant to the situation causing the concern. The group of experts shall submit a factual report to the Executive Council on its findings;

(f) If the requesting State Party considers the clarification obtained under subparagraphs (d) and (e) to be unsatisfactory, it shall have the right to request a special session of the Executive Council in which States Parties involved that are not members of the Executive Council shall be entitled to take part. In such a special session, the Executive Council shall consider the matter and may recommend any measure it deems appropriate to resolve the situation.

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

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

7. If the doubt or concern of a State Party about a possible non-compliance has not been resolved within 60 days after the submission of the request for clarification to the Executive Council, or it believes its doubts warrant urgent consideration, notwithstanding its right to request a challenge inspection, it may request a special session of the Conference in accordance with Article VIII, paragraph 12 (c). At such a special session, the Conference shall consider the matter and may recommend any measure it deems appropriate to resolve the situation.

Procedures for challenge inspections

8. Each State Party has the right to request an on-site challenge inspection of any facility or location in the territory or in any other place under the jurisdiction or control of any other State Party for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the provisions of this Convention, and to have this inspection conducted anywhere without delay by an inspection team designated by the Director-General and in accordance with the Verification Annex.

9. Each State Party is under the obligation to keep the inspection request within the scope of this Convention and to provide in the inspection request all appropriate information on the basis of which a concern has arisen regarding possible non-compliance with this Convention as specified in the Verification Annex. Each State Party shall refrain from unfounded inspection requests, care being taken to avoid abuse. The challenge inspection shall be carried out for the sole purpose of determining facts relating to the possible non-compliance.

10. For the purpose of verifying compliance with the provisions of this Convention, each State Party shall permit the Technical Secretariat to conduct the on-site challenge inspection pursuant to paragraph 8.

11. Pursuant to a request for a challenge inspection of a facility or location, and in accordance with the procedures provided for in the Verification Annex, the inspected State Party shall have:

(a) The right and the obligation to make every reasonable effort to demonstrate its compliance with this Convention and, to this end, to enable the inspection team to fulfil its mandate;

(b) The obligation to provide access within the requested site for the sole purpose of establishing facts relevant to the concern regarding possible non-compliance; and

(c) The right to take measures to protect sensitive installations, and to prevent disclosure of confidential information and data, not related to this Convention.

12. With regard to an observer, the following shall apply:

(a) The requesting State Party may, subject to the agreement of the inspected State Party, send a representative who may be a national either of the requesting State Party or of a third State Party, to observe the conduct of the challenge inspection.

(b) The inspected State Party shall then grant access to the observer in accordance with the Verification Annex.

(c) The inspected State Party shall, as a rule, accept the proposed observer, but if the inspected State Party exercises a refusal, that fact shall be recorded in the final report.

13. The requesting State Party shall present an inspection request for an on-site challenge inspection to the Executive Council and at the same time to the Director-General for immediate processing.

14. The Director-General shall immediately ascertain that the inspection request meets the requirements specified in Part X, paragraph 4, of the Verification Annex, and, if necessary, assist the requesting State Party in filing the inspection request accordingly. When the inspection request fulfils the requirements, preparations for the challenge inspection shall begin.

15. The Director-General shall transmit the inspection request to the inspected State Party not less than 12 hours before the planned arrival of the inspection team at the point of entry.

16. After having received the inspection request, the Executive Council shall take cognizance of the Director-General's actions on the request and shall keep the case under its consideration throughout the inspection procedure. However, its deliberations shall not delay the inspection process.

17. The Executive Council may, not later than 12 hours after having received the inspection request, decide by a three-quarter majority of all its members against carrying out the challenge inspection, if it considers the inspection request to be frivolous, abusive or clearly beyond the scope of this Convention as described in paragraph 8. Neither the requesting nor the inspected State Party shall participate in such a decision. If the Executive Council decides against the challenge inspection, preparations shall be stopped, no further action on the inspection request shall be taken, and the States Parties concerned shall be informed accordingly.

18. The Director-General shall issue an inspection mandate for the conduct of the challenge inspection. The inspection mandate shall be the inspection request referred to in paragraphs 8 and 9 put into operational terms, and shall conform with the inspection request.

19. The challenge inspection shall be conducted in accordance with Part X or, in the case of alleged use, in accordance with Part XI of the Verification Annex. The inspection team shall be guided by the principle of conducting the challenge inspection in the

least intrusive manner possible, consistent with the effective and timely accomplishment of its mission.

20. The inspected State Party shall assist the inspection team throughout the challenge inspection and facilitate its task. If the inspected State Party proposes, pursuant to Part X, Section C, of the Verification Annex, arrangements to demonstrate compliance with this Convention, alternative to full and comprehensive access, it shall make every reasonable effort, through consultations with the inspection team, to reach agreement on the modalities for establishing the facts with the aim of demonstrating its compliance.

21. The final report shall contain the factual findings as well as an assessment by the inspection team of the degree and nature of access and cooperation granted for the satisfactory implementation of the challenge inspection. The Director-General shall promptly transmit the final report of the inspection team to the requesting State Party, to the inspected State Party, to the Executive Council and to all other States Parties. The Director-General shall further transmit promptly to the Executive Council the assessments of the requesting and of the inspected States Parties, as well as the views of other States Parties which may be conveyed to the Director-General for that purpose, and then provide them to all States Parties.

22. The Executive Council shall, in accordance with its powers and functions, review the final report of the inspection team as soon as it is presented, and address any concerns as to:

(a) Whether any non-compliance has occurred;

(b) Whether the request had been within the scope of this Convention; and

(c) Whether the right to request a challenge inspection had been abused.

23. If the Executive Council reaches the conclusion, in keeping with its powers and functions, that further action may be necessary with regard to paragraph 22, it shall take the appropriate measures to redress the situation and to ensure compliance with this Convention, including specific recommendations to the Conference. In the case of abuse, the Executive Council shall examine whether the requesting State Party should bear any of the financial implications of the challenge inspection.

24. The requesting State Party and the inspected State Party shall have the right to participate in the review process. The Executive Council shall inform the States Parties and the next session of the Conference of the outcome of the process.

25. If the Executive Council has made specific recommendations to the Conference, the Conference shall consider action in accordance with Article XII.

Article X: Assistance and Protection against Chemical Weapons

1. For the purposes of this Article, "Assistance" means the coordination and delivery to States Parties of protection against chemical weapons, including, inter alia, the following: detection equipment and alarm systems; protective equipment; decontamination equipment and decontaminants; medical antidotes and treatments; and advice on any of these protective measures.

2. Nothing in this Convention shall be interpreted as impeding the right of any State Party to conduct research into, develop, produce, acquire, transfer or use means of protection against chemical weapons, for purposes not prohibited under this Convention.

3. Each State Party undertakes to facilitate, and shall have the right to participate in, the fullest possible exchange of equipment, material and scientific and technological information concerning means of protection against chemical weapons.

4. For the purposes of increasing the transparency of national programmes related to protective purposes, each State Party shall provide annually to the Technical Secretariat information on its programme, in accordance with procedures to be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

5. The Technical Secretariat shall establish, not later than 180 days after entry into force of this Convention and maintain, for the use of any requesting State Party, a data bank containing freely available information concerning various means of protection against chemical weapons as well as such information as may be provided by States Parties.

The Technical Secretariat shall also, within the resources available to it, and at the request of a State Party, provide expert advice and assist the State Party in identifying how its programmes for the development and improvement of a protective capacity against chemical weapons could be implemented.

6. Nothing in this Convention shall be interpreted as impeding the right of States Parties to request and provide assistance bilaterally and to conclude individual agreements with other States Parties concerning the emergency procurement of assistance.

7. Each State Party undertakes to provide assistance through the Organization and to this end to elect to take one or more of the following measures:

(a) To contribute to the voluntary fund for assistance to be established by the Conference at its first session;

(b) To conclude, if possible not later than 180 days after this Convention enters into force for it, agreements with the Organization concerning the procurement, upon demand, of assistance;

(c) To declare, not later than 180 days after this Convention enters into force for it, the kind of assistance it might provide in response to an appeal by the Organization. If, however, a State Party subsequently is unable to provide the assistance envisaged in its declaration, it is still under the obligation to provide assistance in accordance with this paragraph.

8. Each State Party has the right to request and, subject to the procedures set forth in paragraphs 9, 10 and 11, to receive assistance and protection against the use or threat of use of chemical weapons if it considers that:

(a) Chemical weapons have been used against it;

(b) Riot control agents have been used against it as a method of warfare; or

(c) It is threatened by actions or activities of any State that are prohibited for States Parties by Article I.

9. The request, substantiated by relevant information, shall be submitted to the Director-General, who shall transmit it immediately to the Executive Council and to all States

Parties. The Director-General shall immediately forward the request to States Parties which have volunteered, in accordance with paragraphs 7 (b) and (c), to dispatch emergency assistance in case of use of chemical weapons or use of riot control agents as a method of warfare, or humanitarian assistance in case of serious threat of use of chemical weapons or serious threat of use of riot control agents as a method of warfare to the State Party concerned not later than 12 hours after receipt of the request. The Director-General shall initiate, not later than 24 hours after receipt of the request, an investigation in order to provide foundation for further action. He shall complete the investigation within 72 hours and forward a report to the Executive Council. If additional time is required for completion of the investigation, an interim report shall be submitted within the same time-frame. The additional time required for investigation shall not exceed 72 hours. It may, however, be further extended by similar periods. Reports at the end of each additional period shall be submitted to the Executive Council. The investigation shall, as appropriate and in conformity with the request and the information accompanying the request, establish relevant facts related to the request as well as the type and scope of supplementary assistance and protection needed.

10. The Executive Council shall meet not later than 24 hours after receiving an investigation report to consider the situation and shall take a decision by simple majority within the following 24 hours on whether to instruct the Technical Secretariat to provide supplementary assistance. The Technical Secretariat shall immediately transmit to all States Parties and relevant international organizations the investigation report and the decision taken by the Executive Council. When so decided by the Executive Council, the Director-General shall provide assistance immediately. For this purpose, the Director-General may cooperate with the requesting State Party, other States Parties and relevant international organizations. The States Parties shall make the fullest possible efforts to provide assistance.

11. If the information available from the ongoing investigation or other reliable sources would give sufficient proof that there are victims of use of chemical weapons and immediate action is indispensable, the Director-General shall notify all States Parties and shall take emergency measures of assistance, using the resources the Conference has placed at his disposal for such contingencies. The Director-General shall keep the Executive Council informed of actions undertaken pursuant to this paragraph.

Article XI: Economic and Technological Development

1. The provisions of this Convention shall be implemented in a manner which avoids hampering the economic or technological development of States Parties, and international cooperation in the field of chemical activities for purposes not prohibited under this Convention including the international exchange of scientific and technical information and chemicals and equipment for the production, processing or use of chemicals for purposes not prohibited under this Convention.

2. Subject to the provisions of this Convention and without prejudice to the principles and applicable rules of international law, the States Parties shall:

(a) Have the right, individually or collectively, to conduct research with, to develop, produce, acquire, retain, transfer, and use chemicals;

(b) Undertake to facilitate, and have the right to participate in, the fullest possible exchange of chemicals, equipment and scientific and technical information relating to the development and application of chemistry for purposes not prohibited under this Convention;

(c) Not maintain among themselves any restrictions, including those in any international agreements, incompatible with the obligations undertaken under this Convention, which would restrict or impede trade and the development and promotion of scientific and technological knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical or other peaceful purposes;

(d) Not use this Convention as grounds for applying any measures other than those provided for, or permitted, under this Convention nor use any other international agreement for pursuing an objective inconsistent with this Convention;

(e) Undertake to review their existing national regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of this Convention.

Article XI: Measures to Redress a Situation and to Ensure Compliance, including Sanctions

1. The Conference shall take the necessary measures, as set forth in paragraphs 2, 3 and 4, to ensure compliance with this Convention and to redress and remedy any situation which contravenes the provisions of this Convention. In considering action pursuant to this paragraph, the Conference shall take into account all information and recommendations on the issues submitted by the Executive Council.

2. In cases where a State Party has been requested by the Executive Council to take measures to redress a situation raising problems with regard to its compliance, and where the State Party fails to fulfil the request within the specified time, the Conference may, inter alia, upon the recommendation of the Executive Council, restrict or suspend the State Party's rights and privileges under this Convention until it undertakes the necessary action to conform with its obligations under this Convention.

3. In cases where serious damage to the object and purpose of this Convention may result from activities prohibited under this Convention, in particular by Article I, the Conference may recommend collective measures to States Parties in conformity with international law.

4. The Conference shall, in cases of particular gravity, bring the issue, including relevant information and conclusions, to the attention of the United Nations General Assembly and the United Nations Security Council.

Article XIII: Relation to other International Agreements

Nothing in this Convention shall be interpreted as in any way limiting or detracting from the obligations assumed by any State 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 under 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.

Article XIV: Settlement of Disputes

1. Disputes that may arise concerning the application or the interpretation of this Convention shall be settled in accordance with the relevant provisions of this Convention and in conformity with the provisions of the Charter of the United Nations.

2. When a dispute arises between two or more States Parties, or between one or more States Parties and the Organization, relating to the interpretation or application of this Convention, the parties concerned shall consult together with a view to the expeditious settlement of the dispute by negotiation or by other peaceful means of the parties' choice, including recourse to appropriate organs of this Convention and, by mutual consent, referral to the International Court of Justice in conformity with the Statute of the Court. The States Parties involved shall keep the Executive Council informed of actions being taken.

3. The Executive Council may contribute to the settlement of a dispute by whatever means it deems appropriate, including offering its good offices, calling upon the States Parties to a dispute to start the settlement process of their choice and recommending a time-limit for any agreed procedure.

4. The Conference shall consider questions related to disputes raised by States Parties or brought to its attention by the Executive Council. The Conference shall, as it finds necessary, establish or entrust organs with tasks related to the settlement of these disputes in conformity with Article VIII, paragraph 21 (f).

5. The Conference and the Executive Council are separately empowered, subject to authorization from the General Assembly of the United Nations, to request the International Court of Justice to give an advisory opinion on any legal question arising within the scope of the activities of the Organization. An agreement between the Organization and the United Nations shall be concluded for this purpose in accordance with Article VIII, paragraph 34 (a).

6. This Article is without prejudice to Article IX or to the provisions on measures to redress a situation and to ensure compliance, including sanctions.

Article XV: Amendments

1. Any State Party may propose amendments to this Convention. Any State Party may also propose changes, as specified in paragraph 4, to the Annexes of this Convention. Proposals for amendments shall be subject to the procedures in paragraphs 2 and 3. Proposals for changes, as specified in paragraph 4, shall be subject to the procedures in paragraph 5.

2. The text of a proposed amendment shall be submitted to the Director-General for circulation to all States Parties and to the Depositary. The proposed amendment shall be considered only by an Amendment Conference. Such an Amendment Conference shall be convened if one third or more of the States Parties notify the Director-General not later than 30 days after its circulation that they support further consideration of the pro-

posal. The Amendment Conference shall be held immediately following a regular session of the Conference unless the requesting States Parties ask for an earlier meeting. In no case shall an Amendment Conference be held less than 60 days after the circulation of the proposed amendment.

3. Amendments shall enter into force for all States Parties 30 days after deposit of the instruments of ratification or acceptance by all the States Parties referred to under subparagraph (b) below:

(a) When adopted by the Amendment Conference by a positive vote of a majority of all States Parties with no State Party casting a negative vote; and

(b) Ratified or accepted by all those States Parties casting a positive vote at the Amendment Conference.

4. In order to ensure the viability and the effectiveness of this Convention, provisions in the Annexes shall be subject to changes in accordance with paragraph 5, if proposed changes are related only to matters of an administrative or technical nature. All changes to the Annex on Chemicals shall be made in accordance with paragraph 5. Sections A and C of the Confidentiality Annex, Part X of the Verification Annex, and those definitions in Part I of the Verification Annex which relate exclusively to challenge inspections, shall not be subject to changes in accordance with paragraph 5.

5. Proposed changes referred to in paragraph 4 shall be made in accordance with the following procedures:

(a) The text of the proposed changes shall be transmitted together with the necessary information to the Director-General. Additional information for the evaluation of the proposal may be provided by any State Party and the Director-General. The Director-General shall promptly communicate any such proposals and information to all States Parties, the Executive Council and the Depositary;

(b) Not later than 60 days after its receipt, the Director-General shall evaluate the proposal to determine all its possible consequences for the provisions of this Convention and its implementation and shall communicate any such information to all States Parties and the Executive Council;

(c) The Executive Council shall examine the proposal in the light of all information available to it, including whether the proposal fulfils the requirements of paragraph 4. Not later than 90 days after its receipt, the Executive Council shall notify its recommendation, with appropriate explanations, to all States Parties for consideration. States Parties shall acknowledge receipt within 10 days;

(d) If the Executive Council recommends to all States Parties that the proposal be adopted, it shall be considered approved if no State Party objects to it within 90 days after receipt of the recommendation. If the Executive Council recommends that the proposal be rejected, it shall be considered rejected if no State Party objects to the rejection within 90 days after receipt of the recommendation;

(e) If a recommendation of the Executive Council does not meet with the acceptance required under subparagraph (d), a decision on the proposal, including whether it fulfils the requirements of paragraph 4, shall be taken as a matter of substance by the Conference at its next session;

(f) The Director-General shall notify all States Parties and the Depositary of any decision under this paragraph;

(g) Changes approved under this procedure shall enter into force for all States Parties 180 days after the date of notification by the Director-General of their approval unless another time period is recommended by the Executive Council or decided by the Conference.

Article XVI: Duration and Withdrawal

1. This Convention shall be of unlimited duration.

2. Each State Party shall, in exercising its national sovereignty, have the right to withdraw from this Convention if it decides that extraordinary events, related to the subject-matter of this Convention, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal 90 days in advance to all other States Parties, the Executive Council, the Depositary and the United Nations Security Council. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

3. 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 1925.

Article XVII: Status of Annexes

The Annexes form an integral part of this Convention. Any reference to this Convention includes the Annexes.

Article XVIII: Signature

This Convention shall be open for signature for all States before its entry into force.

Article XIX: Ratification

This Convention shall be subject to ratification by States Signatories according to their respective constitutional processes.

Article XX: Accession

Any State which does not sign this Convention before its entry into force may accede to it at any time thereafter.

Article XXI: Entry into Force

1. This Convention shall enter into force 180 days after the date of the deposit of the 65th instrument of ratification, but in no case earlier than two years after its opening for signature.

2. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Convention, it shall enter into force on the 30th day following the date of deposit of their instrument of ratification or accession.

Article XXII: Reservations

The Articles of this Convention shall not be subject to reservations. The Annexes of this Convention shall not be subject to reservations incompatible with its object and purpose.

Article XXIII: Depositary

The Secretary-General of the United Nations is hereby designated as the Depositary of this Convention and shall, *inter alia*:

(a) Promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or accession and the date of the entry into force of this Convention, and of the receipt of other notices;

(b) Transmit duly certified copies of this Convention to the Governments of all signatory and acceding States; and

(c) Register this Convention pursuant to Article 102 of the Charter of the United Nations.

Article XXIV: Authentic Texts

This Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

IN WITNESS WHEREOF the undersigned, being duly authorized to that effect, have signed this Convention.

Done at Paris on the thirteenth day of January, one thousand nine hundred and ninety-three.

Annex on Chemicals

A. Guidelines for Schedules of Chemicals

Guidelines for Schedule 1

1. The following criteria shall be taken into account in considering whether a toxic chemical or precursor should be included in Schedule 1:

(a) It has been developed, produced, stockpiled or used as a chemical weapon as defined in Article II;

(b) It poses otherwise a high risk to the object and purpose of this Convention by virtue of its high potential for use in activities prohibited under this Convention because one or more of the following conditions are met:

(i) It possesses a chemical structure closely related to that of other toxic chemicals listed in Schedule 1, and has, or can be expected to have, comparable properties;

(ii) It possesses such lethal or incapacitating toxicity as well as other properties that would enable it to be used as a chemical weapon;

(iii) It may be used as a precursor in the final single technological stage of production of a toxic chemical listed in Schedule 1, regardless of whether this stage takes place in facilities, in munitions or elsewhere;

(c) It has little or no use for purposes not prohibited under this Convention.

Guidelines for Schedule 2

2. The following criteria shall be taken into account in considering whether a toxic chemical not listed in Schedule 1 or a precursor to a Schedule 1 chemical or to a chemical listed in Schedule 2, part A, should be included in Schedule 2:

(a) It poses a significant risk to the object and purpose of this Convention because it possesses such lethal or incapacitating toxicity as well as other properties that could enable it to be used as a chemical weapon;

(b) It may be used as a precursor in one of the chemical reactions at the final stage of formation of a chemical listed in Schedule 1 or Schedule 2, part A;

(c) It poses a significant risk to the object and purpose of this Convention by virtue of its importance in the production of a chemical listed in Schedule 1 or Schedule 2, part A;

(d) It is not produced in large commercial quantities for purposes not prohibited under this Convention.

Guidelines for Schedule 3

3. The following criteria shall be taken into account in considering whether a toxic chemical or precursor, not listed in other Schedules, should be included in Schedule 3:

(a) It has been produced, stockpiled or used as a chemical weapon;

(b) It poses otherwise a risk to the object and purpose of this Convention because it possesses such lethal or incapacitating toxicity as well as other properties that might enable it to be used as a chemical weapon;

(c) It poses a risk to the object and purpose of this Convention by virtue of its importance in the production of one or more chemicals listed in Schedule 1 or Schedule 2, part B;

(d) It may be produced in large commercial quantities for purposes not prohibited under this Convention.

B. Schedules of Chemicals

The following Schedules list toxic chemicals and their precursors. For the purpose of implementing this Convention, these Schedules identify chemicals for the application of verification measures according to the provisions of the Verification Annex. Pursuant to Article II, subparagraph 1 (a), these Schedules do not constitute a definition of chemical weapons.

(Whenever reference is made to groups of dialkylated chemicals, followed by a list of alkyl groups in parentheses, all chemicals possible by all possible combinations of alkyl groups listed in the parentheses are considered as listed in the respective Schedule as long as they are not explicitly exempted. A chemical marked "*" on Schedule 2, part A, is subject to special thresholds for declaration and verification, as specified in Part VII of the Verification Annex.)

Schedule 1

		(CAS registry number)
A.	*Toxic chemicals:*	
(1)	O-Alkyl ($\leq C_{10}$, incl. cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr)-phosphonofluoridates	
	e.g. Sarin:O-Isopropyl methylphosphonofluoridate	(107-44-8)
	Soman:O-Pinacolyl methylphosphonofluoridate	(96-64-0)
(2)	O-Alkyl ($\leq C_{10}$, incl. cycloalkyl) N,N-dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidocyanidates	
	e.g. Tabun: O-Ethyl N,N-dimethyl phosphoramidocyanidate	(77-81-6)
(3)	O-Alkyl (H or $\leq C_{10}$, incl. cycloalkyl) S-2-dialkyl (Me, Et, n-Pr or i-Pr)-aminoethyl alkyl (Me, Et, n-Pr or i-Pr) phosphonothiolates and Corresponding alkylated or protonated salts	
	e.g. VX: O-Ethyl S-2-diisopropylaminoethyl ethyl phosphonothiolate	(50782-69-9)
(4)	Sulfur mustards:	
	2-Chloroethylchloromethylsulfide**,**	(625-76-5)
	Mustard gas: Bis(2-chloroethyl)sulfide,	(505-60-2)
	Bis(2-chloroethylthio)methane,	(63869-13-6)
	Sesquimustard: 1,2-Bis(2-chloroethylthio)ethane,	(3563-36-8)
	1,3-Bis(2-chloroethylthio)-n-propane	(63905-10-2)
	1,4-Bis(2-chloroethylthio)-n-butane	(142868-93-7)
	1,5-Bis(2-chloroethylthio)-n-pentane	(42868-94-8)
	Bis(2-chloroethylthiomethyl)ether	(63918-90-1)
	O-Mustard: Bis(2-chloroethylthioethyl)ether,	(63918-89-8)
(5)	Lewisites:	
	Lewisite 1: 2-Chlorovinyldichloroarsine,	(541-25-3)

	Lewisite 2: Bis(2-chlorovinyl)chloroarsine	(40334-69-8)
	Lewisite 3: Tris(2-chlorovinyl)arsine	(40334-70-1)
(6)	Nitrogen mustards:	
	HN1: Bis(2-chloroethyl)ethylamine,	(538-07-8)
	HN2: Bis(2-chloroethyl)methylamine,	(51-75-2)
	HN3: Tris(2-chloroethyl)amine	(555-77-1)
(7)	Saxitoxin	(35523-89-8)
(8)	Ricin	(9009-86-3)
B.	*Precursors:*	
(9)	Alkyl (Me, Et, n-Pr or i-Pr) phosphonyldifluorides	
	e.g. DF: Methylphosphonyldifluoride,	(676-99-3)
(10)	O-Alkyl (H or $\leq C_{10}$, incl. cycloalkyl) O-2-dialkyl	
	(Me, Et, n-Pr or i-Pr)-aminoethyl alkyl	
	(Me, Et, n-Pr or i-Pr) phosphonites and	
	Corresponding alkylated or protonated salts	
	e.g. QL: O-Ethyl O-2-diisopropylaminoethyl methylphosphonite	(57856-11-8)
(11)	Chlorosarin: O-Isopropyl methylphosphonochloridate	(1445-76-7)
(12)	Chlorosoman: O-Pinacolyl	(7040-57-5)

Schedule 2

A.	*Toxic chemicals*	
(1)	Amiton: O,O-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate,	(78-53-5)
	and corresponding alkylated or protonated salts	
(2)	PFIB: 1,1,3,3,3-Pentafluoro-2-(trifluoromethyl)-1-propene	(382-21-8)
(3)	BZ: 3-Quinuclidinyl benzilate (*****)	(6581-06-2)
B.	*Precursors:*	
(4)	Chemicals, except for those listed in Schedule 1,	
	containing a phosphorus atom to which is bonded	
	one methyl, ethyl or propyl (normal or iso) group	
	but not further carbon atoms,	
	e.g. Methylphosphonyl dichloride,	(676-97-1)
	Dimethyl methylphosphonate	(756-79-6)

Exemption: Fonofos: O-Ethyl S-phenyl ethylphospho-nothiolothionate (944-22-9)

(5) N, N-Dialkyl (Me Et n-Pr or i-Pr) phosphoramidic dihalides

(6) Dialkyl (Me, Et, n-Pr or i-Pr) N,N-dialkyl (Me, Et, n-Pr or i-Pr)-phosphoramidates

(7) Arsenic trichloride (7784-34-1)

(8) 2, 2-Diphenyl-2-hydroxyacetic acid (76-93-7)

(9) Quinuclidin-3-ol (1619-34-7)

(10) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethyl-2-chlorides and corresponding protonated salts

(11) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-ols and corresponding protonated salts

Exemptions: N,N-Dimethylaminoethanol (108-01-0) and corresponding protonated salts

N,N-Diethylaminoethanol (100-37-8) and corresponding protonated salts

(12) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-thiols and corresponding protonated salts

(13) Thiodiglycol: Bis(2-hydroxyethyl)sulfide (111-48-8)

(14) Pinacolyl alcohol: 3,3-Dimethylbutan-2-ol (464-07-3)

Schedule 3

A. *Toxic chemicals:*

(1) Phosgene: Carbonyl dichloride (75-44-5)

(2) Cyanogen chloride (506-77-4)

(3) Hydrogen cyanide (74-90-8)

(4) Chloropicrin: Trichloronitromethane (76-06-2)

B. *Precursors:*

(5) Phosphorus oxychloride (10025-87-3)

(6) Phosphorus trichloride (7719-12-2)

(7) Phosphorus pentachloride (10026-13-8)

(8) Trimethyl phosphite (121-45-9)

(9) Triethyl phosphite (122-52-1)

(10) Dimethyl phosphite (868-85-9)

(11) Diethyl phosphite	(762-04-9)
(12) Sulfur monochloride	(10025-67-9)
(13) Sulfur dichloride	(10545-99-0)
(14) Thionyl chloride	(7719-09-7)
(15) Ethyldiethanolamine	(139-87-7)
(16) Methyldiethanolamine	(105-59-9)
(17) Triethanolamine	(102-71-6)

Annex on Implementation and Verification („Verification Annex“)

Contents

Part I: Definitions

1. "Approved Equipment" means the devices and instruments necessary for the performance of the inspection team's duties that have been certified by the Technical Secretariat in accordance with regulations prepared by the Technical Secretariat pursuant to Part II, paragraph 27 of this Annex. Such equipment may also refer to the administrative supplies or recording materials that would be used by the inspection team.

2. "Building" as referred to in the definition of chemical weapons production facility in Article II comprises specialized buildings and standard buildings.

(*a*) "Specialized Building" means:

(i) Any building, including underground structures, containing specialized equipment in a production or filling configuration;

(ii) Any building, including underground structures, which has distinctive features which distinguish it from buildings normally used for chemical production or filling activities not prohibited under this Convention.

(*b*) "Standard Building" means any building, including underground structures, constructed to prevailing industry standards for facilities not producing any chemical specified in Article II, paragraph 8 (*a*) (i), or corrosive chemicals.

3. "Challenge Inspection" means the inspection of any facility or location in the territory or in any other place under the jurisdiction or control of a State Party requested by another State Party pursuant to Article IX, paragraphs 8 to 25.

4. "Discrete Organic Chemical" means any chemical belonging to the class of chemical compounds consisting of all compounds of carbon except for its oxides, sulfides and metal carbonates, identifiable by chemical name, by structural formula, if known, and by Chemical Abstracts Service registry number, if assigned.

5. "Equipment" as referred to in the definition of chemical weapons production facility in Article II comprises specialized equipment and standard equipment.

(*a*) "Specialized Equipment" means:

(i) The main production train, including any reactor or equipment for product synthesis, separation or purification, any equipment used directly for heat transfer in the final technological stage, such as in reactors or in product separation, as well as any other equipment which has been in contact with any chemical specified in Article II, paragraph 8 (*a*) (i), or would be in contact with such a chemical if the facility were operated;

(ii) Any chemical weapon filling machines;

(iii) Any other equipment specially designed, built or installed for the operation of the facility as a chemical weapons production facility, as distinct from a facility constructed according to prevailing commercial industry standards for facilities not producing any chemical specified in Article II, paragraph 8 (*a*) (i), or corrosive chemicals, such as: equipment made of high-nickel alloys or other special corrosion-resistant material; special equipment for waste control, waste treatment, air filtering, or solvent recovery; special containment enclosures and safety shields; non-standard laboratory equipment used to analyse toxic chemicals for chemical weapons purposes; custom-designed process control panels; or dedicated spares for specialized equipment.

(*b*) "Standard Equipment" means:

(i) Production equipment which is generally used in the chemical industry and is not included in the types of specialized equipment;

(ii) Other equipment commonly used in the chemical industry, such as: fire-fighting equipment; guard and security/safety surveillance equipment; medical facilities, laboratory facilities; or communications equipment.

6. "Facility" in the context of Article VI means any of the industrial sites as defined below ("plant site","plant" and "unit").

(*a*) "Plant Site" (Works, Factory) means the local integration of one or more plants, with any intermediate administrative levels, which are under one operational control, and includes common infrastructure, such as:

(i) Administration and other offices;

(ii) Repair and maintenance shops;

(iii) Medical centre;

(iv) Utilities;

(v) Central analytical laboratory;

(vi) Research and development laboratories;

(vii) Central effluent and waste treatment area; and

(viii) Warehouse storage.

(*b*) "Plant" (Production facility, Workshop) means a relatively self-contained area, structure or building containing one or more units with auxiliary and associated infrastructure, such as:

(i) Small administrative section;

(ii) Storage/handling areas for feedstock and products;

(iii) Effluent/waste handling/treatment area;

(iv) Control/analytical laboratory;

(v) First aid service/related medical section; and

(vi) Records associated with the movement into, around and from the site, of declared chemicals and their feedstock or product chemicals formed from them, as appropriate.

(*c*) "Unit" (Production unit, Process unit) means the combination of those items of equipment, including vessels and vessel set up, necessary for the production, processing or consumption of a chemical.

7. "Facility Agreement" means an agreement or arrangement between a State Party and the Organization relating to a specific facility subject to on-site verification pursuant to Articles IV, V and VI.

8. "Host State" means the State on whose territory lie facilities or areas of another State, Party to this Convention, which are subject to inspection under this Convention.

9. "In-Country Escort" means individuals specified by the inspected State Party and, if appropriate, by the Host State, if they so wish, to accompany and assist the inspection team during the in-country period.

10. "In-Country Period" means the period from the arrival of the inspection team at a point of entry until its departure from the State at a point of entry.

11. "Initial Inspection" means the first on-site inspection of facilities to verify declarations submitted pursuant to Articles III, IV, V and VI and this Annex.

12. "Inspected State Party" means the State Party on whose territory or in any other place under its jurisdiction or control an inspection pursuant to this Convention takes place, or the State Party whose facility or area on the territory of a Host State is subject to such an inspection; it does not, however, include the State Party specified in Part II, paragraph 21 of this Annex.

13. "Inspection Assistant" means an individual designated by the Technical Secretariat as set forth in Part II, Section A, of this Annex to assist inspectors in an inspection or visit, such as medical, security and administrative personnel and interpreters.

14. "Inspection Mandate" means the instructions issued by the Director-General to the inspection team for the conduct of a particular inspection.

15. "Inspection Manual" means the compilation of additional procedures for the conduct of inspections developed by the Technical Secretariat.

16. "Inspection Site" means any facility or area at which an inspection is carried out and which is specifically defined in the respective facility agreement or inspection request or mandate or inspection request as expanded by the alternative or final perimeter.

17. "Inspection Team" means the group of inspectors and inspection assistants assigned by the Director-General to conduct a particular inspection.

18. "Inspector" means an individual designated by the Technical Secretariat according to the procedures as set forth in Part II, Section A, of this Annex, to carry out an inspection or visit in accordance with this Convention.

19. "Model Agreement" means a document specifying the general form and content for an agreement concluded between a State Party and the Organization for fulfilling the verification provisions specified in this Annex.

20. "Observer" means a representative of a requesting State Party or a third State Party to observe a challenge inspection.

21. "Perimeter" in case of challenge inspection means the external boundary of the inspection site, defined by either geographic coordinates or description on a map.

(*a*) "Requested Perimeter" means the inspection site perimeter as specified in conformity with Part X, paragraph 8, of this Annex;

(*b*) "Alternative Perimeter" means the inspection site perimeter as specified, alternatively to the requested perimeter, by the inspected State Party; it shall conform to the requirements specified in Part X, paragraph 17, of this Annex;

(*c*) "Final Perimeter" means the final inspection site perimeter as agreed in negotiations between the inspection team and the inspected State Party, in accordance with Part X, paragraphs 16 to 21, of this Annex;

(*d*) "Declared Perimeter" means the external boundary of the facility declared pursuant to Articles III, IV, V and VI.

22. "Period of Inspection", for the purposes of Article IX, means the period of time from provision of access to the inspection team to the inspection site until its departure from the inspection site, exclusive of time spent on briefings before and after the verification activities.

23. "Period of Inspection", for the purposes of Articles IV, V and VI, means the period of time from arrival of the inspection team at the inspection site until its departure from the inspection site, exclusive of time spent on briefings before and after the verification activities.

24. "Point of Entry"/"Point of Exit" means a location designated for the in-country arrival of inspection teams for inspections pursuant to this Convention or for their departure after completion of their mission.

25. "Requesting State Party" means a State Party which has requested a challenge inspection pursuant to Article IX.

26. "Tonne" means metric ton, i.e. 1,000 kg.

Part II: General Rules of Verification

A. Designation of Inspectors and Inspection Assistants

1. Not later than 30 days after entry into force of this Convention the Technical Secretariat shall communicate, in writing, to all States Parties the names, nationalities and

ranks of the inspectors and inspection assistants proposed for designation, as well as a description of their qualifications and professional experiences.

2. Each State Party shall immediately acknowledge receipt of the list of inspectors and inspection assistants, proposed for designation communicated to it. The State Party shall inform the Technical Secretariat in writing of its acceptance of each inspector and inspection assistant, not later than 30 days after acknowledgement of receipt of the list. Any inspector and inspection assistant included in this list shall be regarded as designated unless a State Party, not later than 30 days after acknowledgement of receipt of the list, declares its non-acceptance in writing. The State Party may include the reason for the objection.

In the case of non-acceptance, the proposed inspector or inspection assistant shall not undertake or participate in verification activities on the territory or in any other place under the jurisdiction or control of the State Party which has declared its non-acceptance. The Technical Secretariat shall, as necessary, submit further proposals in addition to the original list.

3. Verification activities under this Convention shall only be performed by designated inspectors and inspection assistants.

4. Subject to the provisions of paragraph 5, a State Party has the right at any time to object to an inspector or inspection assistant who has already been designated. It shall notify the Technical Secretariat of its objection in writing and may include the reason for the objection. Such objection shall come into effect 30 days after receipt by the Technical Secretariat. The Technical Secretariat shall immediately inform the State Party concerned of the withdrawal of the designation of the inspector or inspection assistant.

5. A State Party that has been notified of an inspection shall not seek to have removed from the inspection team for that inspection any of the designated inspectors or inspection assistants named in the inspection team list.

6. The number of inspectors or inspection assistants accepted by and designated to a State Party must be sufficient to allow for availability and rotation of appropriate numbers of inspectors and inspection assistants.

7. If, in the opinion of the Director-General, the non-acceptance of proposed inspectors or inspection assistants impedes the designation of a sufficient number of inspectors or inspection assistants or otherwise hampers the effective fulfilment of the tasks of the Technical Secretariat, the Director-General shall refer the issue to the Executive Council.

8. Whenever amendments to the above-mentioned lists of inspectors and inspection assistants are necessary or requested, replacement inspectors and inspection assistants shall be designated in the same manner as set forth with respect to the initial list.

9. The members of the inspection team carrying out an inspection of a facility of a State Party located on the territory of another State Party shall be designated in accordance with the procedures set forth in this Annex as applied both to the inspected State Party and the Host State Party.

B. Privileges and Immunities

10. Each State Party shall, not later than 30 days after acknowledgement of receipt of the list of inspectors and inspection assistants or of changes thereto, provide multiple entry/exit and/or transit visas and other such documents to enable each inspector or inspection assistant to enter and to remain on the territory of that State Party for the purpose of carrying out inspection activities. These documents shall be valid for at least two years after their provision to the Technical Secretariat.

11. To exercise their functions effectively, inspectors and inspection assistants shall be accorded privileges and immunities as set forth in subparagraphs (a) to (i). Privileges and immunities shall be granted to members of the inspection team for the sake of this Convention and not for the personal benefit of the individuals themselves. Such privileges and immunities shall be accorded to them for the entire period between arrival on and departure from the territory of the inspected State Party or Host State, and thereafter with respect to acts previously performed in the exercise of their official functions.

(a) The members of the inspection team shall be accorded the inviolability enjoyed by diplomatic agents pursuant to Article 29 of the Vienna Convention on Diplomatic Relations of 18 April 1961.

(b) The living quarters and office premises occupied by the inspection team carrying out inspection activities pursuant to this Convention shall be accorded the inviolability and protection accorded to the premises of diplomatic agents pursuant to Article 30, paragraph 1, of the Vienna Convention on Diplomatic Relations.

(c) The papers and correspondence, including records, of the inspection team shall enjoy the inviolability accorded to all papers and correspondence of diplomatic agents pursuant to Article 30, paragraph 2, of the Vienna Convention on Diplomatic Relations. The inspection team shall have the right to use codes for their communications with the Technical Secretariat.

(d) Samples and approved equipment carried by members of the inspection team shall be inviolable subject to provisions contained in this Convention and exempt from all customs duties. Hazardous samples shall be transported in accordance with relevant regulations.

(e) The members of the inspection team shall be accorded the immunities accorded to diplomatic agents pursuant to Article 31, paragraphs 1, 2 and 3, of the Vienna Convention on Diplomatic Relations.

(f) The members of the inspection team carrying out prescribed activities pursuant to this Convention shall be accorded the exemption from dues and taxes accorded to diplomatic agents pursuant to Article 34 of the Vienna Convention on Diplomatic Relations.

(g) The members of the inspection team shall be permitted to bring into the territory of the inspected State Party or Host State Party, without payment of any customs duties or related charges, articles for personal use, with the exception of articles the import or export of which is prohibited by law or controlled by quarantine regulations.

(h) The members of the inspection team shall be accorded the same currency and exchange facilities as are accorded to representatives of foreign Governments on temporary official missions.

(i) The members of the inspection team shall not engage in any professional or commercial activity for personal profit on the territory of the inspected State Party or the Host State.

12. When transiting the territory of non-inspected States Parties, the members of the inspection team shall be accorded the privileges and immunities enjoyed by diplomatic agents pursuant to Article 40, paragraph 1, of the Vienna Convention on Diplomatic Relations. Papers and correspondence, including records, and samples and approved equipment, carried by them, shall be accorded the privileges and immunities set forth in paragraph 11 (c) and (d).

13. Without prejudice to their privileges and immunities the members of the inspection team shall be obliged to respect the laws and regulations of the inspected State Party or Host State and, to the extent that is consistent with the inspection mandate, shall be obliged not to interfere in the internal affairs of that State. If the inspected State Party or Host State Party considers that there has been an abuse of privileges and immunities specified in this Annex, consultations shall be held between the State Party and the Director-General to determine whether such an abuse has occurred and, if so determined, to prevent a repetition of such an abuse.

14. The immunity from jurisdiction of members of the inspection team may be waived by the Director-General in those cases when the Director-General is of the opinion that immunity would impede the course of justice and that it can be waived without prejudice to the implementation of the provisions of this Convention. Waiver must always be express.

15. Observers shall be accorded the same privileges and immunities accorded to inspectors pursuant to this section, except for those accorded pursuant to paragraph 11 (d).

C. Standing Arrangements

Points of entry

16. Each State Party shall designate the points of entry and shall supply the required information to the Technical Secretariat not later than 30 days after this Convention enters into force for it. These points of entry shall be such that the inspection team can reach any inspection site from at least one point of entry within 12 hours. Locations of points of entry shall be provided to all States Parties by the Technical Secretariat.

17. Each State Party may change the points of entry by giving notice of such change to the Technical Secretariat. Changes shall become effective 30 days after the Technical Secretariat receives such notification to allow appropriate notification to all States Parties.

18. If the Technical Secretariat considers that there are insufficient points of entry for the timely conduct of inspections or that changes to the points of entry proposed by a State Party would hamper such timely conduct of inspections, it shall enter into consultations with the State Party concerned to resolve the problem.

19. In cases where facilities or areas of an inspected State Party are located on the territory of a Host State Party or where the access from the point of entry to the facilities or areas subject to inspection requires transit through the territory of another State Party, the inspected State Party shall exercise the rights and fulfil the obligations concerning

such inspections in accordance with this Annex. The Host State Party shall facilitate the inspection of those facilities or areas and shall provide for the necessary support to enable the inspection team to carry out its tasks in a timely and effective manner. States Parties through whose territory transit is required to inspect facilities or areas of an inspected State Party shall facilitate such transit.

20. In cases where facilities or areas of an inspected State Party are located on the territory of a State not Party to this Convention, the inspected State Party shall take all necessary measures to ensure that inspections of those facilities or areas can be carried out in accordance with the provisions of this Annex. A State Party that has one or more facilities or areas on the territory of a State not Party to this Convention shall take all necessary measures to ensure acceptance by the Host State of inspectors and inspection assistants designated to that State Party. If an inspected State Party is unable to ensure access, it shall demonstrate that it took all necessary measures to ensure access.

21. In cases where the facilities or areas sought to be inspected are located on the territory of a State Party, but in a place under the jurisdiction or control of a State not Party to this Convention, the State Party shall take all necessary measures as would be required of an inspected State Party and a Host State Party to ensure that inspections of such facilities or areas can be carried out in accordance with the provisions of this Annex. If the State Party is unable to ensure access to those facilities or areas, it shall demonstrate that it took all necessary measures to ensure access. This paragraph shall not apply where the facilities or areas sought to be inspected are those of the State Party.

Arrangements for use of non-scheduled aircraft

22. For inspections pursuant to Article IX and for other inspections where timely travel is not feasible using scheduled commercial transport, an inspection team may need to utilize aircraft owned or chartered by the Technical Secretariat. Not later than 30 days after this Convention enters into force for it, each State Party shall inform the Technical Secretariat of the standing diplomatic clearance number for non-scheduled aircraft transporting inspection teams and equipment necessary for inspection into and out of the territory in which an inspection site is located. Aircraft routings to and from the designated point of entry shall be along established international airways that are agreed upon between the States Parties and the Technical Secretariat as the basis for such diplomatic clearance.

23. When a non-scheduled aircraft is used, the Technical Secretariat shall provide the inspected State Party with a flight plan, through the National Authority, for the aircraft's flight from the last airfield prior to entering the airspace of the State in which the inspection site is located to the point of entry, not less than six hours before the scheduled departure time from that airfield. Such a plan shall be filed in accordance with the procedures of the International Civil Aviation Organization applicable to civil aircraft. For its owned or chartered flights, the Technical Secretariat shall include in the remarks section of each flight plan the standing diplomatic clearance number and the appropriate notation identifying the aircraft as an inspection aircraft.

24. Not less than three hours before the scheduled departure of the inspection team from the last airfield prior to entering the airspace of the State in which the inspection is to take place, the inspected State Party or Host State Party shall ensure that the flight plan

filed in accordance with paragraph 23 is approved so that the inspection team may arrive at the point of entry by the estimated arrival time.

25. The inspected State Party shall provide parking, security protection, servicing and fuel as required by the Technical Secretariat for the aircraft of the inspection team at the point of entry when such aircraft is owned or chartered by the Technical Secretariat. Such aircraft shall not be liable for landing fees, departure tax, and similar charges. The Technical Secretariat shall bear the cost of such fuel, security protection and servicing.

Administrative arrangements

26. The inspected State Party shall provide or arrange for the amenities necessary for the inspection team such as communication means, interpretation services to the extent necessary for the performance of interviewing and other tasks, transportation, working space, lodging, meals and medical care. In this regard, the inspected State Party shall be reimbursed by the Organization for such costs incurred by the inspection team.

Approved equipment

27. Subject to paragraph 29, there shall be no restriction by the inspected State Party on the inspection team bringing onto the inspection site such equipment, approved in accordance with paragraph 28, which the Technical Secretariat has determined to be necessary to fulfil the inspection requirements. The Technical Secretariat shall prepare and, as appropriate, update a list of approved equipment, which may be needed for the purposes described above, and regulations governing such equipment which shall be in accordance with this Annex. In establishing the list of approved equipment and these regulations, the Technical Secretariat shall ensure that safety considerations for all the types of facilities at which such equipment is likely to be used, are taken fully into account. A list of approved equipment shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

28. The equipment shall be in the custody of the Technical Secretariat and be designated, calibrated and approved by the Technical Secretariat. The Technical Secretariat shall, to the extent possible, select that equipment which is specifically designed for the specific kind of inspection required. Designated and approved equipment shall be specifically protected against unauthorized alteration.

29. The inspected State Party shall have the right, without prejudice to the prescribed time-frames, to inspect the equipment in the presence of inspection team members at the point of entry, i.e., to check the identity of the equipment brought in or removed from the territory of the inspected State Party or the Host State. To facilitate such identification, the Technical Secretariat shall attach documents and devices to authenticate its designation and approval of the equipment. The inspection of the equipment shall also ascertain to the satisfaction of the inspected State Party that the equipment meets the description of the approved equipment for the particular type of inspection. The inspected State Party may exclude equipment not meeting that description or equipment without the above-mentioned authentication documents and devices. Procedures for the inspection of equipment shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

30. In cases where the inspection team finds it necessary to use equipment available on site not belonging to the Technical Secretariat and requests the inspected State Party to

enable the team to use such equipment, the inspected State Party shall comply with the request to the extent it can.

D. Pre-Inspection Activities

Notification

31. The Director-General shall notify the State Party before the planned arrival of the inspection team at the point of entry and within the prescribed time-frames, where specified, of its intention to carry out an inspection.

32. Notifications made by the Director-General shall include the following information:

(a) The type of inspection;

(b) The point of entry;

(c) The date and estimated time of arrival at the point of entry;

(d) The means of arrival at the point of entry;

(e) The site to be inspected;

(f) The names of inspectors and inspection assistants;

(g) If appropriate, aircraft clearance for special flights.

33. The inspected State Party shall acknowledge the receipt of a notification by the Technical Secretariat of an intention to conduct an inspection, not later than one hour after receipt of such notification.

34. In the case of an inspection of a facility of a State Party located on the territory of another State Party, both States Parties shall be simultaneously notified in accordance with paragraphs 31 and 32.

Entry into the territory of the inspected State Party or Host State and transfer to the inspection site

35. The inspected State Party or Host State Party which has been notified of the arrival of an inspection team, shall ensure its immediate entry into the territory and shall through an in-country escort or by other means do everything in its power to ensure the safe conduct of the inspection team and its equipment and supplies, from its point of entry to the inspection site(s) and to a point of exit.

36. The inspected State Party or Host State Party shall, as necessary, assist the inspection team in reaching the inspection site not later than 12 hours after the arrival at the point of entry.

Pre-inspection briefing

37. Upon arrival at the inspection site and before the commencement of the inspection, the inspection team shall be briefed by facility representatives, with the aid of maps and other documentation as appropriate, on the facility, the activities carried out there, safety measures and administrative and logistic arrangements necessary for the inspection. The time spent for the briefing shall be limited to the minimum necessary and in any event not exceed three hours.

E. Conduct of Inspections

General rules

38. The members of the inspection team shall discharge their functions in accordance with the provisions of this Convention, as well as rules established by the Director-General and facility agreements concluded between States Parties and the Organization.

39. The inspection team shall strictly observe the inspection mandate issued by the Director-General. It shall refrain from activities going beyond this mandate.

40. The activities of the inspection team shall be so arranged as to ensure the timely and effective discharge of its functions and the least possible inconvenience to the inspected State Party or Host State and disturbance to the facility or area inspected. The inspection team shall avoid unnecessarily hampering or delaying the operation of a facility and avoid affecting its safety. In particular, the inspection team shall not operate any facility. 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 inspected facility to have them performed. The representative shall carry out the request to the extent possible.

41. In the performance of their duties on the territory of an inspected State Party or Host State, the members of the inspection team shall, if the inspected State Party so requests, be accompanied by representatives of the inspected State Party, but the inspection team must not thereby be delayed or otherwise hindered in the exercise of its functions.

42. Detailed procedures for the conduct of inspections shall be developed for inclusion in the inspection manual by the Technical Secretariat, taking into account guidelines to be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

Safety

43. In carrying out their activities, inspectors and inspection assistants shall observe safety regulations established at the inspection site, including those for the protection of controlled environments within a facility and for personal safety. In order to implement these requirements, appropriate detailed procedures shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (*i*).

Communications

44. Inspectors shall have the right throughout the in-country period to communicate with the Headquarters of the Technical Secretariat. For this purpose they may use their own, duly certified, approved equipment and may request that the inspected State Party or Host State Party provide them with access to other telecommunications. The inspection team shall have the right to use its own two-way system of radio communications between personnel patrolling the perimeter and other members of the inspection team.

Inspection team and inspected State Party rights

45. The inspection team shall, in accordance with the relevant Articles and Annexes of this Convention as well as with facility agreements and procedures set forth in the inspection manual, have the right to unimpeded access to the inspection site. The items to be inspected will be chosen by the inspectors.

46. Inspectors shall have the right to interview any facility personnel in the presence of representatives of the inspected State Party with the purpose of establishing relevant facts. Inspectors shall only request information and data which are necessary for the conduct of the inspection, and the inspected State Party shall furnish such information upon request. The inspected State Party shall have the right to object to questions posed to the facility personnel if those questions are deemed not relevant to the inspection. If the head of the inspection team objects and states their relevance, the questions shall be provided in writing to the inspected State Party for reply. The inspection team may note any refusal to permit interviews or to allow questions to be answered and any explanations given, in that part of the inspection report that deals with the cooperation of the inspected State Party.

47. Inspectors shall have the right to inspect documentation and records they deem relevant to the conduct of their mission.

48. Inspectors shall have the right to have photographs taken at their request by representatives of the inspected State Party or of the inspected facility. The capability to take instant development photographic prints shall be available. The inspection team shall determine whether photographs conform to those requested and, if not, repeat photographs shall be taken. The inspection team and the inspected State Party shall each retain one copy of every photograph.

49. The representatives of the inspected State Party shall have the right to observe all verification activities carried out by the inspection team.

50. The inspected State Party shall receive copies, at its request, of the information and data gathered about its facility(ies) by the Technical Secretariat.

51. Inspectors shall have the right to request clarifications in connection with ambiguities that arise during an inspection. Such requests shall be made promptly through the representative of the inspected State Party. The representative of the inspected State Party shall provide the inspection team, during the inspection, with such clarification as may be necessary to remove the ambiguity. If questions relating to an object or a building located within the inspection site are not resolved, the object or building shall, if requested, be photographed for the purpose of clarifying its nature and function. If the ambiguity cannot be removed during the inspection, the inspectors shall notify the Technical Secretariat immediately. The inspectors shall include in the inspection report any such unresolved question, relevant clarifications, and a copy of any photographs taken.

Collection, handling and analysis of samples

52. Representatives of the inspected State Party or of the inspected facility shall take samples at the request of the inspection team in the presence of inspectors. If so agreed in advance with the representatives of the inspected State Party or of the inspected facility, the inspection team may take samples itself.

53. Where possible, the analysis of samples shall be performed on-site. The inspection team shall have the right to perform on-site analysis of samples using approved equipment brought by it. At the request of the inspection team, the inspected State Party shall, in accordance with agreed procedures, provide assistance for the analysis of samples on-site. Alternatively, the inspection team may request that appropriate analysis on-site be performed in its presence.

54. The inspected State Party has the right to retain portions of all samples taken or take duplicate samples and be present when samples are analysed on-site.

55. The inspection team shall, if it deems it necessary, transfer samples for analysis off-site at laboratories designated by the Organization.

56. The Director-General shall have the primary responsibility for the security, integrity and preservation of samples and for ensuring that the confidentiality of samples transferred for analysis off-site is protected. The Director-General shall do so in accordance with procedures, to be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i), for inclusion in the inspection manual. He shall:

(a) Establish a stringent regime governing the collection, handling, transport and analysis of samples;

(b) Certify the laboratories designated to perform different types of analysis;

(c) Oversee the standardization of equipment and procedures at these designated laboratories, mobile analytical equipment and procedures, and monitor quality control and overall standards in relation to the certification of these laboratories, mobile equipment and procedures; and

(d) Select from among the designated laboratories those which shall perform analytical or other functions in relation to specific investigations.

57. When off-site analysis is to be performed, samples shall be analysed in at least two designated laboratories. The Technical Secretariat shall ensure the expeditious processing of the analysis. The samples shall be accounted for by the Technical Secretariat and any unused samples or portions thereof shall be returned to the Technical Secretariat.

58. The Technical Secretariat shall compile the results of the laboratory analysis of samples relevant to compliance with this Convention and include them in the final inspection report. The Technical Secretariat shall include in the report detailed information concerning the equipment and methodology employed by the designated laboratories.

Extension of inspection duration

59. Periods of inspection may be extended by agreement with the representative of the inspected State Party.

Debriefing

60. Upon completion of an inspection the inspection team shall meet with representatives of the inspected State Party and the personnel responsible for the inspection site to review the preliminary findings of the inspection team and to clarify any ambiguities. The inspection team shall provide to the representatives of the inspected State Party its preliminary findings in written form according to a standardized format, together with a list of any samples and copies of written information and data gathered and other material to be taken off-site. The document shall be signed by the head of the inspection team. In order to indicate that he has taken notice of the contents of the document, the representative of the inspected State Party shall countersign the document. This meeting shall be completed not later than 24 hours after the completion of the inspection.

F. Departure

61. Upon completion of the post-inspection procedures, the inspection team shall leave, as soon as possible, the territory of the inspected State Party or the Host State.

G. Reports

62. Not later than 10 days after the inspection, the inspectors shall prepare a factual, final report on the activities conducted by them and on their findings. It shall only contain facts relevant to compliance with this Convention, as provided for under the inspection mandate. The report shall also provide information as to the manner in which the State Party inspected cooperated with the inspection team. Differing observations made by inspectors may be attached to the report. The report shall be kept confidential.

63. The final report shall immediately be submitted to the inspected State Party. Any written comments, which the inspected State Party may immediately make on its findings shall be annexed to it. The final report together with annexed comments made by the inspected State Party shall be submitted to the Director-General not later than 30 days after the inspection.

64. Should the report contain uncertainties, or should cooperation between the National Authority and the inspectors not measure up to the standards required, the Director-General shall approach the State Party for clarification.

65. If the uncertainties cannot be removed or the facts established are of a nature to suggest that obligations undertaken under this Convention have not been met, the Director-General shall inform the Executive Council without delay.

H. Application of General Provisions

66. The provisions of this Part shall apply to all inspections conducted pursuant to this Convention, except where the provisions of this Part differ from the provisions set forth for specific types of inspections in Parts III to XI of this Annex, in which case the latter provisions shall take precedence.

Part III: General Provisions for Verification Measures Pursuant to Articles IV, V and VI, Paragraph 3

A. Initial Inspections and Facility Attachements

1. Each declared facility subject to on-site inspection pursuant to Articles IV, V, and VI, paragraph 3, shall receive an initial inspection promptly after the facility is declared. The purpose of this inspection of the facility shall be to verify information provided and to obtain any additional information needed for planning future verification activities at the facility, including on-site inspections and continuous monitoring with on-site instruments, and to work on the facility agreements.

2. States Parties shall ensure that the verification of declarations and the initiation of the systematic verification measures can be accomplished by the Technical Secretariat at all facilities within the established time-frames after this Convention enters into force for them.

3. Each State Party shall conclude a facility agreement with the Organization for each facility declared and subject to on-site inspection pursuant to Articles IV, V, and VI, paragraph 3.

4. Facility agreements shall be completed not later than 180 days after this Convention enters into force for the State Party or after the facility has been declared for the first time, except for a chemical weapons destruction facility to which paragraphs 5 to 7 shall apply.

5. In the case of a chemical weapons destruction facility that begins operations more than one year after this Convention enters into force for the State Party, the facility agreement shall be completed not less than 180 days before the facility begins operation.

6. In the case of a chemical weapons destruction facility that is in operation when this Convention enters into force for the State Party, or begins operation not later than one year thereafter, the facility agreement shall be completed not later than 210 days after this Convention enters into force for the State Party, except that the Executive Council may decide that transitional verification arrangements, approved in accordance with Part IV (A), paragraph 51, of this Annex and including a transitional facility agreement, provisions for verification through on-site inspection and monitoring with on-site instruments, and the time-frame for application of the arrangements, are sufficient.

7. In the case of a facility, referred to in paragraph 6, that will cease operations not later than two years after this Convention enters into force for the State Party, the Executive Council may decide that transitional verification arrangements, approved in accordance with Part IV (A), paragraph 51, of this Annex and including a transitional facility agreement, provisions for verification through on-site inspection and monitoring with on-site instruments, and the time-frame for application of the arrangements, are sufficient.

8. Facility agreements shall be based on models for such agreements and provide for detailed arrangements which shall govern inspections at each facility. The model agreements shall include provisions to take into account future technological developments and shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

9. 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 inspections.

B. Standing Arrangements

10. Where applicable, the Technical Secretariat shall have the right to have continuous monitoring instruments and systems and seals installed and to use them, in conformity with the relevant provisions in this Convention and the facility agreements between States Parties and the Organization.

11. The inspected State Party shall, in accordance with agreed procedures, have the right to inspect any instrument used or installed by the inspection team and to have it tested in the presence of representatives of the inspected State Party. The inspection team shall have the right to use the instruments that were installed by the inspected State Party for its own monitoring of the technological process of the destruction of chemical weapons. To this end, the inspection team shall have the right to inspect those instruments that it

intends to use for purposes of verification of the destruction of chemical weapons and to have them tested in its presence.

12. The inspected State Party shall provide the necessary preparation and support for the establishment of continuous monitoring instruments and systems.

13. In order to implement paragraphs 11 and 12, appropriate detailed procedures shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

14. The inspected State Party shall immediately notify the Technical Secretariat if an event occurs or may occur at a facility where monitoring instruments are installed, which may have an impact on the monitoring system. The inspected State Party shall coordinate subsequent actions with the Technical Secretariat with a view to restoring the operation of the monitoring system and establishing interim measures, if necessary, as soon as possible.

15. The inspection team shall verify during each inspection that the monitoring system functions correctly and that emplaced seals have not been tampered with. In addition, visits to service the monitoring system may be required to perform any necessary maintenance or replacement of equipment, or to adjust the coverage of the monitoring system as required.

16. If the monitoring system indicates any anomaly, the Technical Secretariat shall immediately take action to determine whether this resulted from equipment malfunction or activities at the facility. If, after this examination, the problem remains unresolved, the Technical Secretariat shall immediately ascertain the actual situation, including through immediate on-site inspection of, or visit to, the facility if necessary. The Technical Secretariat shall report any such problem immediately after its detection to the inspected State Party which shall assist in its resolution.

C. Pre-Inspection Activities

17. The inspected State Party shall, except as specified in paragraph 18, be notified of inspections not less than 24 hours in advance of the planned arrival of the inspection team at the point of entry.

18. The inspected State Party shall be notified of initial inspections not less than 72 hours in advance of the estimated time of arrival of the inspection team at the point of entry.

Part IV (A): Destruction of Chemical Weapons and its Verification Pursuant to Article IV

A. Declarations

Chemical weapons

1. The declaration of chemical weapons by a State Party pursuant to Article III, paragraph 1 (a) (ii), shall include the following:

(a) The aggregate quantity of each chemical declared;

(b) The precise location of each chemical weapons storage facility, expressed by:

(i) Name;

(ii) Geographical coordinates; and

(iii) A detailed site diagram, including a boundary map and the location of bunkers/storage areas within the facility.

(c) The detailed inventory for each chemical weapons storage facility including:

(i) Chemicals defined as chemical weapons in accordance with Article II;

(ii) Unfilled munitions, sub-munitions, devices and equipment defined as chemical weapons;

(iii) Equipment specially designed for use directly in connection with the employment of munitions, sub-munitions, devices or equipment specified in sub-subparagraph (ii);

(iv) Chemicals specifically designed for use directly in connection with the employment of munitions, sub-munitions, devices or equipment specified in sub-subparagraph (ii).

2. For the declaration of chemicals referred to in paragraph 1 (c) (i) the following shall apply:

(a) Chemicals shall be declared in accordance with the Schedules specified in the Annex on Chemicals;

(b) For a chemical not listed in the Schedules in the Annex on Chemicals the information required for possible assignment of the chemical to the appropriate Schedule shall be provided, including the toxicity of the pure compound. For a precursor, 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 International Union of Pure and Applied Chemistry (IUPAC) nomenclature, structural formula and Chemical Abstracts Service registry number, if assigned. For a precursor, the toxicity and identity of the principal final reaction product(s) shall be provided;

(d) In cases involving mixtures of two or more chemicals, each chemical shall be identified and the percentage of each shall be provided, and the mixture shall be declared under the category of the most toxic chemical. If a component of a binary chemical weapon consists of a mixture of two or more chemicals, each chemical shall be identified and the percentage of each provided;

(e) Binary chemical weapons shall be declared under the relevant end product within the framework of the categories of chemical weapons referred to in paragraph 16. The following supplementary information shall be provided for each type of binary chemical munition/device:

(i) The chemical name of the toxic end-product;

(ii) The chemical composition and quantity of each component;

(iii) The actual weight ratio between the components;

(iv) Which component is considered the key component;

(v) The projected quantity of the toxic end-product calculated on a stoichiometric basis from the key component, assuming 100 per cent yield. A declared quantity (in tonnes) of the key component intended for a specific toxic end-product shall be considered equivalent to the quantity (in tonnes) of this toxic end-product calculated on a stoichiometric basis assuming 100 per cent yield.

(f) For multicomponent chemical weapons, the declaration shall be analogous to that envisaged for binary chemical weapons;

(g) 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:

(i) Type;

(ii) Size or calibre;

(iii) Number of items; and

(iv) Nominal weight of chemical fill per item.

(h) For each chemical the total weight present at the storage facility shall be declared;

(i) In addition, for chemicals stored in bulk, the percentage purity shall be declared, if known.

3. For each type of unfilled munitions, sub-munitions, devices or equipment, referred to in paragraph 1 (c) (ii), the information shall include:

(a) The number of items;

(b) The nominal fill volume per item;

(c) The intended chemical fill.

Declarations of chemical weapons pursuant to Article III, paragraph 1 (a) (iii)

4. The declaration of chemical weapons pursuant to Article III, paragraph 1 (*a*) (iii), shall contain all information specified in paragraphs 1 to 3 above. It is the responsibility of the State Party on whose territory the chemical weapons are located to make appropriate arrangements with the other State to ensure that the declarations are made. If the State Party on whose territory the chemical weapons are located is not able to fulfil its obligations under this paragraph, it shall state the reasons therefor.

Declarations of past transfers and receipts

5. A State Party that has transferred or received chemical weapons since 1 January 1946 shall declare these transfers or receipts pursuant to Article III, paragraph 1 (*a*) (iv), provided the amount transferred or received exceeded 1 tonne per chemical per year in bulk and/or munition form. This declaration shall be made according to the inventory format specified in paragraphs 1 and 2. This declaration shall also indicate the supplier and recipient countries, the dates of the transfers or receipts and, as precisely as possible, the current location of the transferred items. When not all the specified information is available for transfers or receipts of chemical weapons for the period between 1 January 1946 and 1 January 1970, the State Party shall declare whatever information is still available to it and provide an explanation as to why it cannot submit a full declaration.

Submission of the general plan for destruction of chemical weapons

6. The general plan for destruction of chemical weapons submitted pursuant to Article III, paragraph 1 (*a*) (v), shall provide an overview of the entire national chemical weapons destruction programme of the State Party and information on the efforts of the State Party to fulfil the destruction requirements contained in this Convention. The plan shall specify:

(a) A general schedule for destruction, giving types and approximate quantities of chemical weapons planned to be destroyed in each annual destruction period for each existing chemical weapons destruction facility and, if possible, for each planned chemical weapons destruction facility;

(b) The number of chemical weapons destruction facilities existing or planned to be operated over the destruction period;

(c) For each existing or planned chemical weapons destruction facility:

(i) Name and location; and

(ii) The types and approximate quantities of chemical weapons, and the type (for example, nerve agent or blister agent) and approximate quantity of chemical fill, to be destroyed;

(d) The plans and programmes for training personnel for the operation of destruction facilities;

(e) The national standards for safety and emissions that the destruction facilities must satisfy;

(f) Information on the development of new methods for destruction of chemical weapons and on the improvement of existing methods;

(g) The cost estimates for destroying the chemical weapons; and

(h) Any issues which could adversely impact on the national destruction programme.

B. Measures to Secure the Storage Facility and Storage Facility Preparation

7. 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 facilities and shall prevent any movement of its chemical weapons out of the facilities, except their removal for destruction.

8. A State Party shall ensure that chemical weapons at its storage facilities are configured to allow ready access for verification in accordance with paragraphs 37 to 49.

9. While a storage facility remains closed for any movement of chemical weapons out of the facility other than their removal for destruction, a State Party may continue at the facility standard maintenance activities, including standard maintenance of chemical weapons; safety monitoring and physical security activities; and preparation of chemical weapons for destruction.

10. Maintenance activities of chemical weapons shall not include:

(a) Replacement of agent or of munition bodies;

(b) Modification of the original characteristics of munitions, or parts or components thereof.

11. All maintenance activities shall be subject to monitoring by the Technical Secretariat.

C. Destruction

Principles and methods for destruction of chemical weapons

12. "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.

13. Each State Party shall determine how it shall destroy chemical weapons, 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 facilities.

14. Each State Party shall ensure that its chemical weapons destruction facilities 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.

Order of destruction

15. The order of destruction of chemical weapons is based on the obligations specified in Article I and the other Articles, including obligations regarding systematic on-site verification. It takes into account interests of States Parties for undiminished security during the destruction period; confidence-building in the early part of the destruction stage; gradual acquisition of experience in the course of destroying chemical weapons; and applicability irrespective of the actual composition of the stockpiles and the methods chosen for the destruction of the chemical weapons. The order of destruction is based on the principle of levelling out.

16. For the purpose of destruction, chemical weapons declared by each State Party shall be divided into three categories:

Category 1: Chemical weapons on the basis of Schedule 1 chemicals and their parts and components;

Category 2: Chemical weapons on the basis of all other chemicals and their parts and components;

Category 3: Unfilled munitions and devices, and equipment specifically designed for use directly in connection with employment of chemical weapons.

17. A State Party shall start:

(a) The destruction of Category 1 chemical weapons not later than two years after this Convention enters into force for it, and shall complete the destruction not later than 10 years after entry into force of this Convention. A State Party shall destroy chemical weapons in accordance with the following destruction deadlines:

(i) Phase 1: Not later than two years after entry into force of this Convention, testing of its first destruction facility shall be completed. Not less than 1 per cent of the

Category 1 chemical weapons shall be destroyed not later than three years after the entry into force of this Convention;

(ii) Phase 2: Not less than 20 per cent of the Category 1 chemical weapons shall be destroyed not later than five years after the entry into force of this Convention;

(iii) Phase 3: Not less than 45 per cent of the Category 1 chemical weapons shall be destroyed not later than seven years after the entry into force of this Convention;

(iv) Phase 4: All Category 1 chemical weapons shall be destroyed not later than 10 years after the entry into force of this Convention.

(b) The destruction of Category 2 chemical weapons not later than one year after this Convention enters into force for it and shall complete the destruction not later than five years after the entry into force of this Convention. Category 2 chemical weapons shall be destroyed in equal annual increments throughout the destruction period. The comparison factor for such weapons is the weight of the chemicals within Category 2; and

(c) The destruction of Category 3 chemical weapons not later than one year after this Convention enters into force for it, and shall complete the destruction not later than five years after the entry into force of this Convention. Category 3 chemical weapons shall be destroyed in equal annual increments throughout the destruction period. The comparison factor for unfilled munitions and devices is expressed in nominal fill volume (m3) and for equipment in number of items.

18. For the destruction of binary chemical weapons the following shall apply:

(a) For the purposes of the order of destruction, a declared quantity (in tonnes) of the key component intended for a specific toxic end-product shall be considered equivalent to the quantity (in tonnes) of this toxic end-product calculated on a stoichiometric basis assuming 100 per cent yield.

(b) A requirement to destroy a given quantity of the key component shall entail a requirement to destroy a corresponding quantity of the other component, calculated from the actual weight ratio of the components in the relevant type of binary chemical munition/device.

(c) If more of the other component is declared than is needed, based on the actual weight ratio between components, the excess shall be destroyed over the first two years after destruction operations begin.

(d) At the end of each subsequent operational year a State Party may retain an amount of the other declared component that is determined on the basis of the actual weight ratio of the components in the relevant type of binary chemical munition/device.

19. For multicomponent chemical weapons the order of destruction shall be analogous to that envisaged for binary chemical weapons.

Modification of intermediate destruction deadlines

20. The Executive Council shall review the general plans for destruction of chemical weapons, submitted pursuant to Article III, paragraph 1 (a) (v), and in accordance with paragraph 6, inter alia, to assess their conformity with the order of destruction set forth in paragraphs 15 to 19. The Executive Council shall consult with any State Party whose plan does not conform, with the objective of bringing the plan into conformity.

21. If a State Party, due to exceptional circumstances beyond its control, believes that it cannot achieve the level of destruction specified for Phase 1, Phase 2 or Phase 3 of the order of destruction of Category 1 chemical weapons, it may propose changes in those levels. Such a proposal must be made not later than 120 days after the entry into force of this Convention and shall contain a detailed explanation of the reasons for the proposal.

22. Each State Party shall take all necessary measures to ensure destruction of Category 1 chemical weapons in accordance with the destruction deadlines set forth in paragraph 17 (a) as changed pursuant to paragraph 21. However, if a State Party believes that it will be unable to ensure the destruction of the percentage of Category 1 chemical weapons required by an intermediate destruction deadline, it may request the Executive Council to recommend to the Conference to grant an extension of its obligation to meet that deadline. Such a request must be made not less than 180 days before the intermediate destruction deadline and shall contain a detailed explanation of the reasons for the request and the plans of the State Party for ensuring that it will be able to fulfil its obligation to meet the next intermediate destruction deadline.

23. If an extension is granted, the State Party shall still be under the obligation to meet the cumulative destruction requirements set forth for the next destruction deadline. Extensions granted pursuant to this Section shall not, in any way, modify the obligation of the State Party to destroy all Category 1 chemical weapons not later than 10 years after the entry into force of this Convention.

Extension of the deadline for completion of destruction

24. If a State Party believes that it will be unable to ensure the destruction of all Category 1 chemical weapons not later than 10 years after the entry into force of this Convention, it may submit a request to the Executive Council for an extension of the deadline for completing the destruction of such chemical weapons. Such a request must be made not later than nine years after the entry into force of this Convention.

25. The request shall contain:

(a) The duration of the proposed extension;

(b) A detailed explanation of the reasons for the proposed extension; and

(c) A detailed plan for destruction during the proposed extension and the remaining portion of the original 10-year period for destruction.

26. A decision on the request shall be taken by the Conference at its next session, on the recommendation of the Executive Council. Any extension shall be the minimum necessary, but in no case shall the deadline for a State Party to complete its destruction of all chemical weapons be extended beyond 15 years after the entry into force of this Convention. The Executive Council shall set conditions for the granting of the extension, including the specific verification measures deemed necessary as well as specific actions to be taken by the State Party to overcome problems in its destruction programme. Costs of verification during the extension period shall be allocated in accordance with Article IV, paragraph 16.

27. If an extension is granted, the State Party shall take appropriate measures to meet all subsequent deadlines.

28. The State Party shall continue to submit detailed annual plans for destruction in accordance with paragraph 29 and annual reports on the destruction of Category 1 chemical weapons in accordance with paragraph 36, until all Category 1 chemical weapons are destroyed. In addition, not later than at the end of each 90 days of the extension period, the State Party shall report to the Executive Council on its destruction activity. The Executive Council shall review progress towards completion of destruction and take the necessary measures to document this progress. All information concerning the destruction activities during the extension period shall be provided by the Executive Council to States Parties, upon request.

Detailed annual plans for destruction

29. The detailed annual plans for destruction shall be submitted to the Technical Secretariat not less than 60 days before each annual destruction period begins pursuant to Article IV, paragraph 7 (a), and shall specify:

(a) The quantity of each specific type of chemical weapon to be destroyed at each destruction facility and the inclusive dates when the destruction of each specific type of chemical weapon will be accomplished;

(b) The detailed site diagram for each chemical weapons destruction facility and any changes to previously submitted diagrams; and

(c) The detailed schedule of activities for each chemical weapons destruction facility for the upcoming year, identifying time required for design, construction or modification of the facility, installation of equipment, equipment check-out and operator training, destruction operations for each specific type of chemical weapon, and scheduled periods of inactivity.

30. A State Party shall provide, for each of its chemical weapons destruction facilities, detailed facility information to assist the Technical Secretariat in developing preliminary inspection procedures for use at the facility.

31. The detailed facility information for each destruction facility shall include the following information:

(a) Name, address and location;

(b) Detailed, annotated facility drawings;

(c) Facility design drawings, process drawings, and piping and instrumentation design drawings;

(d) Detailed technical descriptions, including design drawings and instrument specifications, for the equipment required for: removing the chemical fill from the munitions, devices, and containers; temporarily storing the drained chemical fill; destroying the chemical agent; and destroying the munitions, devices, and containers;

(e) Detailed technical descriptions of the destruction process, including material flow rates, temperatures and pressures, and designed destruction efficiency;

(f) Design capacity for each specific type of chemical weapon;

(g) A detailed description of the products of destruction and the method of their ultimate disposal;

(h) A detailed technical description of measures to facilitate inspections in accordance with this Convention;

(i) A detailed description of any temporary holding area at the destruction facility that will be used to provide chemical weapons directly to the destruction facility, including site and facility drawings and information on the storage capacity for each specific type of chemical weapon to be destroyed at the facility;

(j) A detailed description of the safety and medical measures in force at the facility;

(k) A detailed description of the living quarters and working premises for the inspectors; and

(l) Suggested measures for international verification.

32. A State Party shall provide, for each of its chemical weapons destruction facilities, the plant operations manuals, the safety and medical plans, the laboratory operations and quality assurance and control manuals, and the environmental permits that have been obtained, except that this shall not include material previously provided.

33. A State Party shall promptly notify the Technical Secretariat of any developments that could affect inspection activities at its destruction facilities.

34. Deadlines for submission of the information specified in paragraphs 30 to 32 shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

35. After a review of the detailed facility information for each destruction facility, the Technical Secretariat, if the need arises, shall enter into consultation with the State Party concerned in order to ensure that its chemical weapons destruction facilities are designed to assure the 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 operation, and that the facility operation allows appropriate verification.

Annual reports on destruction

36. Information regarding the implementation of plans for destruction of chemical weapons shall be submitted to the Technical Secretariat pursuant to Article IV, paragraph 7 (b), not later than 60 days after the end of each annual destruction period and shall specify the actual amounts of chemical weapons which were destroyed during the previous year at each destruction facility. If appropriate, reasons for not meeting destruction goals should be stated.

D. Verification

Verification of declarations of chemical weapons through on-site inspection

37. The purpose of the verification of declarations of chemical weapons shall be to confirm through on-site inspection the accuracy of the relevant declarations made pursuant to Article III.

38. The 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.

39. The inspectors 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.

40. As the inventory progresses, 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 during the inventory. After completion of the inventory, such seals will be removed unless otherwise agreed.

Systematic verification of storage facilities

41. The purpose of the systematic verification of storage facilities shall be to ensure that no undetected removal of chemical weapons from such facilities takes place.

42. The systematic verification 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 in accordance with the facility agreement, combine on-site inspection and monitoring with on-site instruments.

43. When all chemical weapons have been removed from the storage facility, the Technical Secretariat shall confirm the declaration of the State Party to that effect. After this confirmation, the Technical Secretariat shall terminate the systematic verification of the storage facility and shall promptly remove any monitoring instruments installed by the inspectors.

Inspections and visits

44. The particular storage facility to be inspected shall be chosen by the Technical Secretariat in such a way as to preclude the prediction of precisely when the facility is to be inspected. The guidelines for determining the frequency of systematic on-site inspections shall be elaborated by the Technical Secretariat, taking into account the recommendations to be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

45. The Technical Secretariat shall notify the inspected State Party of its decision to inspect or visit the storage facility 48 hours before the planned arrival of the inspection team at the facility for systematic inspections or visits. In cases of inspections or visits to resolve urgent problems, this period may be shortened. The Technical Secretariat shall specify the purpose of the inspection or visit.

46. The inspected State Party shall make any necessary preparations for the arrival of the inspectors and shall ensure their expeditious transportation from their point of entry to the storage facility. The facility agreement will specify administrative arrangements for inspectors.

47. The inspected State Party shall provide the inspection team upon its arrival at the chemical weapons storage facility to carry out an inspection, with the following data on the facility:

(a) The number of storage buildings and storage locations;

(b) For each storage building and storage location, the type and the identification number or designation, shown on the site diagram; and

(c) For each storage building and storage location at the facility, the number of items of each specific type of chemical weapon, and, for containers that are not part of binary munitions, the actual quantity of chemical fill in each container.

48. In carrying out an inventory, within the time available, inspectors shall have the right:

(a) To use any of the following inspection techniques:

(i) inventory all the chemical weapons stored at the facility;

(ii) inventory all the chemical weapons stored in specific buildings or locations at the facility, as chosen by the inspectors; or

(iii) inventory all the chemical weapons of one or more specific types stored at the facility, as chosen by the inspectors; and

(b) To check all items inventoried against agreed records.

49. Inspectors shall, in accordance with facility agreements:

(a) 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; and

(b) Have the right, during the first and any subsequent inspection of each chemical weapons storage facility, to designate munitions, devices, and containers from which samples are to be taken, and to affix to such munitions, devices, and containers a unique tag that will indicate an attempt to remove or alter the tag. A sample shall be taken from a tagged item at a chemical weapons storage facility or a chemical weapons destruction facility as soon as it is practically possible in accordance with the corresponding destruction programmes, and, in any case, not later than by the end of the destruction operations.

Systematic verification of the destruction of chemical weapons

50. The purpose of verification of destruction of chemical weapons shall be:

(a) To confirm the identity and quantity of the chemical weapons stocks to be destroyed; and

(b) To confirm that these stocks have been destroyed.

51. Chemical weapons destruction operations during the first 390 days after the entry into force of this Convention shall be governed by transitional verification arrangements. Such arrangements, including a transitional facility agreement, provisions for verification through on-site inspection and monitoring with on-site instruments, and the timeframe for application of the arrangements, shall be agreed between the Organization and the inspected State Party. These arrangements shall be approved by the Executive Council not later than 60 days after this Convention enters into force for the State Party, taking into account the recommendations of the Technical Secretariat, which shall be based on an evaluation of the detailed facility information provided in accordance with paragraph 31 and a visit to the facility. The Executive Council shall, at its first session, establish the guidelines for such transitional verification arrangements, based on recommendations to be considered and approved by the Conference pursuant to Article VIII,

paragraph 21 (*i*). The transitional verification arrangements shall be designed to verify, throughout the entire transitional period, the destruction of chemical weapons in accordance with the purposes set forth in paragraph 50, and to avoid hampering ongoing destruction operations.

52. The provisions of paragraphs 53 to 61 shall apply to chemical weapons destruction operations that are to begin not earlier than 390 days after the entry into force of this Convention.

53. On the basis of this Convention and the detailed destruction facility information, and as the case may be, on experience from previous inspections, the Technical Secretariat shall prepare a draft plan for inspecting the destruction of chemical weapons at each destruction facility. The plan shall be completed and provided to the inspected State Party for comment not less than 270 days before the facility begins destruction operations pursuant to this Convention. Any differences between the Technical Secretariat and the inspected State Party should be resolved through consultations. Any unresolved matter shall be forwarded to the Executive Council for appropriate action with a view to facilitating the full implementation of this Convention.

54. The Technical Secretariat shall conduct an initial visit to each chemical weapons destruction facility of the inspected State Party not less than 240 days before each facility begins destruction operations pursuant to this Convention, to allow it to familiarize itself with the facility and assess the adequacy of the inspection plan.

55. In the case of an existing facility where chemical weapons destruction operations have already been initiated, the inspected State Party shall not be required to decontaminate the facility before the Technical Secretariat conducts an initial visit. The duration of the visit shall not exceed five days and the number of visiting personnel shall not exceed 15.

56. The agreed detailed plans for verification, with an appropriate recommendation by the Technical Secretariat, shall be forwarded to the Executive Council for review. The Executive Council shall review the plans with a view to approving them, consistent with verification objectives and obligations under this Convention. It should also confirm that verification schemes for destruction are consistent with verification aims and are efficient and practical. This review should be completed not less than 180 days before the destruction period begins.

57. Each member of the Executive Council may consult with the Technical Secretariat on any issues regarding the adequacy of the plan for verification. If there are no objections by any member of the Executive Council, the plan shall be put into action

58. 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 shall be referred to the Conference.

59. The detailed facility agreements for chemical weapons destruction facilities shall specify, taking into account the specific characteristics of the destruction facility and its mode of operation:

(a) Detailed on-site inspection procedures; and

(b) Provisions for verification through continuous monitoring with on-site instruments and physical presence of inspectors.

60. Inspectors shall be granted access to each chemical weapons destruction facility not less than 60 days before the commencement of the destruction, pursuant to this Convention, at the facility. Such access shall be for the purpose of supervising the installation of the inspection equipment, inspecting this equipment and testing its operation, as well as for the purpose of carrying out a final engineering review of the facility. In the case of an existing facility where chemical weapons destruction operations have already been initiated, destruction operations shall be stopped for the minimum amount of time required, not to exceed 60 days, for installation and testing of the inspection equipment. Depending on the results of the testing and review, the State Party and the Technical Secretariat may agree on additions or changes to the detailed facility agreement for the facility.

61. The inspected State Party shall notify, in writing, the inspection team leader at a chemical weapons destruction facility not less than four hours before the departure of each shipment of chemical weapons from a chemical weapons storage facility to that destruction facility. This notification shall specify the name of the storage facility, the estimated times of departure and arrival, the specific types and quantities of chemical weapons being transported, whether any tagged items are being moved, and the method of transportation. This notification may include notification of more than one shipment. The inspection team leader shall be promptly notified, in writing, of any changes in this information.

Chemical weapons storage facilities at chemical weapons destruction facilities

62. The inspectors shall verify the arrival of the chemical weapons at the destruction facility and the storing of these chemical weapons. The inspectors shall verify the inventory of each shipment, using agreed procedures consistent with facility safety regulations, prior to the destruction of the chemical weapons. They shall employ, as appropriate, agreed seals, markers or other inventory control procedures to facilitate an accurate inventory of the chemical weapons prior to destruction.

63. As soon and as long as chemical weapons are stored at chemical weapons storage facilities located at chemical weapons destruction facilities, these storage facilities shall be subject to systematic verification in conformity with the relevant facility agreements.

64. At the end of an active destruction phase, inspectors shall make an inventory of the chemical weapons, that have been removed from the storage facility, to be destroyed. They shall verify the accuracy of the inventory of the chemical weapons remaining, employing inventory control procedures as referred to in paragraph 62.

Systematic on-site verification measures at chemical weapons destruction facilities

65. The inspectors shall be granted access to conduct their activities at the chemical weapons destruction facilities and the chemical weapons storage facilities located at such facilities during the entire active phase of destruction.

66. At each chemical weapons destruction facility, to provide assurance that no chemical weapons are diverted and that the destruction process has been completed, inspectors shall have the right to verify through their physical presence and monitoring with on-site instruments:

(a) The receipt of chemical weapons at the facility;

(b) The temporary holding area for chemical weapons and the specific type and quantity of chemical weapons stored in that area;

(c) The specific type and quantity of chemical weapons being destroyed;

(d) The process of destruction;

(e) The end-product of destruction;

(f) The mutilation of metal parts; and

(g) The integrity of the destruction process and of the facility as a whole.

67. Inspectors shall have the right to tag, for sampling, munitions, devices, or containers located in the temporary holding areas at the chemical weapons destruction facilities.

68. To the extent that it meets inspection requirements, information from routine facility operations, with appropriate data authentication, shall be used for inspection purposes.

69. After the completion of each period of destruction, the Technical Secretariat shall confirm the declaration of the State Party, reporting the completion of destruction of the designated quantity of chemical weapons.

70. Inspectors shall, in accordance with facility agreements:

(a) Have unimpeded access to all parts of the chemical weapons destruction facilities and the chemical weapons storage facilities located at such facilities, including any munitions, devices, bulk containers, or other containers, therein. The items to be inspected shall be chosen by the inspectors in accordance with the verification plan that has been agreed to by the inspected State Party and approved by the Executive Council;

(b) Monitor the systematic on-site analysis of samples during the destruction process; and

(c) Receive, if necessary, samples taken at their request from any devices, bulk containers and other containers at the destruction facility or the storage facility thereat.

Part IV (B): Old Chemical Weapons and Abandoned Chemical Weapons

A. General

1. Old chemical weapons shall be destroyed as provided for in Section B.

2. Abandoned chemical weapons, including those which also meet the definition of Article II, paragraph 5 (b), shall be destroyed as provided for in Section C.

B. Regime for old Chemical Weapons

3. A State Party which has on its territory old chemical weapons as defined in Article II, paragraph 5 (*a*), shall, not later than 30 days after this Convention enters into force for it, submit to the Technical Secretariat all available relevant information, including, to the extent possible, the location, type, quantity and the present condition of these old chemical weapons.

In the case of old chemical weapons as defined in Article II, paragraph 5 (b), the State Party shall submit to the Technical Secretariat a declaration pursuant to Article III, para-

graph 1 (b) (i), including, to the extent possible, the information specified in Part IV (A), paragraphs 1 to 3, of this Annex.

4. A State Party which discovers old chemical weapons after this Convention enters into force for it shall submit to the Technical Secretariat the information specified in paragraph 3 not later than 180 days after the discovery of the old chemical weapons.

5. The Technical Secretariat shall conduct an initial inspection, and any further inspections as may be necessary, in order to verify the information submitted pursuant to paragraphs 3 and 4 and in particular to determine whether the chemical weapons meet the definition of old chemical weapons as specified in Article II, paragraph 5. Guidelines to determine the usability of chemical weapons produced between 1925 and 1946 shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (*i*).

6. A State Party shall treat old chemical weapons that have been confirmed by the Technical Secretariat as meeting the definition in Article II, paragraph 5 (*a*), as toxic waste. It shall inform the Technical Secretariat of the steps being taken to destroy or otherwise dispose of such old chemical weapons as toxic waste in accordance with its national legislation.

7. Subject to paragraphs 3 to 5, a State Party shall destroy old chemical weapons that have been confirmed by the Technical Secretariat as meeting the definition in Article II, paragraph 5 (b), in accordance with Article IV and Part IV (A) of this Annex. Upon request of a State Party, the Executive Council may, however, modify the provisions on time-limit and order of destruction of these old chemical weapons, if it determines that doing so would not pose a risk to the object and purpose of this Convention. The request shall contain specific proposals for modification of the provisions and a detailed explanation of the reasons for the proposed modification.

C. Regime for Abandoned Chemical Weapons

8. A State Party on whose territory there are abandoned chemical weapons (hereinafter referred to as the "Territorial State Party") shall, not later than 30 days after this Convention enters into force for it, submit to the Technical Secretariat all available relevant information concerning the abandoned chemical weapons. This information shall include, to the extent possible, the location, type, quantity and the present condition of the abandoned chemical weapons as well as information on the abandonment.

9. A State Party which discovers abandoned chemical weapons after this Convention enters into force for it shall, not later than 180 days after the discovery, submit to the Technical Secretariat all available relevant information concerning the discovered abandoned chemical weapons. This information shall include, to the extent possible, the location, type, quantity and the present condition of the abandoned chemical weapons as well as information on the abandonment.

10. A State Party which has abandoned chemical weapons on the territory of another State Party (hereinafter referred to as the "Abandoning State Party") shall, not later than 30 days after this Convention enters into force for it, submit to the Technical Secretariat all available relevant information concerning the abandoned chemical weapons. This information shall include, to the extent possible, the location, type, quantity as well as information on the abandonment, and the condition of the abandoned chemical weapons.

11. The Technical Secretariat shall conduct an initial inspection, and any further inspections as may be necessary, in order to verify all available relevant information submitted pursuant to paragraphs 8 to 10 and determine whether systematic verification in accordance with Part IV (A), paragraphs 41 to 43, of this Annex is required. It shall, if necessary, verify the origin of the abandoned chemical weapons and establish evidence concerning the abandonment and the identity of the Abandoning State.

12. The report of the Technical Secretariat shall be submitted to the Executive Council, the Territorial State Party, and to the Abandoning State Party or the State Party declared by the Territorial State Party or identified by the Technical Secretariat as having abandoned the chemical weapons. If one of the States Parties directly concerned is not satisfied with the report it shall have the right to settle the matter in accordance with provisions of this Convention or bring the issue to the Executive Council with a view to settling the matter expeditiously.

13. Pursuant to Article I, paragraph 3, the Territorial State Party shall have the right to request the State Party which has been established as the Abandoning State Party pursuant to paragraphs 8 to 12 to enter into consultations for the purpose of destroying the abandoned chemical weapons in cooperation with the Territorial State Party. It shall immediately inform the Technical Secretariat of this request.

14. Consultations between the Territorial State Party and the Abandoning State Party with a view to establishing a mutually agreed plan for destruction shall begin not later than 30 days after the Technical Secretariat has been informed of the request referred to in paragraph 13. The mutually agreed plan for destruction shall be transmitted to the Technical Secretariat not later than 180 days after the Technical Secretariat has been informed of the request referred to in paragraph 13. Upon the request of the Abandoning State Party and the Territorial State Party, the Executive Council may extend the time-limit for transmission of the mutually agreed plan for destruction.

15. For the purpose of destroying abandoned chemical weapons, the Abandoning State Party shall provide all necessary financial, technical, expert, facility as well as other resources. The Territorial State Party shall provide appropriate cooperation.

16. If the Abandoning State cannot be identified or is not a State Party, the Territorial State Party, in order to ensure the destruction of these abandoned chemical weapons, may request the Organization and other States Parties to provide assistance in the destruction of these abandoned chemical weapons.

17. Subject to paragraphs 8 to 16, Article IV and Part IV (A) of this Annex shall also apply to the destruction of abandoned chemical weapons. In the case of abandoned chemical weapons which also meet the definition of old chemical weapons in Article II, paragraph 5 (*b*), the Executive Council, upon the request of the Territorial State Party, individually or together with the Abandoning State Party, may modify or in exceptional cases suspend the application of provisions on destruction, if it determines that doing so would not pose a risk to the object and purpose of this Convention. In the case of abandoned chemical weapons which do not meet the definition of old chemical weapons in Article II, paragraph 5 (b), the Executive Council, upon the request of the Territorial State Party, individually or together with the Abandoning State Party, may in exceptional circumstances modify the provisions on the time-limit and the order of destruction, if it determines that doing so would not pose a risk to the object and purpose of this

Convention. Any request as referred to in this paragraph shall contain specific proposals for modification of the provisions and a detailed explanation of the reasons for the proposed modification.

18. States Parties may conclude between themselves agreements or arrangements concerning the destruction of abandoned chemical weapons. The Executive Council may, upon request of the Territorial State Party, individually or together with the Abandoning State Party, decide that selected provisions of such agreements or arrangements take precedence over provisions of this Section, if it determines that the agreement or arrangement ensures the destruction of the abandoned chemical weapons in accordance with paragraph 17.

Part V: Destruction of Chemical Weapons Production Facilities and its Verification Pursuant to Article V

A. Declaration

Declarations of chemical weapons production facilities

1. The declaration of chemical weapons production facilities by a State Party pursuant to Article III, paragraph 1 (*c*) (ii), shall contain for each facility:

(a) The name of the facility, the names of the owners, and the names of the companies or enterprises operating the facility since 1 January 1946;

(b) The precise 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;

(c) A statement whether it is a facility for the manufacture of chemicals that are defined as chemical weapons or whether it is a facility for the filling of chemical weapons, or both;

(d) The date when the construction of the facility was completed and the periods during which any modifications to the facility were made, including the installation of new or modified equipment, that significantly changed the production process characteristics of the facility;

(e) Information on the chemicals defined as chemical weapons that were manufactured at the facility; the munitions, devices, and containers that were filled at the facility; and the dates of the beginning and cessation of such manufacture or filling:

(i) For chemicals defined as chemical weapons that were manufactured at the facility, such information shall be expressed in terms of the specific types of chemicals manufactured, indicating the chemical name in accordance with the current International Union of Pure and Applied Chemistry (IUPAC) nomenclature, structural formula, and the Chemical Abstracts Service registry number, if assigned, and in terms of the amount of each chemical expressed by weight of chemical in tonnes;

(ii) For munitions, devices and containers that were filled at the facility, such information shall be expressed in terms of the specific type of chemical weapons filled and the weight of the chemical fill per unit;

(*f*) The production capacity of the chemical weapons production facility:

(i) For a facility where chemical weapons were manufactured, production capacity shall be expressed in terms of the annual quantitative potential for manufacturing a specific substance on the basis of the technological process actually used or, in the case of processes not actually used, planned to be used at the facility;

(ii) For a facility where chemical weapons were filled, production capacity shall be expressed in terms of the quantity of chemical that the facility can fill into each specific type of chemical weapon a year;

(g) For each chemical weapons production facility that has not been destroyed, a description of the facility including:

(i) A site diagram;

(ii) A process flow diagram of the facility; and

(iii) An inventory of buildings at the facility, and specialized equipment at the facility and of any spare parts for such equipment;

(h) The present status of the facility, stating:

(i) The date when chemical weapons were last produced at the facility;

(ii) Whether the facility has been destroyed, including the date and manner of its destruction; and

(iii) Whether the facility has been used or modified before entry into force of this Convention for an activity not related to the production of chemical weapons, and if so, information on what modifications have been made, the date such non-chemical weapons related activity began and the nature of such activity, indicating, if applicable, the kind of product;

(i) A specification of the measures that have been taken by the State Party for closure of, and a description of the measures that have been or will be taken by the State Party to inactivate the facility;

(j) A description of the normal pattern of activity for safety and security at the inactivated facility; and

(k) A statement as to whether the facility will be converted for the destruction of chemical weapons and, if so, the dates for such conversions.

Declarations of chemical weapons production facilities pursuant to Article III, paragraph 1 (c) (iii)

2. The declaration of chemical weapons production facilities pursuant to Article III, paragraph 1 (c) (iii), shall contain all information specified in paragraph 1 above. It is the responsibility of the State Party on whose territory the facility is or has been located to make appropriate arrangements with the other State to ensure that the declarations are made. If the State Party on whose territory the facility is or has been located is not able to fulfil this obligation, it shall state the reasons therefor.

Declarations of past transfers and receipts

3. A State Party that has transferred or received chemical weapons production equipment since 1 January 1946 shall declare these transfers and receipts pursuant to Article III, paragraph 1 (c) (iv), and in accordance with paragraph 5 below. When not all the

specified information is available for transfer and receipt of such equipment for the period between 1 January 1946 and 1 January 1970, the State Party shall declare whatever information is still available to it and provide an explanation as to why it cannot submit a full declaration.

4. Chemical weapons production equipment referred to in paragraph 3 means:

(a) Specialized equipment;

(b) Equipment for the production of equipment specifically designed for use directly in connection with chemical weapons employment; and

(c) Equipment designed or used exclusively for producing non-chemical parts for chemical munitions.

5. The declaration concerning transfer and receipt of chemical weapons production equipment shall specify:

(a) Who received/transferred the chemical weapons production equipment;

(b) The identity of such equipment;

(c) The date of transfer or receipt;

(d) Whether the equipment was destroyed, if known; and

(e) Current disposition, if known.

Submission of general plans for destruction

6. For each chemical weapons production facility, a State Party shall supply the following information:

(a) Envisaged time-frame for measures to be taken; and

(b) Methods of destruction.

7. For each chemical weapons production facility that a State Party intends to convert temporarily into a chemical weapons destruction facility, the State Party shall supply the following information:

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

(b) Envisaged time-frame for utilizing the facility as a chemical weapons destruction facility;

(c) Description of the new facility;

(d) Method of destruction of special equipment;

(e) Time-frame for destruction of the converted facility after it has been utilized to destroy chemical weapons; and

(f) Method of destruction of the converted facility.

Submission of annual plans for destruction and annual reports on destruction

8. The State Party shall submit an annual plan for destruction not less than 90 days before the beginning of the coming destruction year. The annual plan shall specify:

(a) Capacity to be destroyed;

(b) Name and location of the facilities where destruction will take place;

(c) List of buildings and equipment that will be destroyed at each facility; and

(d) Planned method(s) of destruction.

9. A State Party shall submit an annual report on destruction not later than 90 days after the end of the previous destruction year. The annual report shall specify:

(a) Capacity destroyed;

(b) Name and location of each facility where destruction took place;

(c) List of buildings and equipment that were destroyed at each facility;

(d) Methods of destruction.

10. For a chemical weapons production facility declared pursuant to Article III, paragraph 1 (c) (iii), it is the responsibility of the State Party on whose territory the facility is or has been located to make appropriate arrangements to ensure that the declarations specified in paragraphs 6 to 9 above are made. If the State Party on whose territory the facility is or has been located is not able to fulfil this obligation, it shall state the reasons therefor.

B. Destruction

General principles for destruction of chemical weapons production facilities

11. Each State Party shall decide on methods to be applied for the destruction of chemical weapons production facilities, according to the principles laid down in Article V and in this Part.

Principles and methods for closure of a chemical weapons production facility

12. The purpose of the closure of a chemical weapons production facility is to render it inactive.

13. Agreed measures for closure shall be taken by a State Party with due regard to the specific characteristics of each facility. Such measures shall include, inter alia:

(a) Prohibition of occupation of the specialized buildings and standard buildings of the facility except for agreed activities;

(b) Disconnection of equipment directly related to the production of chemical weapons, including, inter alia, process control equipment and utilities;

(c) Decommissioning of protective installations and equipment used exclusively for the safety of operations of the chemical weapons production facility;

(d) Installation of blind flanges and other devices to prevent the addition of chemicals to, or the removal of chemicals from, any specialized process equipment for synthesis, separation or purification of chemicals defined as a chemical weapon, any storage tank, or any machine for filling chemical weapons, the heating, cooling, or supply of electrical or other forms of power to such equipment, storage tanks, or machines; and

(e) Interruption of rail, road and other access routes for heavy transport to the chemical weapons production facility except those required for agreed activities.

14. While the chemical weapons production facility remains closed, a State Party may continue safety and physical security activities at the facility.

Technical maintenance of chemical weapons production facilities prior to their destruction

15. A State Party may carry out standard maintenance activities at chemical weapons production facilities only for safety reasons, including visual inspection, preventive maintenance, and routine repairs.

16. All planned maintenance activities shall be specified in the general and detailed plans for destruction. Maintenance activities shall not include:

(a) Replacement of any process equipment;

(b) Modification of the characteristics of the chemical process equipment;

(c) Production of chemicals of any type.

17. All maintenance activities shall be subject to monitoring by the Technical Secretariat.

Principles and methods for temporary conversion of chemical weapons production facilities into chemical weapons destruction facilities

18. Measures pertaining to the temporary conversion of chemical weapons production facilities into chemical weapons destruction facilities shall ensure that the regime for the temporarily converted facilities is at least as stringent as the regime for chemical weapons production facilities that have not been converted.

19. Chemical weapons production facilities converted into chemical weapons destruction facilities before entry into force of this Convention shall be declared under the category of chemical weapons production facilities.

They shall be subject to an initial visit by inspectors, who shall confirm the correctness of the information about these facilities. Verification that the conversion of these facilities was performed in such a manner as to render them inoperable as chemical weapons production facilities shall also be required, and shall fall within the framework of measures provided for the facilities that are to be rendered inoperable not later than 90 days after entry into force of this Convention.

20. A State Party that intends to carry out a conversion of chemical weapons production facilities shall submit to the Technical Secretariat, not later than 30 days after this Convention enters into force for it, or not later than 30 days after a decision has been taken for temporary conversion, a general facility conversion plan, and subsequently shall submit annual plans.

21. Should a State Party have the need to convert to a chemical weapons destruction facility an additional chemical weapons production facility that had been closed after this Convention entered into force for it, it shall inform the Technical Secretariat thereof not less than 150 days before conversion. The Technical Secretariat, in conjunction with the State Party, shall make sure that the necessary measures are taken to render that facility, after its conversion, inoperable as a chemical weapons production facility.

22. A facility converted for the destruction of chemical weapons shall not be more fit for resuming chemical weapons production than a chemical weapons production facility which has been closed and is under maintenance. Its reactivation shall require no less time than that required for a chemical weapons production facility that has been closed and is under maintenance.

23. Converted chemical weapons production facilities shall be destroyed not later than 10 years after entry into force of this Convention.

24. Any measures for the conversion of any given chemical weapons production facility shall be facility-specific and shall depend upon its individual characteristics.

25. The set of measures carried out for the purpose of converting a chemical weapons production facility into a chemical weapons destruction facility shall not be less than that which is provided for the disabling of other chemical weapons production facilities to be carried out not later than 90 days after this Convention enters into force for the State Party.

Principles and methods related to destruction of a chemical weapons production facility

26. A State Party shall destroy equipment and buildings covered by the definition of a chemical weapons production facility as follows:

(a) All specialized equipment and standard equipment shall be physically destroyed;

(b) All specialized buildings and standard buildings shall be physically destroyed.

27. A State Party shall destroy facilities for producing unfilled chemical munitions and equipment for chemical weapons employment as follows:

(a) Facilities used exclusively for production of non-chemical parts for chemical munitions or equipment specifically designed for use directly in connection with chemical weapons employment, shall be declared and destroyed. The destruction process and its verification shall be conducted according to the provisions of Article V and this Part of this Annex that govern destruction of chemical weapons production facilities;

(b) All equipment designed or used exclusively for producing non-chemical parts for chemical munitions shall be physically destroyed. Such equipment, which includes specially designed moulds and metal-forming dies, may be brought to a special location for destruction;

(*c*) All buildings and standard equipment used for such production activities shall be destroyed or converted for purposes not prohibited under this Convention, with confirmation, as necessary, through consultations and inspections as provided for under Article IX;

(d) Activities for purposes not prohibited under this Convention may continue while destruction or conversion proceeds.

Order of destruction

28. The order of destruction of chemical weapons production facilities is based on the obligations specified in Article I and the other Articles of this Convention, including obligations regarding systematic on-site verification. It takes into account interests of States Parties for undiminished security during the destruction period; confidence- building in the early part of the destruction stage; gradual acquisition of experience in the

course of destroying chemical weapons production facilities; and applicability irrespective of the actual characteristics of the facilities and the methods chosen for their destruction. The order of destruction is based on the principle of levelling out.

29. A State Party shall, for each destruction period, determine which chemical weapons production facilities are to be destroyed and carry out the destruction in such a way that not more than what is specified in paragraphs 30 and 31 remains at the end of each destruction period. A State Party is not precluded from destroying its facilities at a faster pace.

30. The following provisions shall apply to chemical weapons production facilities that produce Schedule 1 chemicals:

(a) A State Party shall start the destruction of such facilities not later than one year after this Convention enters into force for it, and shall complete it not later than 10 years after entry into force of this Convention. For a State which is a Party at the entry into force of this Convention, this overall period shall be divided into three separate destruction periods, namely, years 2-5, years 6-8, and years 9-10. For States which become a Party after entry into force of this Convention, the destruction periods shall be adapted, taking into account paragraphs 28 and 29;

(b) Production capacity shall be used as the comparison factor for such facilities. It shall be expressed in agent tonnes, taking into account the rules specified for binary chemical weapons;

(c) Appropriate agreed levels of production capacity shall be established for the end of the eighth year after entry into force of this Convention. Production capacity that exceeds the relevant level shall be destroyed in equal increments during the first two destruction periods;

(d) A requirement to destroy a given amount of capacity shall entail a requirement to destroy any other chemical weapons production facility that supplied the Schedule 1 facility or filled the Schedule 1 chemical produced there into munitions or devices;

(e) Chemical weapons production facilities that have been converted temporarily for destruction of chemical weapons shall continue to be subject to the obligation to destroy capacity according to the provisions of this paragraph.

31. A State Party shall start the destruction of chemical weapons production facilities not covered in paragraph 30 not later than one year after this Convention enters into force for it, and complete it not later than five years after entry into force of this Convention.

Detailed plans for destruction

32. Not less than 180 days before the destruction of a chemical weapons production facility starts, a State Party shall provide to the Technical Secretariat the detailed plans for destruction of the facility, including proposed measures for verification of destruction referred to in paragraph 33 (f), with respect to, inter alia:

(a) Timing of the presence of the inspectors at the facility to be destroyed; and

(b) Procedures for verification of measures to be applied to each item on the declared inventory.

33. The detailed plans for destruction of each chemical weapons production facility shall contain:

(a) Detailed time schedule of the destruction process;

(b) Layout of the facility;

(c) Process flow diagram;

(d) Detailed inventory of equipment, buildings and other items to be destroyed;

(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; and

(h) Working and living conditions to be provided for inspectors.

34. If a State Party intends to convert temporarily a chemical weapons production facility into a chemical weapons destruction facility, it shall notify the Technical Secretariat not less than 150 days before undertaking any conversion activities. The notification shall:

(a) Specify the name, address, and location of the facility;

(b) Provide a site diagram indicating all structures and areas that will be involved in the destruction of chemical weapons and also identify all structures of the chemical weapons production facility that are to be temporarily converted;

(c) Specify the types of chemical weapons, and the type and quantity of chemical fill to be destroyed;

(d) Specify the destruction method;

(e) Provide a process flow diagram, indicating which portions of the production process and specialized equipment will be converted for the destruction of chemical weapons;

(f) Specify the seals and inspection equipment potentially affected by the conversion, if applicable; and

(g) Provide a schedule identifying: The time allocated to design, temporary conversion of the facility, installation of equipment, equipment check-out, destruction operations, and closure.

35. In relation to the destruction of a facility that was temporarily converted for destruction of chemical weapons, information shall be provided in accordance with paragraphs 32 and 33.

Review of detailed plans

36. On the basis of the detailed plan for destruction 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 destruction 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 for appropriate action with a view to facilitating the full implementation of this Convention.

37. To ensure that the provisions of Article V and this Part are fulfilled, the combined plans for destruction and verification shall be agreed upon between the Executive Council and the State Party. This agreement should be completed, not less than 60 days before the planned initiation of destruction.

38. 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 member of the Executive Council, the plan shall be put into action.

39. 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 shall be referred to the Conference. The resolution of any differences over methods of destruction shall not delay the execution of other parts of the destruction plan that are acceptable.

40. 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 destruction shall proceed through continuous monitoring with on-site instruments and physical presence of inspectors.

41. Destruction and verification shall proceed according to the agreed plan. The verification shall not unduly interfere with the destruction process and shall be conducted through the presence of inspectors on-site to witness the destruction.

42. If required verification or destruction actions are not taken as planned, all States Parties shall be so informed.

C. Verification

Verification of declarations of chemical weapons production facilities through on-site inspection

43. The Technical Secretariat shall conduct an initial inspection of each chemical weapons production facility in the period between 90 and 120 days after this Convention enters into force for the State Party.

44. The purposes of the initial inspection shall be:

(a) To confirm that the production of chemical weapons has ceased and that the facility has been inactivated in accordance with this Convention;

(b) To permit the Technical Secretariat to familiarize itself with the measures that have been taken to cease production of chemical weapons at the facility;

(c) To permit the inspectors to install temporary seals;

(d) To permit the inspectors to confirm the inventory of buildings and specialized equipment;

(e) To obtain information necessary for planning inspection activities at the facility, including use of tamper-indicating seals and other agreed equipment, which shall be installed pursuant to the detailed facility agreement for the facility; and

(f) To conduct preliminary discussions regarding a detailed agreement on inspection procedures at the facility.

45. Inspectors 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.

46. 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 inspected State Party. Inspectors may return to maintain and verify the integrity of the devices.

47. If, on the basis of the initial inspection, the Director-General believes that additional measures are necessary to inactivate the facility in accordance with this Convention, the Director-General may request, not later than 135 days after this Convention enters into force for a State Party, that such measures be implemented by the inspected State Party not later than 180 days after this Convention enters into force for it. At its discretion, the inspected State Party may satisfy the request. If it does not satisfy the request, the inspected State Party and the Director-General shall consult to resolve the matter.

Systematic verification of chemical weapons production facilities and cessation of their activities

48. The purpose of the systematic verification of a chemical weapons production facility shall be to ensure that any resumption of production of chemical weapons or removal of declared items will be detected at this facility.

49. The detailed facility agreement for each chemical weapons production facility shall specify:

(a) Detailed on-site inspection procedures, which may include:

(i) Visual examinations;

(ii) Checking and servicing of seals and other agreed devices; and

(iii) Obtaining and analysing samples;

(*b*) Procedures for using tamper-indicating seals and other agreed equipment to prevent the undetected reactivation of the facility, which shall specify:

(i) The type, placement, and arrangements for installation; and

(ii) The maintenance of such seals and equipment; and

(*c*) Other agreed measures.

50. The seals or other approved equipment provided for in a detailed agreement on inspection measures for that facility shall be placed not later than 240 days after this Convention enters into force for a State Party. Inspectors shall be permitted to visit each chemical weapons production facility for the installation of such seals or equipment.

51. During each calendar year, the Technical Secretariat shall be permitted to conduct up to four inspections of each chemical weapons production facility.

52. The Director-General shall notify the inspected State Party of his decision to inspect or visit a chemical weapons production facility 48 hours before the planned arrival of the inspection team at the facility for systematic inspections or visits. In the case of in-

spections or visits to resolve urgent problems, this period may be shortened. The Director-General shall specify the purpose of the inspection or visit.

53. Inspectors shall, in accordance with the facility agreements, have unimpeded access to all parts of the chemical weapons production facilities. The items on the declared inventory to be inspected shall be chosen by the inspectors.

54. The guidelines for determining the frequency of systematic on-site inspections shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (*i*). The particular production facility to be inspected shall be chosen by the Technical Secretariat in such a way as to preclude the prediction of precisely when the facility is to be inspected.

Verification of destruction of chemical weapons production facilities

55. The purpose of systematic verification of the destruction of chemical weapons production facilities shall be to confirm that the facility is destroyed in accordance with the obligations under this Convention and that each item on the declared inventory is destroyed in accordance with the agreed detailed plan for destruction.

56. When all items on the declared inventory have been destroyed, the Technical Secretariat shall confirm the declaration of the State Party to that effect. After this confirmation, the Technical Secretariat shall terminate the systematic verification of the chemical weapons production facility and shall promptly remove all devices and monitoring instruments installed by the inspectors.

57. After this confirmation, the State Party shall make the declaration that the facility has been destroyed.

Verification of temporary conversion of a chemical weapons production facility into a chemical weapons destruction facility

58. Not later than 90 days after receiving the initial notification of the intent to convert temporarily a production facility, the inspectors shall have the right to visit the facility to familiarize themselves with the proposed temporary conversion and to study possible inspection measures that will be required during the conversion.

59. Not later than 60 days after such a visit, the Technical Secretariat and the inspected State Party shall conclude a transition agreement containing additional inspection measures for the temporary conversion period. The transition agreement shall specify inspection procedures, including the use of seals, monitoring equipment, and inspections, that will provide confidence that no chemical weapons production takes place during the conversion process. This agreement shall remain in force from the beginning of the temporary conversion activity until the facility begins operation as a chemical weapons destruction facility.

60. The inspected State Party shall not remove or convert any portion of the facility, or remove or modify any seal or other agreed inspection equipment that may have been installed pursuant to this Convention until the transition agreement has been concluded.

61. Once the facility begins operation as a chemical weapons destruction facility, it shall be subject to the provisions of Part IV (A) of this Annex applicable to chemical weapons destruction facilities. Arrangements for the pre-operation period shall be governed by the transition agreement.

62. During destruction operations the inspectors shall have access to all portions of the temporarily converted chemical weapons production facilities, including those that are not directly involved with the destruction of chemical weapons.

63. Before the commencement of work at the facility to convert it temporarily for chemical weapons destruction purposes and after the facility has ceased to function as a facility for chemical weapons destruction, the facility shall be subject to the provisions of this Part applicable to chemical weapons production facilities.

D. Conversion of Chemical Weapons Production Facilities to purposes not prohibited under this Convention

Procedures for requesting conversion

64. A request to use a chemical weapons production facility for purposes not prohibited under this Convention may be made for any facility that a State Party is already using for such purposes before this Convention enters into force for it, or that it plans to use for such purposes.

65. For a chemical weapons production facility that is being used for purposes not prohibited under this Convention when this Convention enters into force for the State Party, the request shall be submitted to the Director-General not later than 30 days after this Convention enters into force for the State Party. The request shall contain, in addition to data submitted in accordance with paragraph 1 (h) (iii), the following information:

(a) A detailed justification for the request;

(b) A general facility conversion plan that specifies:

(i) The nature of the activity to be conducted at the facility;

(ii) If the planned activity involves production, processing, or consumption of chemicals: the name of each of the chemicals, the flow diagram of the facility, and the quantities planned to be produced, processed, or consumed annually;

(iii) Which buildings or structures are proposed to be used and what modifications are proposed, if any;

(iv) Which buildings or structures have been destroyed or are proposed to be destroyed and the plans for destruction;

(v) What equipment is to be used in the facility;

(vi) What equipment has been removed and destroyed and what equipment is proposed to be removed and destroyed and the plans for its destruction;

(vii) The proposed schedule for conversion, if applicable; and

(viii) The nature of the activity of each other facility operating at the site; and

(*c*) A detailed explanation of how measures set forth in subparagraph (b), as well as any other measures proposed by the State Party, will ensure the prevention of standby chemical weapons production capability at the facility.

66. For a chemical weapons production facility that is not being used for purposes not prohibited under this Convention when this Convention enters into force for the State Party, the request shall be submitted to the Director-General not later than 30 days after

the decision to convert, but in no case later than four years after this Convention enters into force for the State Party. The request shall contain the following information:

(a) A detailed justification for the request, including its economic needs;

(b) A general facility conversion plan that specifies:

(i) The nature of the activity planned to be conducted at the facility;

(ii) If the planned activity involves production, processing, or consumption of chemicals: the name of each of the chemicals, the flow diagram of the facility, and the quantities planned to be produced, processed, or consumed annually;

(iii) Which buildings or structures are proposed to be retained and what modifications are proposed, if any;

(iv) Which buildings or structures have been destroyed or are proposed to be destroyed and the plans for destruction;

(v) What equipment is proposed for use in the facility;

(vi) What equipment is proposed to be removed and destroyed and the plans for its destruction;

(vii) The proposed schedule for conversion; and

(viii) The nature of the activity of each other facility operating at the site; and

(*c*) A detailed explanation of how the measures set forth in subparagraph (*b*), as well as any other measures proposed by the State Party, will ensure the prevention of standby chemical weapons production capability at the facility.

67. The State Party may propose in its request any other measures it deems appropriate to build confidence.

Actions pending a decision

68. Pending a decision of the Conference, a State Party may continue to use for purposes not prohibited under this Convention a facility that was being used for such purposes before this Convention enters into force for it, but only if the State Party certifies in its request that no specialized equipment and no specialized buildings are being used and that the specialized equipment and specialized buildings have been rendered inactive using the methods specified in paragraph 13.

69. If the facility, for which the request was made, was not being used for purposes not prohibited under this Convention before this Convention enters into force for the State Party, or if the certification required in paragraph 68 is not made, the State Party shall cease immediately all activity pursuant to Article V, paragraph 4. The State Party shall close the facility in accordance with paragraph 13 not later than 90 days after this Convention enters into force for it.

Conditions for conversion

70. As a condition for conversion of a chemical weapons production facility for purposes not prohibited under this Convention, all specialized equipment at the facility must be destroyed and all special features of buildings and structures that distinguish them from buildings and structures normally used for purposes not prohibited under this Convention and not involving Schedule 1 chemicals must be eliminated.

71. A converted facility shall not be used:

(a) For any activity involving production, processing, or consumption of a Schedule 1 chemical or a Schedule 2 chemical; or

(b) For the production of any highly toxic chemical, including any highly toxic organophosphorus chemical, or for any other activity that would require special equipment for handling highly toxic or highly corrosive chemicals, unless the Executive Council decides that such production or activity would pose no risk to the object and purpose of this Convention, taking into account criteria for toxicity, corrosiveness and, if applicable, other technical factors, to be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (*i*).

72. Conversion of a chemical weapons production facility shall be completed not later than six years after entry into force of this Convention.

Decisions by the Executive Council and the Conference

73. Not later than 90 days after receipt of the request by the Director-General, an initial inspection of the facility shall be conducted by the Technical Secretariat. The purpose of this inspection shall be to determine the accuracy of the information provided in the request, to obtain information on the technical characteristics of the proposed converted facility, and to assess the conditions under which use for purposes not prohibited under this Convention may be permitted. The Director-General shall promptly submit a report to the Executive Council, the Conference, and all States Parties containing his recommendations on the measures necessary to convert the facility to purposes not prohibited under this Convention and to provide assurance that the converted facility will be used only for purposes not prohibited under this Convention.

74. If the facility has been used for purposes not prohibited under this Convention before this Convention enters into force for the State Party, and is continuing to be in operation, but the measures required to be certified under paragraph 68 have not been taken, the Director-General shall immediately inform the Executive Council, which may require implementation of measures it deems appropriate, *inter alia*, shut-down of the facility and removal of specialized equipment and modification of buildings or structures. The Executive Council shall stipulate the deadline for implementation of these measures and shall suspend consideration of the request pending their satisfactory completion. The facility shall be inspected promptly after the expiration of the deadline to determine whether the measures have been implemented. If not, the State Party shall be required to shut down completely all facility operations.

75. As soon as possible after receiving the report of the Director-General, the Conference, upon recommendation of the Executive Council, shall decide, taking into account the report and any views expressed by States Parties, whether to approve the request, and shall establish the conditions upon which approval is contingent. If any State Party objects to approval of the request and the associated conditions, consultations shall be undertaken among interested States Parties for up to 90 days to seek a mutually acceptable solution. A decision on the request and associated conditions, along with any proposed modifications thereto, shall be taken, as a matter of substance, as soon as possible after the end of the consultation period.

76. If the request is approved, a facility agreement shall be completed not later than 90 days after such a decision is taken. The facility agreement shall contain the conditions under which the conversion and use of the facility is permitted, including measures for verification. Conversion shall not begin before the facility agreement is concluded.

Detailed plans for conversion

77. Not less than 180 days before conversion of a chemical weapons production facility is planned to begin, the State Party shall provide the Technical Secretariat with the detailed plans for conversion of the facility, including proposed measures for verification of conversion, with respect to, inter alia:

(a) Timing of the presence of the inspectors at the facility to be converted; and

(b) Procedures for verification of measures to be applied to each item on the declared inventory.

78. The detailed plan for conversion of each chemical weapons production facility shall contain:

(a) Detailed time schedule of the conversion process;

(b) Layout of the facility before and after conversion;

(c) Process flow diagram of the facility before, and as appropriate, after the conversion;

(d) Detailed inventory of equipment, buildings and structures and other items to be destroyed and of the buildings and structures to be modified;

(e) Measures to be applied to each item on the inventory, if any;

(f) Proposed measures for verification;

(g) Security/safety measures to be observed during the conversion of the facility; and

(h) Working and living conditions to be provided for inspectors.

Review of detailed plans

79. On the basis of the detailed plan for conversion 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 conversion of the facility, consulting closely with the State Party. Any differences between the Technical Secretariat and the State Party concerning appropriate measures shall be resolved through consultations. Any unresolved matters shall be forwarded to the Executive Council for appropriate action with a view to facilitate the full implementation of this Convention.

80. To ensure that the provisions of Article V and this Part are fulfilled, the combined plans for conversion and verification shall be agreed upon between the Executive Council and the State Party. This agreement shall be completed not less than 60 days before conversion is planned to begin.

81. Each member of the Executive Council may consult with the Technical Secretariat on any issue regarding the adequacy of the combined plan for conversion and verification. If there are no objections by any member of the Executive Council, the plan shall be put into action.

82. 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 Conference. The resolution of any differences over methods of conversion should not delay the execution of other parts of the conversion plan that are acceptable.

83. 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 conversion shall proceed through continuous monitoring with on-site instruments and physical presence of inspectors.

84. Conversion and verification shall proceed according to the agreed plan. The verification shall not unduly interfere with the conversion process and shall be conducted through the presence of inspectors to confirm the conversion.

85. For the 10 years after the Director-General certifies that conversion is complete, the State Party shall provide to inspectors unimpeded access to the facility at any time. The inspectors shall have the right to observe all areas, all activities, and all items of equipment at the facility. The inspectors shall have the right to verify that the activities at the facility are consistent with any conditions established under this Section, by the Executive Council and the Conference. The inspectors shall also have the right, in accordance with provisions of Part II, Section E, of this Annex to receive samples from any area of the facility and to analyse them to verify the absence of Schedule 1 chemicals, their stable by-products and decomposition products and of Schedule 2 chemicals and to verify that the activities at the facility are consistent with any other conditions on chemical activities established under this Section, by the Executive Council and the Conference. The inspectors shall also have the right to managed access, in accordance with Part X, Section C, of this Annex, to the plant site at which the facility is located. During the 10-year period, the State Party shall report annually on the activities at the converted facility. Upon completion of the 10-year period, the Executive Council, taking into account recommendations of the Technical Secretariat, shall decide on the nature of continued verification measures.

86. Costs of verification of the converted facility shall be allocated in accordance with Article V, paragraph 19.

Part VI: Activities not prohibited under this Convention in Accordance with Article VI. Regime for schedule 1 Chemicals and Facilities related to such Chemicals

A. General Provisions

1. A State Party shall not produce, acquire, retain or use Schedule 1 chemicals outside the territories of States Parties and shall not transfer such chemicals outside its territory except to another State Party.

2. A State Party shall not produce, acquire, retain, transfer or use Schedule 1 chemicals unless:

(a) The chemicals are applied to research, medical, pharmaceutical or protective purposes; and

(b) The types and quantities of chemicals are strictly limited to those which can be justified for such purposes; and

(c) The aggregate amount of such chemicals at any given time for such purposes is equal to or less than 1 tonne; and

(d) The aggregate amount for such purposes acquired by a State Party in any year through production, withdrawal from chemical weapons stocks and transfer is equal to or less than 1 tonne.

B. Transfers

3. A State Party may transfer Schedule 1 chemicals outside its territory only to another State Party and only for research, medical, pharmaceutical or protective purposes in accordance with paragraph 2.

4. Chemicals transferred shall not be retransferred to a third State.

5. Not less than 30 days before any transfer to another State Party both States Parties shall notify the Technical Secretariat of the transfer.

6. Each State Party shall make a detailed annual declaration regarding transfers during the previous year. The declaration shall be submitted not later than 90 days after the end of that year and shall for each Schedule 1 chemical that has been transferred include the following information:

(a) The chemical name, structural formula and Chemical Abstracts Service registry number, if assigned;

(b) The quantity acquired from other States or transferred to other States Parties. For each transfer the quantity, recipient and purpose shall be included.

C. Production

General principles for production

7. Each State Party, during production under paragraphs 8 to 12, shall assign the highest priority to ensuring the safety of people and to protecting the environment. Each State Party shall conduct such production in accordance with its national standards for safety and emissions.

Single small-scale facility

8. Each State Party that produces Schedule 1 chemicals for research, medical, pharmaceutical or protective purposes shall carry out the production at a single small-scale facility approved by the State Party, except as set forth in paragraphs 10, 11 and 12.

9. The production at a single small-scale facility shall be carried out in reaction vessels in production lines not configurated for continuous operation. The volume of such a reaction vessel shall not exceed 100 litres, and the total volume of all reaction vessels with a volume exceeding 5 litres shall not be more than 500 litres.

Other facilities

10. Production of Schedule 1 chemicals in aggregate quantities not exceeding 10 kg per year may be carried out for protective purposes at one facility outside a single small-scale facility. This facility shall be approved by the State Party.

11. Production of Schedule 1 chemicals in quantities of more than 100 g per year may be carried out for research, medical or pharmaceutical purposes outside a single small-scale facility in aggregate quantities not exceeding 10 kg per year per facility. These facilities shall be approved by the State Party.

12. Synthesis of Schedule 1 chemicals for research, medical or pharmaceutical purposes, but not for protective purposes, may be carried out at laboratories in aggregate quantities less than 100 g per year per facility. These facilities shall not be subject to any obligation relating to declaration and verification as specified in Sections D and E.

D. Declarations

Single small-scale facility

13. Each State Party that plans to operate a single small-scale facility shall provide the Technical Secretariat with the precise location and a detailed technical description of the facility, including an inventory of equipment and detailed diagrams. For existing facilities, this initial declaration shall be provided not later than 30 days after this Convention enters into force for the State Party. Initial declarations on new facilities shall be provided not less than 180 days before operations are to begin.

14. Each State Party shall give advance notification to the Technical Secretariat of planned changes related to the initial declaration. The notification shall be submitted not less than 180 days before the changes are to take place.

15. A State Party producing Schedule 1 chemicals at a single small-scale facility shall make a detailed annual declaration regarding the activities of the facility for the previous year. The declaration shall be submitted not later than 90 days after the end of that year and shall include:

(a) Identification of the facility;

(*b*) For each Schedule 1 chemical produced, acquired, consumed or stored at the facility, the following information:

(i) The chemical name, structural formula and Chemical Abstracts Service registry number, if assigned;

(ii) The methods employed and quantity produced;

(iii) The name and quantity of precursors listed in Schedules 1, 2, or 3 used for production of Schedule 1 chemicals;

(iv) The quantity consumed at the facility and the purpose(s) of the consumption;

(v) The quantity received from or shipped to other facilities in the State Party. For each shipment the quantity, recipient and purpose should be included;

(vi) The maximum quantity stored at any time during the year; and

(vii) The quantity stored at the end of the year; and

(*c*) Information on any changes at the facility during the year compared to previously submitted detailed technical descriptions of the facility including inventories of equipment and detailed diagrams.

16. Each State Party producing Schedule 1 chemicals at a single small-scale facility shall make a detailed annual declaration regarding the projected activities and the anticipated production at the facility for the coming year. The declaration shall be submitted not less than 90 days before the beginning of that year and shall include:

(a) Identification of the facility;

(b) For each Schedule 1 chemical anticipated to be produced, consumed or stored at the facility, the following information:

(i) The chemical name, structural formula and Chemical Abstracts Service registry number, if assigned;

(ii) The quantity anticipated to be produced and the purpose of the production; and

(*c*) Information on any anticipated changes at the facility during the year compared to previously submitted detailed technical descriptions of the facility including inventories of equipment and detailed diagrams.

Other facilities referred to in paragraphs 10 and 11

17. For each facility, a State Party shall provide the Technical Secretariat with the name, location and a detailed technical description of the facility or its relevant part(s) as requested by the Technical Secretariat. The facility producing Schedule 1 chemicals for protective purposes shall be specifically identified. For existing facilities, this initial declaration shall be provided not later than 30 days after this Convention enters into force for the State Party. Initial declarations on new facilities shall be provided not less than 180 days before operations are to begin.

18. Each State Party shall give advance notification to the Technical Secretariat of planned changes related to the initial declaration. The notification shall be submitted not less than 180 days before the changes are to take place.

19. Each State Party shall, for each facility, make a detailed annual declaration regarding the activities of the facility for the previous year. The declaration shall be submitted not later than 90 days after the end of that year and shall include:

(a) Identification of the facility;

(b) For each Schedule 1 chemical the following information:

(i) The chemical name, structural formula and Chemical Abstracts Service registry number, if assigned;

(ii) The quantity produced and, in case of production for protective purposes, methods employed;

(iii) The name and quantity of precursors listed in Schedules 1, 2, or 3, used for production of Schedule 1 chemicals;

(iv) The quantity consumed at the facility and the purpose of the consumption;

(v) The quantity transferred to other facilities within the State Party. For each transfer the quantity, recipient and purpose should be included;

(vi) The maximum quantity stored at any time during the year; and

(vii) The quantity stored at the end of the year; and

(*c*) Information on any changes at the facility or its relevant parts during the year compared to previously submitted detailed technical description of the facility.

20. Each State Party shall, for each facility, make a detailed annual declaration regarding the projected activities and the anticipated production at the facility for the coming year. The declaration shall be submitted not less than 90 days before the beginning of that year and shall include:

(a) Identification of the facility;

(b) For each Schedule 1 chemical the following information:

(i) The chemical name, structural formula and Chemical Abstracts Service registry number, if assigned; and

(ii) The quantity anticipated to be produced, the time periods when the production is anticipated to take place and the purposes of the production; and

(c) Information on any anticipated changes at the facility or its relevant parts, during the year compared to previously submitted detailed technical descriptions of the facility.

E. Verification

Single small-scale facility

21. The aim of verification activities at the single small-scale 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 1 tonne.

22. The facility shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments.

23. The number, intensity, duration, timing and mode of inspections for a particular facility shall be based on the risk to the object and purpose of this Convention posed by the relevant chemicals, the characteristics of the facility and the nature of the activities carried out there. Appropriate guidelines shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

24. The purpose of the initial inspection shall be to verify information provided concerning the facility, including verification of the limits on reaction vessels set forth in paragraph 9.

25. Not later than 180 days after this Convention enters into force for a State Party, it shall conclude a facility agreement, based on a model agreement, with the Organization, covering detailed inspection procedures for the facility.

26. Each State Party planning to establish a single small-scale facility after this Convention enters into force for it shall conclude a facility agreement, based on a model agreement, with the Organization, covering detailed inspection procedures for the facility before it begins operation or is used.

27. A model for agreements shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (*i*).

Other facilities referred to in paragraphs 10 and 11

28. The aim of verification activities at any facility referred to in paragraphs 10 and 11 shall be to verify that:

(*a*) The facility is not used to produce any Schedule 1 chemical, except for the declared chemicals;

(b) The quantities of Schedule 1 chemicals produced, processed or consumed are correctly declared and consistent with needs for the declared purpose; and

(c) The Schedule 1 chemical is not diverted or used for other purposes.

29. The facility shall be subject to systematic verification through on-site inspection and monitoring with on-site instruments.

30. The number, intensity, duration, timing and mode of inspections for a particular facility shall be based on the risk to the object and purpose of this Convention posed by the quantities of chemicals produced, the characteristics of the facility and the nature of the activities carried out there. Appropriate guidelines shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

31. Not later than 180 days after this Convention enters into force for a State Party, it shall conclude facility agreements with the Organization, based on a model agreement covering detailed inspection procedures for each facility.

32. Each State Party planning to establish such a facility after entry into force of this Convention shall conclude a facility agreement with the Organization before the facility begins operation or is used.

Part VII: Activities not prohibited under this Convention in Accordance with Article VI: Regime for Schedule 2 Chemicals and Facilities related to such Chemicals

A. Declarations

Declarations of aggregate national data

1. The initial and annual declarations to be provided by each State Party pursuant to Article VI, paragraphs 7 and 8, shall include aggregate national data for the previous calendar year on the quantities produced, processed, consumed, imported and exported of each Schedule 2 chemical, as well as a quantitative specification of import and export for each country involved.

2. Each State Party shall submit:

(a) Initial declarations pursuant to paragraph 1 not later than 30 days after this Convention enters into force for it; and, starting in the following calendar year,

(b) Annual declarations not later than 90 days after the end of the previous calendar year.

Declarations of plant sites producing, processing or consuming Schedule 2 chemicals

3. Initial and annual declarations are required for all plant sites that comprise one or more plant(s) which produced, processed or consumed during any of the previous three

calendar years or is anticipated to produce, process or consume in the next calendar year more than:

(a) 1 kg of a chemical designated "*" in Schedule 2, part A;

(b) 100 kg of any other chemical listed in Schedule 2, part A; or

(c) 1 tonne of a chemical listed in Schedule 2, part B.

4. Each State Party shall submit:

(a) Initial declarations pursuant to paragraph 3 not later than 30 days after this Convention enters into force for it; and, starting in the following calendar year;

(b) Annual declarations on past activities not later than 90 days after the end of the previous calendar year;

(c) Annual declarations on anticipated activities not later than 60 days before the beginning of the following calendar year. Any such activity additionally planned after the annual declaration has been submitted shall be declared not later than five days before this activity begins.

5. Declarations pursuant to paragraph 3 are generally not required for mixtures containing a low concentration of a Schedule 2 chemical. They are only required, in accordance with guidelines, in cases where the ease of recovery from the mixture of the Schedule 2 chemical and its total weight are deemed to pose a risk to the object and purpose of this Convention. These guidelines shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

6. Declarations of a plant site pursuant to paragraph 3 shall include:

(a) The name of the plant site and the name of the owner, company, or enterprise operating it;

(b) Its precise location including the address; and

(c) The number of plants within the plant site which are declared pursuant to Part VIII of this Annex.

7. Declarations of a plant site pursuant to paragraph 3 shall also include, for each plant which is located within the plant site and which falls under the specifications set forth in paragraph 3, the following information:

(a) The name of the plant and the name of the owner, company, or enterprise operating it;

(b) Its precise location within the plant site including the specific building or structure number, if any;

(c) Its main activities;

(d) Whether the plant:

(i) Produces, processes, or consumes the declared Schedule 2 chemical(s);

(ii) Is dedicated to such activities or multi-purpose; and

(iii) Performs other activities with regard to the declared Schedule 2 chemical(s), including a specification of that other activity (e.g. storage); and

(*e*) The production capacity of the plant for each declared Schedule 2 chemical.

8. Declarations of a plant site pursuant to paragraph 3 shall also include the following information on each Schedule 2 chemical above the declaration threshold:

(a) The chemical name, common or trade name used by the facility, structural formula, and Chemical Abstracts Service registry number, if assigned;

(b) In the case of the initial declaration: the total amount produced, processed, consumed, imported and exported by the plant site in each of the three previous calendar years;

(c) In the case of the annual declaration on past activities: the total amount produced, processed, consumed, imported and exported by the plant site in the previous calendar year;

(d) In the case of the annual declaration on anticipated activities: the total amount anticipated to be produced, processed or consumed by the plant site in the following calendar year, including the anticipated time periods for production, processing or consumption; and

(e) The purposes for which the chemical was or will be produced, processed or consumed:

(i) Processing and consumption on site with a specification of the product types;

(ii) Sale or transfer within the territory or to any other place under the jurisdiction or control of the State Party, with a specification whether to other industry, trader or other destination and, if possible, of final product types;

(iii) Direct export, with a specification of the States involved; or

(iv) Other, including a specification of these other purposes.

Declarations on past production of Schedule 2 chemicals for chemical weapons purposes

9. Each State Party shall, not later than 30 days after this Convention enters into force for it, declare all plant sites comprising plants that produced at any time since 1 January 1946 a Schedule 2 chemical for chemical weapons purposes.

10. Declarations of a plant site pursuant to paragraph 9 shall include:

(a) The name of the plant site and the name of the owner, company, or enterprise operating it;

(b) Its precise location including the address;

(c) For each plant which is located within the plant site, and which falls under the specifications set forth in paragraph 9, the same information as required under paragraph 7, subparagraphs (a) to (e); and

(d) For each Schedule 2 chemical produced for chemical weapons purposes:

(i) The chemical name, common or trade name used by the plant site for chemical weapons production purposes, structural formula, and Chemical Abstracts Service registry number, if assigned;

(ii) The dates when the chemical was produced and the quantity produced; and

(iii) The location to which the chemical was delivered and the final product produced there, if known.

Information to States Parties

11. A list of plant sites declared under this Section together with the information provided under paragraphs 6, 7 (*a*), 7 (*c*), 7 (*d*) (i), 7 (*d*) (iii), 8 (*a*) and 10 shall be transmitted by the Technical Secretariat to States Parties upon request.

B. Verification

General

12. Verification provided for in Article VI, paragraph 4, shall be carried out through on-site inspection at those of the declared plant sites that comprise one or more plants which produced, processed or consumed during any of the previous three calendar years or are anticipated to produce, process or consume in the next calendar year more than:

(*a*) 10 kg of a chemical designated "*" in Schedule 2, part A;

(*b*) 1 tonne of any other chemical listed in Schedule 2, part A; or

(c) 10 tonnes of a chemical listed in Schedule 2, part B.

13. The programme and budget of the Organization to be adopted by the Conference pursuant to Article VIII, paragraph 21 (a) shall contain, as a separate item, a programme and budget for verification under this Section. In the allocation of resources made available for verification under Article VI, the Technical Secretariat shall, during the first three years after the entry into force of this Convention, give priority to the initial inspections of plant sites declared under Section A. The allocation shall thereafter be reviewed on the basis of the experience gained.

14. The Technical Secretariat shall conduct initial inspections and subsequent inspections in accordance with paragraphs 15 to 22.

Inspection aims

15. The general aim of inspections shall be to verify that activities are in accordance with obligations under this Convention and consistent with the information to be provided in declarations. Particular aims of inspections at plant sites declared under Section A shall include verification of:

(*a*) The absence of any Schedule 1 chemical, especially its production, except if in accordance with Part VI of this Annex;

(b) Consistency with declarations of levels of production, processing or consumption of Schedule 2 chemicals; and

(c) Non-diversion of Schedule 2 chemicals for activities prohibited under this Convention.

Initial inspections

16. Each plant site to be inspected pursuant to paragraph 12 shall receive an initial inspection as soon as possible but preferably not later than three years after entry into force of this Convention. Plant sites declared after this period shall receive an initial inspection not later than one year after production, processing or consumption is first

declared. Selection of plant sites for initial inspections shall be made by the Technical Secretariat in such a way as to preclude the prediction of precisely when the plant site is to be inspected.

17. During the initial inspection, a draft facility agreement for the plant site shall be prepared unless the inspected State Party and the Technical Secretariat agree that it is not needed.

18. With regard to frequency and intensity of subsequent inspections, inspectors shall during the initial inspection assess the risk to the object and purpose of this Convention posed by the relevant chemicals, the characteristics of the plant site and the nature of the activities carried out there, taking into account, *inter alia*, the following criteria:

(*a*) The toxicity of the scheduled chemicals and of the end-products produced with it, if any;

(b) The quantity of the scheduled chemicals typically stored at the inspected site;

(c) The quantity of feedstock chemicals for the scheduled chemicals typically stored at the inspected site;

(d) The production capacity of the Schedule 2 plants; and

(e) The capability and convertibility for initiating production, storage and filling of toxic chemicals at the inspected site.

Inspections

19. Having received the initial inspection, each plant site to be inspected pursuant to paragraph 12 shall be subject to subsequent inspections.

20. In selecting particular plant sites for inspection and in deciding on the frequency and intensity of inspections, the Technical Secretariat shall give due consideration to the risk to the object and purpose of this Convention posed by the relevant chemical, the characteristics of the plant site and the nature of the activities carried out there, taking into account the respective facility agreement as well as the results of the initial inspections and subsequent inspections.

21. The Technical Secretariat shall choose a particular plant site to be inspected in such a way as to preclude the prediction of exactly when it will be inspected.

22. No plant site shall receive more than two inspections per calendar year under the provisions of this Section. This, however, shall not limit inspections pursuant to Article IX.

Inspection procedures

23. In addition to agreed guidelines, other relevant provisions of this Annex and the Confidentiality Annex, paragraphs 24 to 30 below shall apply.

24. A facility agreement for the declared plant site shall be concluded not later than 90 days after completion of the initial inspection between the inspected State Party and the Organization unless the inspected State Party and the Technical Secretariat agree that it is not needed. It shall be based on a model agreement and govern the conduct of inspections at the declared plant site. The agreement shall specify the frequency and intensity

of inspections as well as detailed inspection procedures, consistent with paragraphs 25 to 29.

25. The focus of the inspection shall be the declared Schedule 2 plant(s) within the declared plant site. If the inspection team requests access to other parts of the plant site, access to these areas shall be granted in accordance with the obligation to provide clarification pursuant to Part II, paragraph 51, of this Annex and in accordance with the facility agreement, or, in the absence of a facility agreement, in accordance with the rules of managed access as specified in Part X, Section C, of this Annex.

26. Access to records shall be provided, as appropriate, to provide assurance that there has been no diversion of the declared chemical and that production has been consistent with declarations.

27. Sampling and analysis shall be undertaken to check for the absence of undeclared scheduled chemicals.

28. Areas to be inspected may include:

(a) Areas where feed chemicals (reactants) are delivered or stored;

(b) Areas where manipulative processes are performed upon the reactants prior to addition to the reaction vessels;

(c) Feed lines as appropriate from the areas referred to in subparagraph (a) or subparagraph (b) to the reaction vessels together with any associated valves, flow meters, etc.;

(d) The external aspect of the reaction vessels and ancillary equipment;

(e) Lines from the reaction vessels leading to long- or short-term storage or to equipment further processing the declared Schedule 2 chemicals;

(f) Control equipment associated with any of the items under subparagraphs (a) to (e);

(g) Equipment and areas for waste and effluent handling;

(h) Equipment and areas for disposition of chemicals not up to specification.

29. The period of inspection shall not last more than 96 hours; however, extensions may be agreed between the inspection team and the inspected State Party.

Notification of inspection

30. A State Party shall be notified by the Technical Secretariat of the inspection not less than 48 hours before the arrival of the inspection team at the plant site to be inspected.

C. Transfers to States not Party to this Convention

31. Schedule 2 chemicals shall only be transferred to or received from States Parties. This obligation shall take effect three years after entry into force of this Convention.

32. During this interim three-year period, each State Party shall require an end-use certificate, as specified below, for transfers of Schedule 2 chemicals to States not Party to this Convention. For such transfers, each State Party shall adopt the necessary measures to ensure that the transferred chemicals shall only be used for purposes not prohibited under this Convention. Inter alia, the State Party shall require from the recipient State a certificate stating, in relation to the transferred chemicals:

(a) That they will only be used for purposes not prohibited under this Convention;

(b) That they will not be re-transferred;

(c) Their types and quantities;

(d) Their end-use(s); and

(e) The name(s) and address(es) of the end-user(s).

Part VIII: Activities not prohibited under this Convention in Accordance with Article VI: Regime for schedule 3 Chemicals and Facilities related to such Chemicals

A. Declarations

Declarations of aggregate national data

1. The initial and annual declarations to be provided by a State Party pursuant to Article VI, paragraphs 7 and 8, shall include aggregate national data for the previous calendar year on the quantities produced, imported and exported of each Schedule 3 chemical, as well as a quantitative specification of import and export for each country involved.

2. Each State Party shall submit:

(a) Initial declarations pursuant to paragraph 1 not later than 30 days after this Convention enters into force for it; and, starting in the following calendar year,

(b) Annual declarations not later than 90 days after the end of the previous calendar year.

Declarations of plant sites producing Schedule 3 chemicals

3. Initial and annual declarations are required for all plant sites that comprise one or more plants which produced during the previous calendar year or are anticipated to produce in the next calendar year more than 30 tonnes of a Schedule 3 chemical.

4. Each State Party shall submit:

(a) Initial declarations pursuant to paragraph 3 not later than 30 days after this Convention enters into force for it; and, starting in the following calendar year;

(b) Annual declarations on past activities not later than 90 days after the end of the previous calendar year;

(c) Annual declarations on anticipated activities not later than 60 days before the beginning of the following calendar year. Any such activity additionally planned after the annual declaration has been submitted shall be declared not later than five days before this activity begins.

5. Declarations pursuant to paragraph 3 are generally not required for mixtures containing a low concentration of a Schedule 3 chemical. They are only required, in accordance with guidelines, in such cases where the ease of recovery from the mixture of the Schedule 3 chemical and its total weight are deemed to pose a risk to the object and purpose of

this Convention. These guidelines shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

6. Declarations of a plant site pursuant to paragraph 3 shall include:

(a) The name of the plant site and the name of the owner, company, or enterprise operating it;

(b) Its precise location including the address; and

(c) The number of plants within the plant site which are declared pursuant to Part VII of this Annex.

7. Declarations of a plant site pursuant to paragraph 3 shall also include, for each plant which is located within the plant site and which falls under the specifications set forth in paragraph 3, the following information:

(a) The name of the plant and the name of the owner, company, or enterprise operating it;

(b) Its precise location within the plant site, including the specific building or structure number, if any;

(c) Its main activities.

8. Declarations of a plant site pursuant to paragraph 3 shall also include the following information on each Schedule 3 chemical above the declaration threshold:

(*a*) The chemical name, common or trade name used by the facility, structural formula, and Chemical Abstracts Service registry number, if assigned;

(b) The approximate amount of production of the chemical in the previous calendar year, or, in case of declarations on anticipated activities, anticipated for the next calendar year, expressed in the ranges: 30 to 200 tonnes, 200 to 1,000 tonnes, 1,000 to 10,000 tonnes, 10,000 to 100,000 tonnes, and above 100,000 tonnes; and

(c) The purposes for which the chemical was or will be produced.

Declarations on past production of Schedule 3 chemicals for chemical weapons purposes

9. Each State Party shall, not later than 30 days after this Convention enters into force for it, declare all plant sites comprising plants that produced at any time since 1 January 1946 a Schedule 3 chemical for chemical weapons purposes.

10. Declarations of a plant site pursuant to paragraph 9 shall include:

(a) The name of the plant site and the name of the owner, company, or enterprise operating it;

(b) Its precise location including the address;

(c) For each plant which is located within the plant site, and which falls under the specifications set forth in paragraph 9, the same information as required under paragraph 7, subparagraphs (a) to (c); and

(d) For each Schedule 3 chemical produced for chemical weapons purposes:

(i) The chemical name, common or trade name used by the plant site for chemical weapons production purposes, structural formula, and Chemical Abstracts Service registry number, if assigned;

(ii) The dates when the chemical was produced and the quantity produced; and

(iii) The location to which the chemical was delivered and the final product produced there, if known.

Information to States Parties

11. A list of plant sites declared under this Section together with the information provided under paragraphs 6, 7 (*a*), 7 (*c*), 8 (*a*) and 10 shall be transmitted by the Technical Secretariat to States Parties upon request.

B. Verification

General

12. Verification provided for in paragraph 5 of Article VI shall be carried out through on-site inspections at those declared plant sites which produced during the previous calendar year or are anticipated to produce in the next calendar year in excess of 200 tonnes aggregate of any Schedule 3 chemical above the declaration threshold of 30 tonnes.

13. The programme and budget of the Organization to be adopted by the Conference pursuant to Article VIII, paragraph 21 (a), shall contain, as a separate item, a programme and budget for verification under this Section taking into account Part VII, paragraph 13, of this Annex.

14. Under this Section, the Technical Secretariat shall randomly select plant sites for inspection through appropriate mechanisms, such as the use of specially designed computer software, on the basis of the following weighting factors:

(a) Equitable geographical distribution of inspections; and

(b) The information on the declared plant sites available to the Technical Secretariat, related to the relevant chemical, the characteristics of the plant site and the nature of the activities carried out there.

15. No plant site shall receive more than two inspections per year under the provisions of this Section. This, however, shall not limit inspections pursuant to Article IX.

16. In selecting plant sites for inspection under this Section, the Technical Secretariat shall observe the following limitation for the combined number of inspections to be received by a State Party per calendar year under this Part and Part IX of this Annex: the combined number of inspections shall not exceed three plus 5 per cent of the total number of plant sites declared by a State Party under both this Part and Part IX of this Annex, or 20 inspections, whichever of these two figures is lower.

Inspection aims

17. At plant sites declared under Section A, the general aim of inspections shall be to verify that activities are consistent with the information to be provided in declarations. The particular aim of inspections shall be the verification of the absence of any Schedule 1 chemical, especially its production, except if in accordance with Part VI of this Annex.

Inspection procedures

18. In addition to agreed guidelines, other relevant provisions of this Annex and the Confidentiality Annex, paragraphs 19 to 25 below shall apply.

19. There shall be no facility agreement, unless requested by the inspected State Party.

20. The focus of the inspections shall be the declared Schedule 3 plant(s) within the declared plant site. If the inspection team, in accordance with Part II, paragraph 51, of this Annex, requests access to other parts of the plant site for clarification of ambiguities, the extent of such access shall be agreed between the inspection team and the inspected State Party.

21. The inspection team may have access to records in situations in which the inspection team and the inspected State Party agree that such access will assist in achieving the objectives of the inspection.

22. Sampling and on-site analysis may be undertaken to check for the absence of undeclared scheduled chemicals. In case of unresolved ambiguities, samples may be analysed in a designated off-site laboratory, subject to the inspected State Party's agreement.

23. Areas to be inspected may include:

(*a*) Areas where feed chemicals (reactants) are delivered or stored;

(b) Areas where manipulative processes are performed upon the reactants prior to addition to the reaction vessel;

(c) Feed lines as appropriate from the areas referred to in subparagraph (a) or subparagraph (b) to the reaction vessel together with any associated valves, flow meters, etc.;

(d) The external aspect of the reaction vessels and ancillary equipment;

(e) Lines from the reaction vessels leading to long- or short-term storage or to equipment further processing the declared Schedule 3 chemicals;

(f) Control equipment associated with any of the items under subparagraphs (a) to (e);

(g) Equipment and areas for waste and effluent handling;

(h) Equipment and areas for disposition of chemicals not up to specification.

24. The period of inspection shall not last more than 24 hours; however, extensions may be agreed between the inspection team and the inspected State Party.

Notification of inspection

25. A State Party shall be notified by the Technical Secretariat of the inspection not less than 120 hours before the arrival of the inspection team at the plant site to be inspected.

C. Transfers to States not party to this Convention

26. When transferring Schedule 3 chemicals to States not Party to this Convention, each State Party shall adopt the necessary measures to ensure that the transferred chemicals shall only be used for purposes not prohibited under this Convention. *Inter alia*, the State Party shall require from the recipient State a certificate stating, in relation to the transferred chemicals:

(*a*) That they will only be used for purposes not prohibited under this Convention;

(b) That they will not be re-transferred;

(c) Their types and quantities;

(d) Their end-use(s); and

(e) The name(s) and address(es) of the end-user(s).

27. Five years after entry into force of this Convention, the Conference shall consider the need to establish other measures regarding transfers of Schedule 3 chemicals to States not Party to this Convention.

Part IX: Activities not prohibited under this Convention in accordance with Article VI: Regime for other Chemical Production Facilities

A. Declarations

List of other chemical production facilities

1. The initial declaration to be provided by each State Party pursuant to Article VI, paragraph 7, shall include a list of all plant sites that:

(a) Produced by synthesis during the previous calendar year more than 200 tonnes of unscheduled discrete organic chemicals; or

(b) Comprise one or more plants which produced by synthesis during the previous calendar year more than 30 tonnes of an unscheduled discrete organic chemical containing the elements phosphorus, sulfur or fluorine (hereinafter referred to as "PSF-plants" and "PSF-chemical").

2. The list of other chemical production facilities to be submitted pursuant to paragraph 1 shall not include plant sites that exclusively produced explosives or hydrocarbons.

3. Each State Party shall submit its list of other chemical production facilities pursuant to paragraph 1 as part of its initial declaration not later than 30 days after this Convention enters into force for it. Each State Party shall, not later than 90 days after the beginning of each following calendar year, provide annually the information necessary to update the list.

4. The list of other chemical production facilities to be submitted pursuant to paragraph 1 shall include the following information on each plant site:

(*a*) The name of the plant site and the name of the owner, company, or enterprise operating it;

(b) The precise location of the plant site including its address;

(c) Its main activities; and

(d) The approximate number of plants producing the chemicals specified in paragraph 1 in the plant site.

5. With regard to plant sites listed pursuant to paragraph 1 (*a*), the list shall also include information on the approximate aggregate amount of production of the unscheduled

discrete organic chemicals in the previous calendar year expressed in the ranges: under 1,000 tonnes, 1,000 to 10,000 tonnes and above 10,000 tonnes.

6. With regard to plant sites listed pursuant to paragraph 1 (*b*), the list shall also specify the number of PSF-plants within the plant site and include information on the approximate aggregate amount of production of PSF-chemicals produced by each PSF-plant in the previous calendar year expressed in the ranges: under 200 tonnes, 200 to 1,000 tonnes, 1,000 to 10,000 tonnes and above 10,000 tonnes.

Assistance by the Technical Secretariat

7. If a State Party, for administrative reasons, deems it necessary to ask for assistance in compiling its list of chemical production facilities pursuant to paragraph 1, it may request the Technical Secretariat to provide such assistance. Questions as to the completeness of the list shall then be resolved through consultations between the State Party and the Technical Secretariat.

Information to States Parties

8. The lists of other chemical production facilities submitted pursuant to paragraph 1, including the information provided under paragraph 4, shall be transmitted by the Technical Secretariat to States Parties upon request.

B. Verification

General

9. Subject to the provisions of Section C, verification as provided for in Article VI, paragraph 6, shall be carried out through on-site inspection at:

(a) Plant sites listed pursuant to paragraph 1 (a); and

(b) Plant sites listed pursuant to paragraph 1 (*b*) that comprise one or more PSF-plants which produced during the previous calendar year more than 200 tonnes of a PSF-chemical.

10. The programme and budget of the Organization to be adopted by the Conference pursuant to Article VIII, paragraph 21 (a), shall contain, as a separate item, a programme and budget for verification under this Section after its implementation has started.

11. Under this Section, the Technical Secretariat shall randomly select plant sites for inspection through appropriate mechanisms, such as the use of specially designed computer software, on the basis of the following weighting factors:

(a) Equitable geographical distribution of inspections;

(b) The information on the listed plant sites available to the Technical Secretariat, related to the characteristics of the plant site and the activities carried out there; and

(c) Proposals by States Parties on a basis to be agreed upon in accordance with paragraph 25.

12. No plant site shall receive more than two inspections per year under the provisions of this Section. This, however, shall not limit inspections pursuant to Article IX.

13. In selecting plant sites for inspection under this Section, the Technical Secretariat shall observe the following limitation for the combined number of inspections to be

received by a State Party per calendar year under this Part and Part VIII of this Annex: the combined number of inspections shall not exceed three plus 5 per cent of the total number of plant sites declared by a State Party under both this Part and Part VIII of this Annex, or 20 inspections, whichever of these two figures is lower.

Inspection aims

14. At plant sites listed under Section A, the general aim of inspections shall be to verify that activities are consistent with the information to be provided in declarations. The particular aim of inspections shall be the verification of the absence of any Schedule 1 chemical, especially its production, except if in accordance with Part VI of this Annex.

Inspection procedures

15. In addition to agreed guidelines, other relevant provisions of this Annex and the Confidentiality Annex, paragraphs 16 to 20 below shall apply.

16. There shall be no facility agreement, unless requested by the inspected State Party.

17. The focus of inspection at a plant site selected for inspection shall be the plant(s) producing the chemicals specified in paragraph 1, in particular the PSF-plants listed pursuant to paragraph 1 (b). The inspected State Party shall have the right to manage access to these plants in accordance with the rules of managed access as specified in Part X, Section C, of this Annex. If the inspection team, in accordance with Part II, paragraph 51, of this Annex, requests access to other parts of the plant site for clarification of ambiguities, the extent of such access shall be agreed between the inspection team and the inspected State Party.

18. The inspection team may have access to records in situations in which the inspection team and the inspected State Party agree that such access will assist in achieving the objectives of the inspection.

19. Sampling and on-site analysis may be undertaken to check for the absence of undeclared scheduled chemicals. In cases of unresolved ambiguities, samples may be analysed in a designated off-site laboratory, subject to the inspected State Party's agreement.

20. The period of inspection shall not last more than 24 hours; however, extensions may be agreed between the inspection team and the inspected State Party.

Notification of inspection

21. A State Party shall be notified by the Technical Secretariat of the inspection not less than 120 hours before the arrival of the inspection team at the plant site to be inspected.

C. Implementation and Review of Section B

Implementation

22. The implementation of Section B shall start at the beginning of the fourth year after entry into force of this Convention unless the Conference, at its regular session in the third year after entry into force of this Convention, decides otherwise.

23. The Director-General shall, for the regular session of the Conference in the third year after entry into force of this Convention, prepare a report which outlines the experience of the Technical Secretariat in implementing the provisions of Parts VII and VIII of this Annex as well as of Section A of this Part.

24. At its regular session in the third year after entry into force of this Convention, the Conference, on the basis of a report of the Director-General, may also decide on the distribution of resources available for verification under Section B between "PSF-plants" and other chemical production facilities. Otherwise, this distribution shall be left to the expertise of the Technical Secretariat and be added to the weighting factors in paragraph 11.

25. At its regular session in the third year after entry into force of this Convention, the Conference, upon advice of the Executive Council, shall decide on which basis (e.g. regional) proposals by States Parties for inspections should be presented to be taken into account as a weighting factor in the selection process specified in paragraph 11.

Review

26. At the first special session of the Conference convened pursuant to Article VIII, paragraph 22, the provisions of this Part of the Verification Annex shall be re-examined in the light of a comprehensive review of the overall verification regime for the chemical industry (Article VI, Parts VII to IX of this Annex) on the basis of the experience gained. The Conference shall then make recommendations so as to improve the effectiveness of the verification regime.

Part X: Challenge Inspections pursuant to Article IX

A. Designation and Selection of Inspectors and Inspection Assistants

1. Challenge inspections pursuant to Article IX shall only be performed by inspectors and inspection assistants especially designated for this function. In order to designate inspectors and inspection assistants for challenge inspections pursuant to Article IX, the Director-General shall, by selecting inspectors and inspection assistants from among the inspectors and inspection assistants for routine inspection activities, establish a list of proposed inspectors and inspection assistants. It shall comprise a sufficiently large number of inspectors and inspection assistants having the necessary qualification, experience, skill and training, to allow for flexibility in the selection of the inspectors, taking into account their availability, and the need for rotation. Due regard shall be paid also to the importance of selecting inspectors and inspection assistants on as wide a geographical basis as possible. The designation of inspectors and inspection assistants shall follow the procedures provided for under Part II, Section A, of this Annex.

2. The Director-General shall determine the size of the inspection team and select its members taking into account the circumstances of a particular request. The size of the inspection team shall be kept to a minimum necessary for the proper fulfilment of the inspection mandate. No national of the requesting State Party or the inspected State Party shall be a member of the inspection team.

B. Pre-Inspection Activities

3. Before submitting the inspection request for a challenge inspection, the State Party may seek confirmation from the Director-General that the Technical Secretariat is in a position to take immediate action on the request. If the Director-General cannot provide such confirmation immediately, he shall do so at the earliest opportunity, in keeping with the order of requests for confirmation. He shall also keep the State Party informed

of when it is likely that immediate action can be taken. Should the Director-General reach the conclusion that timely action on requests can no longer be taken, he may ask the Executive Council to take appropriate action to improve the situation in the future.

Notification

4. The inspection request for a challenge inspection to be submitted to the Executive Council and the Director-General shall contain at least the following information:

(a) The State Party to be inspected and, if applicable, the Host State;

(b) The point of entry to be used;

(c) The size and type of the inspection site;

(d) The concern regarding possible non-compliance with this Convention including a specification of the relevant provisions of this Convention about which the concern has arisen, and of the nature and circumstances of the possible non-compliance as well as all appropriate information on the basis of which the concern has arisen; and

(e) The name of the observer of the requesting State Party.

The requesting State Party may submit any additional information it deems necessary.

5. The Director-General shall within one hour acknowledge to the requesting State Party receipt of its request.

6. The requesting State Party shall notify the Director-General of the location of the inspection site in due time for the Director-General to be able to provide this information to the inspected State Party not less than 12 hours before the planned arrival of the inspection team at the point of entry.

7. The inspection site shall be designated by the requesting State Party as specifically as possible by providing a site diagram related to a reference point with geographic coordinates, specified to the nearest second if possible. If possible, the requesting State Party shall also provide a map with a general indication of the inspection site and a diagram specifying as precisely as possible the requested perimeter of the site to be inspected.

8. The requested perimeter shall:

(a) Run at least a 10 metre distance outside any buildings or other structures;

(b) Not cut through existing security enclosures; and

(c) Run at least a 10 metre distance outside any existing security enclosures that the requesting State Party intends to include within the requested perimeter.

9. If the requested perimeter does not conform with the specifications of paragraph 8, it shall be redrawn by the inspection team so as to conform with that provision.

10. The Director-General shall, not less than 12 hours before the planned arrival of the inspection team at the point of entry, inform the Executive Council about the location of the inspection site as specified in paragraph 7.

11. Contemporaneously with informing the Executive Council according to paragraph 10, the Director-General shall transmit the inspection request to the inspected State Party including the location of the inspection site as specified in paragraph 7. This notification shall also include the information specified in Part II, paragraph 32, of this Annex.

12. Upon arrival of the inspection team at the point of entry, the inspected State Party shall be informed by the inspection team of the inspection mandate.

Entry into the territory of the inspected State Party or the Host State

13. The Director-General shall, in accordance with Article IX, paragraphs 13 to 18, dispatch an inspection team as soon as possible after an inspection request has been received. The inspection team shall arrive at the point of entry specified in the request in the minimum time possible, consistent with the provisions of paragraphs 10 and 11.

14. If the requested perimeter is acceptable to the inspected State Party, it shall be designated as the final perimeter as early as possible, but in no case later than 24 hours after the arrival of the inspection team at the point of entry. The inspected State Party shall transport the inspection team to the final perimeter of the inspection site. If the inspected State Party deems it necessary, such transportation may begin up to 12 hours before the expiry of the time period specified in this paragraph for the designation of the final perimeter. Transportation shall, in any case, be completed not later than 36 hours after the arrival of the inspection team at the point of entry.

15. For all declared facilities, the procedures in subparagraphs (a) and (b) shall apply. (For the purposes of this Part, "declared facility" means all facilities declared pursuant to Articles III, IV, and V. With regard to Article VI, "declared facility" means only facilities declared pursuant to Part VI of this Annex, as well as declared plants specified by declarations pursuant to Part VII, paragraphs 7 and 10 (*c*), and Part VIII, paragraphs 7 and 10 (*c*), of this Annex.)

(*a*) If the requested perimeter is contained within or conforms with the declared perimeter, the declared perimeter shall be considered the final perimeter. The final perimeter may, however, if agreed by the inspected State Party, be made smaller in order to conform with the perimeter requested by the requesting State Party.

(b) The inspected State Party shall transport the inspection team to the final perimeter as soon as practicable, but in any case shall ensure their arrival at the perimeter not later than 24 hours after the arrival of the inspection team at the point of entry.

Alternative determination of final perimeter

16. At the point of entry, if the inspected State Party cannot accept the requested perimeter, it shall propose an alternative perimeter as soon as possible, but in any case not later than 24 hours after the arrival of the inspection team at the point of entry. In case of differences of opinion, the inspected State Party and the inspection team shall engage in negotiations with the aim of reaching agreement on a final perimeter.

17. The alternative perimeter should be designated as specifically as possible in accordance with paragraph 8. It shall include the whole of the requested perimeter and should, as a rule, bear a close relationship to the latter, taking into account natural terrain features and man-made boundaries. It should normally run close to the surrounding security barrier if such a barrier exists. The inspected State Party should seek to establish such a relationship between the perimeters by a combination of at least two of the following means:

(a) An alternative perimeter that does not extend to an area significantly greater than that of the requested perimeter;

(b) An alternative perimeter that is a short, uniform distance from the requested perimeter;

(c) At least part of the requested perimeter is visible from the alternative perimeter.

18. If the alternative perimeter is acceptable to the inspection team, it shall become the final perimeter and the inspection team shall be transported from the point of entry to that perimeter. If the inspected State Party deems it necessary, such transportation may begin up to 12 hours before the expiry of the time period specified in paragraph 16 for proposing an alternative perimeter. Transportation shall, in any case, be completed not later than 36 hours after the arrival of the inspection team at the point of entry.

19. If a final perimeter is not agreed, the perimeter negotiations shall be concluded as early as possible, but in no case shall they continue more than 24 hours after the arrival of the inspection team at the point of entry. If no agreement is reached, the inspected State Party shall transport the inspection team to a location at the alternative perimeter. If the inspected State Party deems it necessary, such transportation may begin up to 12 hours before the expiry of the time period specified in paragraph 16 for proposing an alternative perimeter. Transportation shall, in any case, be completed not later than 36 hours after the arrival of the inspection team at the point of entry.

20. Once at the location, the inspected State Party shall provide the inspection team with prompt access to the alternative perimeter to facilitate negotiations and agreement on the final perimeter and access within the final perimeter.

21. If no agreement is reached within 72 hours after the arrival of the inspection team at the location, the alternative perimeter shall be designated the final perimeter.

Verification of location

22. To help establish that the inspection site to which the inspection team has been transported corresponds to the inspection site specified by the requesting State Party, the inspection team shall have the right to use approved location-finding equipment and have such equipment installed according to its directions. The inspection team may verify its location by reference to local landmarks identified from maps. The inspected State Party shall assist the inspection team in this task.

Securing the site, exit monitoring

23. Not later than 12 hours after the arrival of the inspection team at the point of entry, the inspected State Party shall begin collecting factual information of all vehicular exit activity from all exit points for all land, air, and water vehicles of the requested perimeter. It shall provide this information to the inspection team upon its arrival at the alternative or final perimeter, whichever occurs first.

24. This obligation may be met by collecting factual information in the form of traffic logs, photographs, video recordings, or data from chemical evidence equipment provided by the inspection team to monitor such exit activity. Alternatively, the inspected State Party may also meet this obligation by allowing one or more members of the inspection team independently to maintain traffic logs, take photographs, make video recordings of exit traffic, or use chemical evidence equipment, and conduct other activities as may be agreed between the inspected State Party and the inspection team.

25. Upon the inspection team's arrival at the alternative perimeter or final perimeter, whichever occurs first, securing the site, which means exit monitoring procedures by the inspection team, shall begin.

26. Such procedures shall include: the identification of vehicular exits, the making of traffic logs, the taking of photographs, and the making of video recordings by the inspection team of exits and exit traffic. The inspection team has the right to go, under escort, to any other part of the perimeter to check that there is no other exit activity.

27. Additional procedures for exit monitoring activities as agreed upon by the inspection team and the inspected State Party may include, *inter alia*:

(*a*) Use of sensors;

(b) Random selective access;

(c) Sample analysis.

28. All activities for securing the site and exit monitoring shall take place within a band around the outside of the perimeter, not exceeding 50 metres in width, measured outward.

29. The inspection team has the right to inspect on a managed access basis vehicular traffic exiting the site. The inspected State Party shall make every reasonable effort to demonstrate to the inspection team that any vehicle, subject to inspection, to which the inspection team is not granted full access, is not being used for purposes related to the possible non-compliance concerns raised in the inspection request.

30. Personnel and vehicles entering and personnel and personal passenger vehicles exiting the site are not subject to inspection.

31. The application of the above procedures may continue for the duration of the inspection, but may not unreasonably hamper or delay the normal operation of the facility.

Pre-inspection briefing and inspection plan

32. To facilitate development of an inspection plan, the inspected State Party shall provide a safety and logistical briefing to the inspection team prior to access.

33. The pre-inspection briefing shall be held in accordance with Part II, paragraph 37, of this Annex. In the course of the pre-inspection briefing, the inspected State Party may indicate to the inspection team the equipment, documentation, or areas it considers sensitive and not related to the purpose of the challenge inspection. In addition, personnel responsible for the site shall brief the inspection team on the physical layout and other relevant characteristics of the site. The inspection team shall be provided with a map or sketch drawn to scale showing all structures and significant geographic features at the site. The inspection team shall also be briefed on the availability of facility personnel and records.

34. After the pre-inspection briefing, the inspection team shall prepare, on the basis of the information available and appropriate to it, an initial inspection plan which specifies the activities to be carried out by the inspection team, including the specific areas of the site to which access is desired. The inspection plan shall also specify whether the inspection team will be divided into subgroups. The inspection plan shall be made available to the representatives of the inspected State Party and the inspection site. Its implementa-

tion shall be consistent with the provisions of Section C, including those related to access and activities.

Perimeter activities

35. Upon the inspection team's arrival at the final or alternative perimeter, whichever occurs first, the team shall have the right to commence immediately perimeter activities in accordance with the procedures set forth under this Section, and to continue these activities until the completion of the challenge inspection.

36. In conducting the perimeter activities, the inspection team shall have the right to:

(a) Use monitoring instruments in accordance with Part II, paragraphs 27 to 30, of this Annex;

(b) Take wipes, air, soil or effluent samples; and

(c) Conduct any additional activities which may be agreed between the inspection team and the inspected State Party.

37. The perimeter activities of the inspection team may be conducted within a band around the outside of the perimeter up to 50 metres in width measured outward from the perimeter. If the inspected State Party agrees, the inspection team may also have access to any building or structure within the perimeter band. All directional monitoring shall be oriented inward. For declared facilities, at the discretion of the inspected State Party, the band could run inside, outside, or on both sides of the declared perimeter.

C. Conduct of Inspections

General rules

38. The inspected State Party shall provide access within the requested perimeter as well as, if different, the final perimeter. The extent and nature of access to a particular place or places within these perimeters shall be negotiated between the inspection team and the inspected State Party on a managed access basis.

39. The inspected State Party shall provide access within the requested perimeter as soon as possible, but in any case not later than 108 hours after the arrival of the inspection team at the point of entry in order to clarify the concern regarding possible non-compliance with this Convention raised in the inspection request.

40. Upon the request of the inspection team, the inspected State Party may provide aerial access to the inspection site.

41. In meeting the requirement to provide access as specified in paragraph 38, the inspected State Party shall be under the obligation to allow the greatest degree of access taking into account any constitutional obligations it may have with regard to proprietary rights or searches and seizures. The inspected State Party has the right under managed access to take such measures as are necessary to protect national security. The provisions in this paragraph may not be invoked by the inspected State Party to conceal evasion of its obligations not to engage in activities prohibited under this Convention.

42. If the inspected State Party provides less than full access to places, activities, or information, it shall be under the obligation to make every reasonable effort to provide

alternative means to clarify the possible non-compliance concern that generated the challenge inspection.

43. Upon arrival at the final perimeter of facilities declared pursuant to Articles IV, V and VI, access shall be granted following the pre-inspection briefing and discussion of the inspection plan which shall be limited to the minimum necessary and in any event shall not exceed three hours. For facilities declared pursuant to Article III, paragraph 1 (*d*), negotiations shall be conducted and managed access commenced not later than 12 hours after arrival at the final perimeter.

44. In carrying out the challenge inspection in accordance with the inspection request, the inspection team shall use only those methods necessary to provide sufficient relevant facts to clarify the concern about possible non-compliance with the provisions of this Convention, and shall refrain from activities not relevant thereto. It shall collect and document such facts as are related to the possible non-compliance with this Convention by the inspected State Party, but shall neither seek nor document information which is clearly not related thereto, unless the inspected State Party expressly requests it to do so. Any material collected and subsequently found not to be relevant shall not be retained.

45. The inspection team shall be guided by the principle of conducting the challenge inspection in the least intrusive manner possible, consistent with the effective and timely accomplishment of its mission. Wherever possible, it shall begin with the least intrusive procedures it deems acceptable and proceed to more intrusive procedures only as it deems necessary.

Managed access

46. The inspection team shall take into consideration suggested modifications of the inspection plan and proposals which may be made by the inspected State Party, at whatever stage of the inspection including the pre-inspection briefing, to ensure that sensitive equipment, information or areas, not related to chemical weapons, are protected.

47. The inspected State Party shall designate the perimeter entry/exit points to be used for access. The inspection team and the inspected State Party shall negotiate: the extent of access to any particular place or places within the final and requested perimeters as provided in paragraph 48; the particular inspection activities, including sampling, to be conducted by the inspection team; the performance of particular activities by the inspected State Party; and the provision of particular information by the inspected State Party.

48. In conformity with the relevant provisions in the Confidentiality Annex the inspected State Party shall have the right to take measures to protect sensitive installations and prevent disclosure of confidential information and data not related to chemical weapons. Such measures may include, *inter alia*:

(a) Removal of sensitive papers from office spaces;

(b) Shrouding of sensitive displays, stores, and equipment;

(c) Shrouding of sensitive pieces of equipment, such as computer or electronic systems;

(d) Logging off of computer systems and turning off of data indicating devices;

(e) Restriction of sample analysis to presence or absence of chemicals listed in Schedules 1, 2 and 3 or appropriate degradation products;

(f) Using random selective access techniques whereby the inspectors are requested to select a given percentage or number of buildings of their choice to inspect; the same principle can apply to the interior and content of sensitive buildings;

(g) In exceptional cases, giving only individual inspectors access to certain parts of the inspection site.

49. The inspected State Party shall make every reasonable effort to demonstrate to the inspection team that any object, building, structure, container or vehicle to which the inspection team has not had full access, or which has been protected in accordance with paragraph 48, is not used for purposes related to the possible non-compliance concerns raised in the inspection request.

50. This may be accomplished by means of, inter alia, the partial removal of a shroud or environmental protection cover, at the discretion of the inspected State Party, by means of a visual inspection of the interior of an enclosed space from its entrance, or by other methods.

51. In the case of facilities declared pursuant to Articles IV, V and VI, the following shall apply:

(a) For facilities with facility agreements, access and activities within the final perimeter shall be unimpeded within the boundaries established by the agreements;

(b) For facilities without facility agreements, negotiation of access and activities shall be governed by the applicable general inspection guidelines established under this Convention;

(c) Access beyond that granted for inspections under Articles IV, V and VI shall be managed in accordance with procedures of this section.

52. In the case of facilities declared pursuant to Article III, paragraph 1 (d), the following shall apply: if the inspected State Party, using procedures of paragraphs 47 and 48, has not granted full access to areas or structures not related to chemical weapons, it shall make every reasonable effort to demonstrate to the inspection team that such areas or structures are not used for purposes related to the possible non-compliance concerns raised in the inspection request.

Observer

53. In accordance with the provisions of Article IX, paragraph 12, on the participation of an observer in the challenge inspection, the requesting State Party shall liaise with the Technical Secretariat to coordinate the arrival of the observer at the same point of entry as the inspection team within a reasonable period of the inspection team's arrival.

54. The observer shall have the right throughout the period of inspection to be in communication with the embassy of the requesting State Party located in the inspected State Party or in the Host State or, in the case of absence of an embassy, with the requesting State Party itself. The inspected State Party shall provide means of communication to the observer.

55. The observer shall have the right to arrive at the alternative or final perimeter of the inspection site, wherever the inspection team arrives first, and to have access to the inspection site as granted by the inspected State Party. The observer shall have the right to make recommendations to the inspection team, which the team shall take into account to

the extent it deems appropriate. Throughout the inspection, the inspection team shall keep the observer informed about the conduct of the inspection and the findings.

56. Throughout the in-country period, the inspected State Party shall provide or arrange for the amenities necessary for the observer such as communication means, interpretation services, transportation, working space, lodging, meals and medical care. All the costs in connection with the stay of the observer on the territory of the inspected State Party or the Host State shall be borne by the requesting State Party.

Duration of inspection

57. The period of inspection shall not exceed 84 hours, unless extended by agreement with the inspected State Party.

D. Post-Inspection Activities

Departure

58. Upon completion of the post-inspection procedures at the inspection site, the inspection team and the observer of the requesting State Party shall proceed promptly to a point of entry and shall then leave the territory of the inspected State Party in the minimum time possible.

Reports

59. The inspection report shall summarize in a general way the activities conducted by the inspection team and the factual findings of the inspection team, particularly with regard to the concerns regarding possible non-compliance with this Convention cited in the request for the challenge inspection, and shall be limited to information directly related to this Convention. It shall also include an assessment by the inspection team of the degree and nature of access and cooperation granted to the inspectors and the extent to which this enabled them to fulfil the inspection mandate. Detailed information relating to the concerns regarding possible non-compliance with this Convention cited in the request for the challenge inspection shall be submitted as an Appendix to the final report and be retained within the Technical Secretariat under appropriate safeguards to protect sensitive information.

60. The inspection team shall, not later than 72 hours after its return to its primary work location, submit a preliminary inspection report, having taken into account, *inter alia*, paragraph 17 of the Confidentiality Annex, to the Director-General. The Director-General shall promptly transmit the preliminary inspection report to the requesting State Party, the inspected State Party and to the Executive Council.

61. A draft final inspection report shall be made available to the inspected State Party not later than 20 days after the completion of the challenge inspection. The inspected State Party has the right to identify any information and data not related to chemical weapons which should, in its view, due to its confidential character, not be circulated outside the Technical Secretariat. The Technical Secretariat shall consider proposals for changes to the draft final inspection report made by the inspected State Party and, using its own discretion, wherever possible, adopt them. The final report shall then be submitted not later than 30 days after the completion of the challenge inspection to the Director-General for further distribution and consideration in accordance with Article IX, paragraphs 21 to 25.

Part XI: Investigations in cases of alleged use of chemical weapons

A. General

1. Investigations of alleged use of chemical weapons, or of alleged use of riot control agents as a method of warfare, initiated pursuant to Articles IX or X, shall be conducted in accordance with this Annex and detailed procedures to be established by the Director-General.

2. The following additional provisions address specific procedures required in cases of alleged use of chemical weapons.

B. Pre-Inspection Activities

Request for an investigation

3. The request for an investigation of an alleged use of chemical weapons to be submitted to the Director-General, to the extent possible, should include the following information:

(a) The State Party on whose territory use of chemical weapons is alleged to have taken place;

(b) The point of entry or other suggested safe routes of access;

(c) Location and characteristics of the areas where chemical weapons are alleged to have been used;

(d) When chemical weapons are alleged to have been used;

(e) Types of chemical weapons believed to have been used;

(f) Extent of alleged use;

(g) Characteristics of the possible toxic chemicals;

(h) Effects on humans, animals and vegetation;

(i) Request for specific assistance, if applicable.

4. The State Party which has requested an investigation may submit at any time any additional information it deems necessary.

Notification

5. The Director-General shall immediately acknowledge receipt to the requesting State Party of its request and inform the Executive Council and all States Parties.

6. If applicable, the Director-General shall notify the State Party on whose territory an investigation has been requested. The Director-General shall also notify other States Parties if access to their territories might be required during the investigation.

Assignment of inspection team

7. The Director-General shall prepare a list of qualified experts whose particular field of expertise could be required in an investigation of alleged use of chemical weapons and constantly keep this list updated. This list shall be communicated, in writing, to each State Party not later than 30 days after entry into force of this Convention and after each

change to the list. Any qualified expert included in this list shall be regarded as designated unless a State Party, not later than 30 days after its receipt of the list, declares its non-acceptance in writing.

8. The Director-General shall select the leader and members of an inspection team from the inspectors and inspection assistants already designated for challenge inspections taking into account the circumstances and specific nature of a particular request. In addition, members of the inspection team may be selected from the list of qualified experts when, in the view of the Director-General, expertise not available among inspectors already designated is required for the proper conduct of a particular investigation.

9. When briefing the inspection team, the Director-General shall include any additional information provided by the requesting State Party, or any other sources, to ensure that the inspection can be carried out in the most effective and expedient manner.

Dispatch of inspection team

10. Immediately upon the receipt of a request for an investigation of alleged use of chemical weapons the Director-General shall, through contacts with the relevant States Parties, request and confirm arrangements for the safe reception of the team.

11. The Director-General shall dispatch the team at the earliest opportunity, taking into account the safety of the team.

12. If the inspection team has not been dispatched within 24 hours from the receipt of the request, the Director-General shall inform the Executive Council and the States Parties concerned about the reasons for the delay.

Briefings

13. The inspection team shall have the right to be briefed by representatives of the inspected State Party upon arrival and at any time during the inspection.

14. Before the commencement of the inspection the inspection team shall prepare an inspection plan to serve, inter alia, as a basis for logistic and safety arrangements. The inspection plan shall be updated as need arises.

C. Conduct of Inspections

Access

15. The inspection team shall have the right of access to any and all areas which could be affected by the alleged use of chemical weapons. It shall also have the right of access to hospitals, refugee camps and other locations it deems relevant to the effective investigation of the alleged use of chemical weapons. For such access, the inspection team shall consult with the inspected State Party.

Sampling

16. The inspection team shall have the right to collect samples of types, and in quantities it considers necessary. If the inspection team deems it necessary, and if so requested by it, the inspected State Party shall assist in the collection of samples under the supervision of inspectors or inspection assistants. The inspected State Party shall also permit and cooperate in the collection of appropriate control samples from areas neighbouring the site of the alleged use and from other areas as requested by the inspection team.

17. Samples of importance in the investigation of alleged use include toxic chemicals, munitions and devices, remnants of munitions and devices, environmental samples (air, soil, vegetation, water, snow, etc.) and biomedical samples from human or animal sources (blood, urine, excreta, tissue etc.).

18. If duplicate samples cannot be taken and the analysis is performed at off-site laboratories, any remaining sample shall, if so requested, be returned to the inspected State Party after the completion of the analysis.

Extension of inspection site

19. If the inspection team during an inspection deems it necessary to extend the investigation into a neighbouring State Party, the Director-General shall notify that State Party about the need for access to its territory and request and confirm arrangements for the safe reception of the team.

Extension of inspection duration

20. If the inspection team deems that safe access to a specific area relevant to the investigation is not possible, the requesting State Party shall be informed immediately. If necessary, the period of inspection shall be extended until safe access can be provided and the inspection team will have concluded its mission.

Interviews

21. The inspection team shall have the right to interview and examine persons who may have been affected by the alleged use of chemical weapons. It shall also have the right to interview eyewitnesses of the alleged use of chemical weapons and medical personnel, and other persons who have treated or have come into contact with persons who may have been affected by the alleged use of chemical weapons. The inspection team shall have access to medical histories, if available, and be permitted to participate in autopsies, as appropriate, of persons who may have been affected by the alleged use of chemical weapons.

D. Reports

Procedures

22. The inspection team shall, not later than 24 hours after its arrival on the territory of the inspected State Party, send a situation report to the Director-General. It shall further throughout the investigation send progress reports as necessary.

23. The inspection team shall, not later than 72 hours after its return to its primary work location, submit a preliminary report to the Director-General. The final report shall be submitted to the Director-General not later than 30 days after its return to its primary work location. The Director-General shall promptly transmit the preliminary and final reports to the Executive Council and to all States Parties.

Contents

24. The situation report shall indicate any urgent need for assistance and any other relevant information. The progress reports shall indicate any further need for assistance that might be identified during the course of the investigation.

25. The final report shall summarize the factual findings of the inspection, particularly with regard to the alleged use cited in the request. In addition, a report of an investigation of an alleged use shall include a description of the investigation process, tracing its various stages, with special reference to:

(*a*) The locations and time of sampling and on-site analyses; and

(b) Supporting evidence, such as the records of interviews, the results of medical examinations and scientific analyses, and the documents examined by the inspection team.

26. If the inspection team collects through, *inter alia*, identification of any impurities or other substances during laboratory analysis of samples taken, any information in the course of its investigation that might serve to identify the origin of any chemical weapons used, that information shall be included in the report.

E. States not Party to this Convention

27. In the case of alleged use of chemical weapons involving a State not Party to this Convention or in territory not controlled by a State Party, the Organization shall closely cooperate with the Secretary-General of the United Nations. If so requested, the Organization shall put its resources at the disposal of the Secretary-General of the United Nations.

Annex on the protection of confidential information („Confidentiality Annex")

Contents

1. The obligation to protect confidential information shall pertain to the verification of both civil and military activities and facilities. Pursuant to the general obligations set forth in Article VIII, the Organization shall:

(a) Require only the minimum amount of information and data necessary for the timely and efficient carrying out of its responsibilities under this Convention;

(b) Take the necessary measures to ensure that inspectors and other staff members of the Technical Secretariat meet the highest standards of efficiency, competence, and integrity;

(c) Develop agreements and regulations to implement the provisions of this Convention and shall specify as precisely as possible the information to which the Organization shall be given access by a State Party.

2. The Director-General shall have the primary responsibility for ensuring the protection of confidential information. The Director-General shall establish a stringent regime governing the handling of confidential information by the Technical Secretariat, and in doing so, shall observe the following guidelines:

(a) Information shall be considered confidential if:

(i) It is so designated by the State Party from which the information was obtained and to which the information refers; or

(ii) In the judgement of the Director-General, its unauthorized disclosure could reasonably be expected to cause damage to the State Party to which it refers or to the mechanisms for implementation of this Convention;

(*b*) All data and documents obtained by the Technical Secretariat shall be evaluated by the appropriate unit of the Technical Secretariat in order to establish whether they contain confidential information. Data required by States Parties to be assured of the continued compliance with this Convention by other States Parties shall be routinely provided to them. Such data shall encompass:

(i) The initial and annual reports and declarations provided by States Parties under Articles III, IV, V and VI, in accordance with the provisions set forth in the Verification Annex;

(ii) General reports on the results and effectiveness of verification activities; and

(iii) Information to be supplied to all States Parties in accordance with the provisions of this Convention;

(*c*) No information obtained by the Organization in connection with the implementation of this Convention shall be published or otherwise released, except, as follows:

(i) General information on the implementation of this Convention may be compiled and released publicly in accordance with the decisions of the Conference or the Executive Council;

(ii) Any information may be released with the express consent of the State Party to which the information refers;

(iii) Information classified as confidential shall be released by the Organization only through procedures which ensure that the release of information only occurs in strict conformity with the needs of this Convention. Such procedures shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (*i*);

(*d*) The level of sensitivity of confidential data or documents shall be established, based on criteria to be applied uniformly in order to ensure their appropriate handling and protection. For this purpose, a classification system shall be introduced, which by taking account of relevant work undertaken in the preparation of this Convention shall provide for clear criteria ensuring the inclusion of information into appropriate categories of confidentiality and the justified durability of the confidential nature of information. While providing for the necessary flexibility in its implementation the classification system shall protect the rights of States Parties providing confidential information. A classification system shall be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i);

(e) Confidential information shall be stored securely at the premises of the Organization. Some data or documents may also be stored with the National Authority of a State Party. Sensitive information, including, inter alia, photographs, plans and other documents required only for the inspection of a specific facility may be kept under lock and key at this facility;

(f) To the greatest extent consistent with the effective implementation of the verification provisions of this Convention, information shall be handled and stored by the Technical

Secretariat in a form that precludes direct identification of the facility to which it pertains;

(*g*) The amount of confidential information removed from a facility shall be kept to the minimum necessary for the timely and effective implementation of the verification provisions of this Convention; and

(h) Access to confidential information shall be regulated in accordance with its classification. The dissemination of confidential information within the Organization shall be strictly on a need-to-know basis.

3. The Director-General shall report annually to the Conference on the implementation of the regime governing the handling of confidential information by the Technical Secretariat.

4. Each State Party shall treat information which it receives from the Organization in accordance with the level of confidentiality established for that information. Upon request, a State Party shall provide details on the handling of information provided to it by the Organization.

B. Employment and Conduct of personnel in the Technical Secretatiat

5. Conditions of staff employment shall be such as to ensure that access to and handling of confidential information shall be in conformity with the procedures established by the Director-General in accordance with Section A.

6. Each position in the Technical Secretariat shall be governed by a formal position description that specifies the scope of access to confidential information, if any, needed in that position.

7. The Director-General, the inspectors and the other members of the staff shall not disclose even after termination of their functions to any unauthorized persons any confidential information coming to their knowledge in the performance of their official duties. They 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 relation to any State Party.

8. In the discharge of their functions inspectors shall only request the information and data which are necessary to fulfil their mandate. They shall not make any records of information collected incidentally and not related to verification of compliance with this Convention.

9. The staff shall enter into individual secrecy agreements with the Technical Secretariat covering their period of employment and a period of five years after it is terminated.

10. In order to avoid improper disclosures, inspectors and staff members shall be appropriately advised and reminded about security considerations and of the possible penalties that they would incur in the event of improper disclosure.

11. Not less than 30 days before an employee is given clearance for access to confidential information that refers to activities on the territory or in any other place under the jurisdiction or control of a State Party, the State Party concerned shall be notified of the proposed clearance. For inspectors the notification of a proposed designation shall fulfil this requirement.

12. In evaluating the performance of inspectors and any other employees of the Technical Secretariat, specific attention shall be given to the employee's record regarding protection of confidential information.

C. Measures to protect sensitive Installations and prevent Disclosure of confidential Data in the course of On Site Verification Activities

13. States Parties may take such measures as they deem necessary to protect confidentiality, provided that they fulfil their obligations to demonstrate compliance in accordance with the relevant Articles and the Verification Annex. When receiving an inspection, the State Party may indicate to the inspection team the equipment, documentation or areas that it considers sensitive and not related to the purpose of the inspection.

14. Inspection teams shall be guided by the principle of conducting on-site inspections in the least intrusive manner possible consistent with the effective and timely accomplishment of their mission. They shall take into consideration proposals which may be made by the State Party receiving the inspection, at whatever stage of the inspection, to ensure that sensitive equipment or information, not related to chemical weapons, is protected.

15. Inspection teams shall strictly abide by the provisions set forth in the relevant Articles and Annexes governing the conduct of inspections. They shall fully respect the procedures designed to protect sensitive installations and to prevent the disclosure of confidential data.

16. In the elaboration of arrangements and facility agreements, due regard shall be paid to the requirement of protecting confidential information. Agreements on inspection procedures for individual facilities shall also include specific and detailed arrangements with regard to the determination of those areas of the facility to which inspectors are granted access, the storage of confidential information on-site, the scope of the inspection effort in agreed areas, the taking of samples and their analysis, the access to records and the use of instruments and continuous monitoring equipment.

17. The report to be prepared after each inspection shall only contain facts relevant to compliance with this Convention. The report shall be handled in accordance with the regulations established by the Organization governing the handling of confidential information. If necessary, the information contained in the report shall be processed into less sensitive forms before it is transmitted outside the Technical Secretariat and the inspected State Party.

D. Procedures in Case of Breaches of alleged Breaches of Confidentiality

18. The Director-General shall establish necessary procedures to be followed in case of breaches or alleged breaches of confidentiality, taking into account recommendations to be considered and approved by the Conference pursuant to Article VIII, paragraph 21 (i).

19. The Director-General shall oversee the implementation of individual secrecy agreements. The Director-General shall promptly initiate an investigation if, in his judgement, there is sufficient indication that obligations concerning the protection of confidential information have been violated. The Director-General shall also promptly initiate an

investigation if an allegation concerning a breach of confidentiality is made by a State Party.

20. The Director-General shall impose appropriate punitive and disciplinary measures on staff members who have violated their obligations to protect confidential information. In cases of serious breaches, the immunity from jurisdiction may be waived by the Director-General.

21. States Parties shall, to the extent possible, cooperate and support the Director-General in investigating any breach or alleged breach of confidentiality and in taking appropriate action in case a breach has been established.

22. The Organization shall not be held liable for any breach of confidentiality committed by members of the Technical Secretariat.

23. For breaches involving both a State Party and the Organization, a "Commission for the settlement of disputes related to confidentiality", set up as a subsidiary organ of the Conference, shall consider the case. This Commission shall be appointed by the Conference. Rules governing its composition and operating procedures shall be adopted by the Conference at its first session.

The Legal Status of the Chemical Weapons Convention

Signed at Paris: 13 January 1993, entered into force: 29 April 1997, Depositary: Secretary-General of the United Nations

Signatures: 165; Deposits: 179

State	Signature	Deposit of ratification
Afghanistan	14 January 1993	24 September 2003
Albania	14 January 1993	11 May 1994
Algeria	13 January 1993	14 August 1995
Andorra		27 February 2003 (a)
Antigua and Barbuda		29 August 2005 (a)
Argentina	13 January 1993	2 October 1995
Armenia	19 March 1993	27 January 1995
Australia	13 January 1993	6 May 1994
Austria	13 January 1993*	17 August 1995
Azerbaijan	13 January 1993	29 February 2000
Bahamas	2 March 1994	
Bahrain	24 February 1993	28 April 1997
Bangladesh	14 January 1993	25 April 1997
Belarus	14 January 1993	11 July 1996
Belgium	13 January 1993*	27 January 1997
Belize		1 December 2003 (a)
Benin	14 January 1993	14 May 1998
Bhutan	24 April 1997	18 August 2005
Bolivia	14 January 1993	14 August 1998
Bosnia and Herzegovina	16 January 1997	25 February 1997
Botswana		31 August 1998
Brazil	13 January 1993	13 March 1996
Brunei Darussalam	13 January 1993	28 July 1997
Bulgaria	13 January 1993	10 August 1994
Burkina Faso	14 January 1993	8 July 1997
Burundi	15 January 1993	4 September 1998
Cambodia	15 January 1993	19 July 2005
Cameroon	14 January 1993	16 September 1996
Canada	13 January 1993	26 September 1995
Cape Verde	15 January 1993	10 October 2003
Central African Republic	14 January 1993	

Chad	11 October 1994	13 February 2004
Chile	14 January 1993	12 July 1996
China	13 January 1993*	25 April 1997**
Colombia	13 January 1993	5 April 2000
Comoros	13 January 1993	18 August 1993
Congo	15 January 1993	
Cook Islands	14 January 1993	15 July 1994
Costa Rica	14 January 1993	31 May 1996
Côte d'Ivoire	13 January 1993	18 December 1995
Croatia	13 January 1993	23 May 1995
Cuba	13 January 1993	29 April 1997*
Cyprus	13 January 1993	28 August 1998
Czech Republic	14 January 1993	6 March 1996
Democratic Republic of the Congo	14 January 1993	12 October 2005
Denmark	14 January 1993*	13 July 1995
Djibouti	28 September 1993	25 January 2006
Dominica	2 August 1993	12 February 2001
Dominican Republic	13 January 1993	
Ecuador	14 January 1993	6 September 1995
El Salvador	14 January 1993	30 October 1995
Equatorial Guinea	14 January 1993	25 April 1997
Eritrea		14 February 2000 (a)
Estonia	14 January 1993	26 May 1999
Ethiopia	14 January 1993	13 May 1996
Fiji	14 January 1993	20 January 1993
Finland	14 January 1993	7 February 1995
France	13 January 1993*	2 March 1995
Gabon	13 January 1993	8 September 2000
Gambia	13 January 1993	19 May 1998
Georgia	14 January 1993	27 November 1995
Germany	13 January 1993*	12 August 1994
Ghana	14 January 1993	9 July 1997
Greece	13 January 1991*	22 December 1994**
Grenada	9 April 1997	30 June 2005
Guatemala	14 January 1993	12 February 2003
Guinea	14 January 1993	9 June 1997
Guinea-Bissau	14 January 1993	

Guyana	6 October 1993	12 September 1997
Haiti	14 January 1993	22 February 2006
Holy See	14 January 1993	12 May 1999
Honduras	13 January 1993	29 August 2005
Hungary	13 January 1993	31 October 1996
Iceland	13 January 1993	28 April 1997
India	14 January 1993	3 September 1996
Indonesia	13 January 1993	12 November 1998
Iran (Islamic Republic of)	13 January 1993	3 November 1997*
Ireland	14 January 1993*	24 June 1996
Israel	13 January 1993	
Italy	13 January 1993*	8 December 1995**
Jamaica	18 April 1997	8 September 2000
Japan	13 January 1993	15 September 1995
Jordan		29 October 1997(a)
Kazakhstan	14 January 1993	23 March 2000
Kenya	15 January 1993	25 April 1997
Kiribati		7 September 2000 (a)
Kuwait	27 January 1993	29 May 1997
Kyrgyzstan	22 February 1993	29 September 2003
Lao People's Democratic Republic	13 May 1993	24 February 1997
Latvia	6 May 1993	23 July 1996
Lesotho	7 December 1994	7 December 1994
Liberia	15 January 1993	23 February 2006
Libyan Arab Jamahiriya		6 January 2004 (a)
Liechtenstein	21 July 1993	24 November 1999
Lithuania	13 January 1993	15 April 1998
Luxembourg	13 January 1993*	15 April 1997
Madagascar	15 January 1993	20 October 2004
Malawi	14 January 1993	11 June 1998
Malaysia	13 January 1993	20 April 2000
Maldives	4 October 1993	31 May 1994
Mali	13 January 1993	28 April 1997
Malta	13 January 1993	28 April 1997
Marshall Islands	13 January 1993	19 May 2004
Mauritania	13 January 1993	9 February 1998
Mauritius	14 January 1993	9 February 1993

Mexico	13 January 1993	29 August 1994
Micronesia (Federated States of)	13 January 1993	21 June 1999
Monaco	13 January 1993	1 June 1995
Mongolia	14 January 1993	17 January 1995
Morocco	13 January 1993	28 December 1995
Mozambique		15 August 2000 (a)
Myanmar	14 January 1993	
Namibia	13 January 1993	24 November 1995
Nauru	13 January 1993	12 November 2001
Nepal	19 January 1993	18 November 1997
Netherlands	14 January 1993*	30 June 1995
New Zealand	14 January 1993	15 July 1996
Nicaragua	9 March 1993	5 November 1999
Niger	14 January 1993	9 April 1997
Nigeria	13 January 1993	20 May 1999
Niue		21 April 2005 (a)
Norway	13 January 1993	7 April 1994
Oman	2 February 1993	8 February 1995
Pakistan	13 January 1993	28 October 1997*
Palau		3 February 2003 (a)
Panama	16 June 1993	7 October 1998
Papua New Guinea	14 January 1993	17 April 1996
Paraguay	14 January 1993	1 December 1994
Peru	14 January 1993	20 July 1995
Philippines	13 January 1993	11 December 1996
Poland	13 January 1993	23 August 1995
Portugal	13 January 1993*	10 September 1996**
Qatar	1 February 1993	3 September 1997
Republic of Korea	14 January 1993	28 April 1997
Republic of Moldova	13 January 1993	8 July 1996
Romania	13 January 1993	15 February 1995
Russian Federation	13 January 1993	5 November 1997
Rwanda	17 May 1993	31 March 2004
Saint Kitts and Nevis	16 March 1994	21 May 2004
Saint Lucia	29 March 1993	9 April 1997
Saint Vincent and the Grenadines	20 September 1993	18 September 2002
Samoa	14 January 1993	27 September 2002

San Marino	13 January 1993	10 December 1999
Sao Tome and Principe		9 September 2003 (a)
Saudi Arabia	20 January 1993	9 August 1996
Senegal	13 January 1993	20 July 1998
Serbia		20 April 2000 (a)
Seychelles	15 January 1993	7 April 1993
Sierra Leone	15 January 1993	30 September 2004
Singapore	14 January 1993	21 May 1997
Slovakia	14 January 1993	27 October 1995
Slovenia	14 January 1993	11 June 1997
Solomon Islands		23 September 2004
South Africa	14 January 1993	13 September 1995
Spain	13 January 1993*	3 August 1994
Sri Lanka	14 January 1993	19 August 1994
Sudan		24 May 1999 (a)
Suriname	28 April 1997	28 April 1997
Swaziland	23 September 1993	20 November 1996
Sweden	13 January 1993	17 June 1993
Switzerland	14 June 1993	10 March 1995
Tajikistan	14 January 1993	11 January 1995
Thailand	14 January 1993	10 December 2002
the former Yugoslav Republic of Macedonia		20 June 1997(a)
Timor Leste		7 May 2003 (a)
Togo	13 January 1993	23 April 1997
Tonga		29 May 2003 (a)
Trinidad and Tobago		24 June 1997(a)
Tunisia	13 January 1993	15 April 1997
Turkey	14 January 1993	12 May 1997
Turkmenistan	12 October 1993	29 September 1994
Tuvalu		19 January 2004 (a)
Uganda	14 January 1993	30 November 2001
Ukraine	13 January 1993	16 October 1998
United Arab Emirates	2 February 1993	28 November 2000
United Kingdom of Great Britain and Northern Ireland	13 January 1993*	13 May 1996
United Republic of Tanzania	25 February 1994	25 June 1998

United States of America	13 January 1993	25 April 1997*
Uruguay	15 January 1993	6 October 1994
Uzbekistan	24 November 1995	23 July 1996
Vanuatu		16 September 2005 (a)
Venezuela	14 January 1993	3 December 1997
Viet Nam	13 January 1993	30 September 1998
Yemen	8 February 1993	2 October 2000
Zambia	13 January 1993	9 February 2001
Zimbabwe	13 January 1993	25 April 1997
Total	**165**	**179**

(a) accession

(s) accession through state succession

* Declaration submitted

** further statement made

4. Review Document as approved by the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention, 9 May 2003 (excerpts)

…Agenda item 7(a): The role of the Chemical Weapons Convention in enhancing international peace and security

1. The First Review Conference emphasised that the Convention is the first global and verifiable ban on a whole category of weapons of mass destruction. The complete and effective prohibition of the development, production, acquisition, stockpiling, retention, transfer, and use of chemical weapons, and their destruction, are an essential safeguard against the future use of chemical weapons.

2. The First Review Conference noted with satisfaction that the Convention has been identified as one of the core treaties reflecting the fundamental purposes of the UN. It is an essential instrument for international peace and security. It is non-discriminatory in nature, and has set new standards for global disarmament under strict and effective international control, non-proliferation, assistance and protection against chemical weapons, and international cooperation in the chemical field for purposes not prohibited by the Convention.

3. The First Review Conference recognised, furthermore, the essential contribution that the Convention has made to confidence-building and cooperation among the States Parties, to international peace and security, and to the national security of the States Parties.

4. The First Review Conference stressed the important contribution of the OPCW to the global prohibition and elimination of chemical weapons.

5. The First Review Conference reaffirmed the commitment of all States Parties to comply with the Convention and to fully and effectively, and in a non-discriminatory manner, implement all its provisions. The Conference of the States Parties (hereinafter 'the Conference") must continue to ensure that all States Parties comply fully with the obligations they have assumed under the Convention, as foreseen by the Convention. The Executive Council (hereinafter 'the Council"), in keeping with its powers and functions, shall continue to promote compliance with the Convention.

6. The First Review Conference reiterated the importance of the obligation of the States Parties to declare their chemical weapons. The First Review Conference reiterated, furthermore, the importance of subjecting chemical weapons stockpiles to international verification by the OPCW, and to complete their destruction in accordance with the provisions of the Convention, including its time limits. The same applies to the destruction or conversion of chemical weapons production facilities. The First Review Conference welcomed the efforts made by the States Parties in respect to the timely destruction of their chemical weapons capabilities, as well as the efforts of the Technical Secretariat (hereinafter 'the Secretariat") to further enhance the efficiency and cost-effectiveness of the verification measures applied to the chemical weapons stockpiles and chemical weapons production facilities and their elimination and conversion. The First Review

Conference encouraged States Parties to provide assistance to others, upon request, in the destruction of chemical weapons.

7. The First Review Conference noted with satisfaction that the OPCW has established an effective verification system with a view to achieving the non-proliferation and confidence-building aims of the Convention. The further development of this regime should take account of relevant developments in science and technology, in accordance with the provisions of the Convention.

8. The First Review Conference, furthermore, recognised that the implementation of the Convention's provisions on assistance and protection against chemical weapons makes a significant contribution to countering the threats still associated with the possible use of chemical weapons. These measures to provide assistance should be implemented in cooperation with the State Party requesting assistance, and with other States Parties and relevant regional and international organisations.

9. The First Review Conference reaffirmed the importance that the Convention attaches to the fostering of international cooperation in the field of the peaceful chemical activities of the States Parties, and the objective of implementing the Convention in a manner that avoids hampering their economic and technological development and international cooperation in the field of chemical activities for purposes not prohibited by the Convention. The First Review Conference reaffirmed the right of the States Parties, subject to the provisions of the Convention and without prejudice to the principles and applicable rules of international law, to use chemicals for purposes not prohibited by the Convention, and their determination to undertake to facilitate the fullest possible exchange of chemicals, equipment, and scientific and technical information relating to the development and application of chemistry for purposes not prohibited by the Convention.

10. The First Review Conference noted with concern that, along with the continued threat of possible use of chemical weapons by States, the international community faces a growing danger of the use of chemical weapons by terrorists. The First Review Conference took cognisance of the request of the UN Security Council that international organisations evaluate ways in which they can enhance the effectiveness of their action against terrorism, in particular those organisations whose activities relate to the control of the use of or of access to chemical and other deadly materials.[1] The First Review Conference reaffirmed in this context the decision of the Council on the OPCW's contribution to the global struggle against terrorism, and noted that work was progressing in the Council's working group on terrorism.

Agenda item 7(b): Measures to ensure the universality of the Convention

11. The First Review Conference stressed the importance of universal adherence by all States to the Convention, and of full compliance by all States Parties with all the provisions and requirements of the Convention. The First Review Conference was convinced that universality and full compliance by all States Parties with all the provisions of the Convention are necessary to the achievement of the global ban on chemical weapons.

[1] SCR/RES/1456.

Universal adherence to, and full implementation of, the Convention will contribute to the global anti-terrorist effort and strengthen the security of all states.

12. The First Review Conference recognised that the Convention has made considerable progress towards universality since its entry into force, with the number of States Parties now at 151. The First Review Conference noted with concern, however, that there remain a total of 43 States not Party to the Convention, including 25 signatory states and 18 non-signatory states. The First Review Conference recalled, in particular, that among the States not Party are some whose non-adherence to the Convention is a cause for serious concern. The First Review Conference recalled that it has reviewed progress towards universality at its past annual sessions, and repeatedly adopted decisions urging all states that have neither ratified nor acceded to the Convention to do so without delay.

13. The First Review Conference acknowledged the efforts made by the OPCW to promote universality, in the form, *inter alia*, of regional seminars, implementation workshops, and bilateral visits and discussions arranged by the Secretariat, with the cooperation and support of States Parties. The First Review Conference recognised that the efforts to achieve universality must coincide with the achievement of full implementation by all States Parties of their obligations under the Convention. The First Review Conference noted with particular concern information indicating that a large number of States Parties had not fulfilled, either in whole or in part, basic obligations associated with national implementation measures.

14. The First Review Conference was convinced that progress achieved towards universality is a reflection of the credibility and validity of, and of the global support for, the principles upon which the Convention is based.

15. The First Review Conference underlined that there are important political, economic, and security benefits of becoming a State Party to the Convention. The First Review Conference recognised the positive effect of international cooperation among the States Parties on universality. Furthermore, their desire for increased security and their determination to participate fully in the global community were incentives for them to adhere to the Convention. The First Review Conference also recalled that States that remain outside the Convention would not be able to take advantage of the benefits that the Convention offers the States Parties.

16. The First Review Conference urged all States that have neither ratified nor acceded to the Convention to do so without delay. The First Review Conference called upon the States Parties and the Director-General to continue to encourage all States not Party, and in particular those whose absence has given rise to particular concern, to ratify or accede to the Convention without delay. The First Review Conference encouraged States Parties to promote the achievement of the common objectives of the Convention in order to encourage other countries to join the Convention.

17. The First Review Conference considered that future universality efforts should be supported by the expansion of bilateral, regional, and appropriate measures on the part of States Parties and the Secretariat. These efforts should take into account factors for non-accession, in a manner that does not encourage delay.

18. The First Review Conference recommended that the Council, with the cooperation of the Secretariat, develop and implement a plan of action to further encourage, in a

systematic and coordinated manner, adherence to the Convention and to assist States ready to join the Convention in their national preparations to implement it.

19. The First Review Conference also noted that more than one-fifth of States Parties had lost their voting privileges in the OPCW due to arrears in payment of their financial contributions. The First Review Conference urged States Parties and the Secretariat to consider all diplomatic measures to facilitate greater implementation and participation by all States Parties.

Agenda item 7(c) (i): General obligations definitions, and declarations related thereto

20. The First Review Conference reaffirmed the commitment of the States Parties to meet the obligations they have undertaken under Article I of the Convention.

21. The First Review Conference reaffirmed the continued relevance of the definitions contained in Article II of the Convention, which ensure the comprehensive nature of the prohibition of chemical weapons under the Convention.

22. The First Review Conference emphasised the importance of all States Parties ensuring that in implementing the Convention, all actions taken are consistent with all the provisions of the Convention.

23. The First Review Conference considered the impact of developments in science and technology on the Convention's prohibitions. The definitions contained in Article II, in particular of the terms 'chemical weapons" and 'chemical weapons production facility", were found to adequately cover these developments and to provide for the application of the Convention's prohibitions to any toxic chemical, except where such a chemical is intended for purposes not prohibited by the Convention, and as long as the types and quantities involved are consistent with such purposes. The First Review Conference noted, however, that science is rapidly advancing. New chemicals may have to be assessed in relation to their relevance to the Schedules of Chemicals of the Convention. The First Review Conference requested the Council to consider the developments in relation to additional chemicals that may be relevant to the Convention, and assess, *inter alia*, whether these compounds should be considered in the context of the Schedules of Chemicals.

24. The First Review Conference stressed the importance of the timely, complete, and accurate submission of the declarations required of each State Party under Article III. The First Review Conference noted with satisfaction that, by the end of 2002, all but two States Parties had submitted their declarations under Article III. The First Review Conference called upon the remaining States Parties that had yet to submit their Article III declarations to do so without any further delay, and called upon those states that had become States Parties in the meantime to submit their declarations under Article III when they are due. The First Review Conference encouraged the Secretariat to monitor progress in this respect, to offer assistance, including to states preparing to join the Convention in the future, and to keep the Council informed about the situation. The First Review Conference also encouraged States Parties that are able to do so, to provide assistance to other States Parties, if requested, in the preparation and submission of declarations and amendments and to inform the OPCW about such assistance.

25. The First Review Conference, noting the obligation of the States Parties to declare any former chemical weapons development facility (Article III, subparagraph 1(d)), and further noting that the infrastructure and personnel of these facilities may remain in place for activities not prohibited under the Convention, and that the Convention does not provide for routine verification of these facilities, called upon the Council to reach agreement on the declaration criteria for former chemical weapons development facilities (facilities designed, constructed, or used since 1 January 1946 primarily for the development of chemical weapons), with a view towards promoting confidence among States Parties.

Agenda item 7(c) (ii): General provisions on verification

Overview

26. The verification system is one of the most important provisions of the Convention. It provides for the monitoring of the elimination of chemical weapons and chemical weapons production facilities, contributes to achieving the non-proliferation objectives of the Convention, and provides assurances of compliance by the States Parties with the provisions of the Convention.

27. The First Review Conference noted with satisfaction that the OPCW has established a verification system that meets the requirements of the Convention. The OPCW has at its disposal a well-trained inspectorate, approved equipment and other technical capabilities, procedures to plan and conduct on-site inspections as required under the Convention, and a network of designated laboratories for off-site chemical analysis. There is, however, room for increased efficiency. The First Review Conference also noted that a number of procedures and guidelines that the Convention requires remain to be finalised and adopted. The Council has already included these in its work programme, and should resolve them as soon as possible.

28. The Secretariat and the States Parties have acquired considerable experience in the conduct of routine inspections, which they should bring to bear when identifying ways to further optimise the system, increase efficiency, and improve the conduct of inspections.

29. The First Review Conference noted that no challenge inspections or investigations of alleged use had been requested of the OPCW since the entry into force of the Convention.

30. The First Review Conference noted the Note by the Director-General conveying to the States Parties the observations of the Scientific Advisory Board (SAB) in relation to developments in science and technology that are relevant to the review of the operation of the Convention (RC-1/DG.2, dated 23 April 2003), together with his recommendations on these observations and findings. The First Review Conference requested the Council, assisted by the Secretariat and members of the SAB, as appropriate, to study these recommendations and observations with a view to preparing recommendations to the Conference on them.

Declarations

31. The timely and accurate submission of declarations is an important condition for the functioning of the verification system of the Convention. The First Review Conference noted the efforts made by the States Parties in collecting declaration data and submitting them to the OPCW. The First Review Conference took cognisance of improvements in the degree of standardisation of declaration data since the entry into force of the Convention, but stressed that there is a need for further improvement.

32. The First Review Conference noted the efforts made by the Secretariat to implement an effective system for receiving, handling, analysing, and protecting declarations, and for submitting declaration data to States Parties in accordance with the provisions of the Convention. In this context, the First Review Conference emphasised that the Secretariat and the States Parties concerned should make expeditious efforts to clarify any ambiguities and discrepancies in declarations submitted.

33. The First Review Conference noted the efforts of the Secretariat, consistent with its responsibilities under the Convention, to cooperate with the States Parties in ensuring that declarations submitted in accordance with the Convention were full and accurate, *inter alia* by clarifying ambiguities and discrepancies and by providing technical assistance and technical evaluation to States Parties in the implementation of the provisions of the Convention. The First Review Conference encouraged the Secretariat to continue these efforts, in close consultation with the States Parties and their National Authorities.

34. The First Review Conference noted the information provided by the Secretariat on the possibility of submitting declarations in electronic form. The First Review Conference noted the need to evaluate whether such a system could bring advantages to the Secretariat as well as to the States Parties. The First Review Conference welcomed the efforts made by some States Parties and by the Secretariat to develop software that could be used for the preparation, submission, and receipt of industry declaration data in electronic form. The First Review Conference requested the Director-General to further explore this possibility and to report to the Council, and recommended that an expert meeting open to all States Parties be convened to study all aspects of the proposed submission of declarations in electronic form. The First Review Conference reiterated the need to ensure that confidential digital data is effectively protected at all times, in accordance with the requirements of the Convention.

Inspections

35. The implementation by all States Parties of the standing arrangements required by the Convention is important to the proper conduct of inspections. These arrangements include, *inter alia*, the designation of points of entry; the issuance to OPCW inspection team members of multiple entry/exit and/or transit visas valid for at least two years, and other such documents to enable them to enter and to remain on the territory of the State Party for the purpose of carrying out inspection activities; the according of privileges and immunities to inspection-team members as required by the Convention; the timely issuance of diplomatic clearance numbers for non-scheduled aircraft used by the Secretariat for inspection purposes; arrangements for the amenities needed by the inspection teams; the provision of access to inspected facilities as required by the Convention, and other arrangements necessary to the transportation, storage, and use of approved equip-

ment by inspection teams. The First Review Conference urged all States Parties to implement these measures as required by the Convention.

36. The First Review Conference noted that a large part of the OPCW's verification resources have in the past been spent on the verification of chemical weapons destruction operations. The planned increase in chemical weapons destruction in coming years and any resource constraints will require a thorough review of the current verification methodology used for chemical weapons destruction verification, as part of the effort to optimise the verification regime of the Convention.

37. The First Review Conference requested the Council, assisted by the Secretariat, to intensify its study of how to further optimise the OPCW verification system, aiming at recommendations that should, if possible, take effect beginning in 2004. Such a study should take into account the findings of the SAB. The study should identify essential inspection tasks; assess how the different aspects of the inspection cycle, from planning to reporting, can be made more efficient; identify means that would further increase verification efficiency; and consider how best to meet the Convention's requirement in relation to sampling and analysis for verification purposes.

Reporting of verification results

38. The First Review Conference agreed that the reporting by the Secretariat to the Council and to the States Parties on verification results is an important matter, enabling States Parties to be assured of continued compliance with the Convention by other States Parties. This reporting includes the submission by the Secretariat to the States Parties of certain information to be provided in annual declarations, as well as general information that the Secretariat provides about the results of its verification activities, in accordance with the provisions of the Annex on the Protection of Confidential Information (hereinafter 'the Confidentiality Annex").

Conclusions

39. The First Review Conference, in concluding its review of the general aspects of verification:

(a) called upon States Parties that have not yet done so to complete the national preparations required by the Convention for the receipt of inspections by the OPCW, and to afford full cooperation to OPCW inspection teams, in accordance with the provisions of the Convention;

(b) called upon all States Parties to submit declarations in a complete, accurate, and timely manner, and to amend them promptly as required;

(c) encouraged States Parties to avail themselves of their right to receive and examine declaration data from other States Parties, and to inform themselves about the results of the OPCW's verification activities, in accordance with the provisions of the Convention;

(d) recalled its previous decisions on the declaration of aggregate national data, called upon all States Parties to take the measures necessary to implement these decisions, and called upon the Council to review the progress of implementation, supported by reports by the Secretariat;

(e) called upon the States Parties to work with the Secretariat to clarify any ambiguities contained in their declarations;

(f) encouraged the Secretariat to more effectively apply information technology in the implementation of the verification regime, and encouraged the Secretariat and States Parties to continue cooperating toward the early implementation of a system that, while seeing to it that confidentiality is protected, would allow them, if they so decided, to submit their industry declarations, and to receive the information they are entitled under the Convention to receive from the Secretariat on a routine basis, in electronic form (for example on a CD-ROM);

(g) encouraged the Council and the Secretariat to work together to further improve the submission of information on verification results to the States Parties, *inter alia* by further improving the form and content of the Verification Implementation Report, consistent with the provisions of the Confidentiality Annex;

(h) stressed how important it is for the Secretariat to inform and consult with the Council, in coordination with the States Parties concerned, regarding any adaptation related to the practical implementation of verification measures previously approved by the Council;

(i) called upon the Secretariat to continue its efforts to optimise verification measures, and requested the Council to intensify its study of the issue of verification resource optimisation, aiming at recommendations that should, if possible, be phased in beginning in 2004; and

(j) requested the Council to resolve urgently the development of recommendations on the still-unresolved issues pertaining to the Convention's verification regime that the Convention requires it to adopt, and to submit draft decisions to the Conference as early as possible.

40. The States Parties reaffirmed the obligation to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Convention. The possessor States Parties are fully committed to meeting their destruction obligations and the verification costs as required by the Convention. There has been progress in chemical weapons disarmament. However, there have been difficulties in the destruction of chemical weapons stockpiles, and the Conference has taken action on delays in some States Parties and granted extensions of destruction time limits, as provided for by the Convention.

41. The First Review Conference, whilst reaffirming that the destruction of chemical weapons is the responsibility of the possessor States Parties, called upon States Parties that are in a position to do so, to provide assistance to support the efforts of possessor States Parties that request such assistance in implementing their programmes of chemical weapons destruction.

42. The First Review Conference stressed how important it is that possessor States Parties implement appropriate measures to secure their storage facilities, and to prevent any movement of their chemical weapons out of the facilities, except their removal for destruction or, in accordance with the provisions of the Convention, the removal of Schedule 1 chemicals for use for research, medical, pharmaceutical, or protective purposes.

The OPCW can serve as a forum for consultation and cooperation between the States Parties in this respect.

43. The First Review Conference requested the Council to continue exercising its important role in monitoring progress in the chemical weapons destruction activities. The First Review Conference urged possessor States Parties to provide realistic and required annual chemical weapons destruction plans, and to update these plans as may become necessary.

44. The First Review Conference noted that the declarations provided by the States Parties under Article III, which establish a baseline for measuring progress in the elimination of chemical weapons stockpiles, need to be comprehensive and accurate. The First Review Conference called upon the States Parties to ensure that their declarations under Article III are updated in a timely manner, if and when new information becomes available. The First Review Conference called upon the Secretariat to continue rendering technical assistance to the States Parties on the preparation of chemical weapons declarations, by mutual consent, and to submit proposals to the Council on any measures that may be necessary to maintain the technical competence of the Secretariat in this respect. The First Review Conference encouraged States Parties that are capable of doing so to assist other States Parties in the preparation and submission of declarations and amendments.

45. The First Review Conference reaffirmed that all chemical weapons shall be destroyed, under OPCW verification, in accordance with the provisions of Article IV and Part IV(A) of the Verification Annex to the Convention (hereinafter 'the Verification Annex").

46. The First Review Conference stressed the importance of the effective verification of chemical weapons stockpiles as well as of their destruction. The First Review Conference recognised that this verification can be optimised and its efficiency increased. The Council has begun working on this issue, supported by the Secretariat. Reducing the manpower requirements for the verification of chemical weapons destruction operations was identified as the issue that could have the greatest impact on optimising verification resource use. Within the context of the discussions under agenda item 7(c) (ii), the First Review Conference recommended that the Secretariat continue working with the Council, with the appropriate involvement of the States Parties possessing chemical weapons stockpiles and destroying them, towards mutually agreeable solutions for optimising chemical weapons verification, whilst maintaining the effectiveness of verification activities. The First Review Conference requested the Council to oversee this work, and to submit to the Conference proposals for recommendations and decisions, with a view toward their implementation starting in 2004.

47. The First Review Conference noted that the Convention provides for States Parties to implement verification activities under bilateral or multilateral agreements, provided that such agreements are, *inter alia*, consistent with the verification provisions of the Convention (paragraphs 13 and 16, respectively, of Articles IV and V). The First Review Conference noted that States Parties, under the purview of the Council, can further examine possibilities for concluding bilateral or multilateral agreements in this regard.

48. The First Review Conference recalled its previous decisions on the mechanism for payment of verification costs by the inspected States Parties under Articles IV and V.

The First Review Conference noted the efforts made by the States Parties concerned and by the Secretariat to effectively implement this mechanism. The First Review Conference called upon the Secretariat to ensure that invoices for relevant verification expenses under Articles IV and V are submitted to the possessor States Parties in a timely manner. The First Review Conference called upon the States Parties to pay Article IV and V verification costs in a timely manner, and called upon the Secretariat and the Council to monitor the efficacy of the steps taken to address problems related to the Article IV and V payment mechanism, and to implement any further measures to be agreed upon.

49. The First Review Conference reaffirmed the obligation to destroy or otherwise dispose of old chemical weapons, in accordance with the Convention, and noted the progress made in this regard.

50. The States Parties, furthermore, attached importance to the destruction of abandoned chemical weapons and to the cooperation that has developed between the Territorial and Abandoning States Parties. Such cooperation would also be necessary in regard to any abandoned chemical weapons discovered in the future.

51. The First Review Conference reviewed progress in relation to the destruction of chemical weapons production facilities, and noted with satisfaction that the elimination of CW production capabilities has progressed as required by Part V of the Verification Annex. The conversion of former chemical weapons production facilities for purposes not prohibited is permitted by the Convention, in exceptional cases of compelling need.

52. The First Review Conference reviewed the progress made in the field of conversion of former CW production facilities for purposes not prohibited by the Convention. The First Review Conference confirmed the States Parties' commitment to complete conversion as early as possible and to keep the Secretariat and the Council informed about the progress being made. The First Review Conference noted the intention of the Secretariat to inspect, soon after 29 April 2003, all chemical weapons production facilities that are subject to conversion for purposes not prohibited by the Convention, but that have not yet been certified as completely converted, and to report to the Council about the conversion status of each of these facilities.

53. The First Review Conference recalled that, after conversion of former chemical weapons production facilities for purposes not prohibited has been completed, these facilities remain liable to on-site inspection in accordance with paragraph 85 of Part V of the Verification Annex for a period of 10 years after the certification by the Director-General of their conversion. The First Review Conference also noted that, in accordance with the provisions of the Convention, these converted facilities shall be no more capable of being reconverted into a chemical weapons production facility than any other facility used for industrial, agricultural, research, medical, pharmaceutical, or other peaceful purposes not involving chemicals listed in Schedule 1 of the Annex on Chemicals. The First Review Conference recalled that the States Parties that have converted facilities are required to report annually on the activities at these facilities. Upon completion of the 10-year period following the completion of conversion, the Council shall decide on the nature of continued verification activities. The First Review Conference reaffirmed that future planning of verification measures needs to take account of these requirements for the verification of converted chemical weapons production facilities, and requested the Secretariat to submit a concept for these verification measures to the

Council for consideration and to enable the Council to submit proposals for recommendations or decisions that may be needed to the Conference.

54. The First Review Conference recalled the need to adopt decisions on a number of unresolved issues related to chemical weapons, old chemical weapons produced after 1925, abandoned chemical weapons, and chemical weapons production facilities. It noted that the Council has included several urgent and long-standing issues in its work programme, and requested the Council to continue working towards an early resolution of these issues.

Agenda item 7(c) (iv): Activities not prohibited under the Chemical Weapons Convention

Overview

55. The First Review Conference reaffirmed the right of the States Parties, subject to the provisions of the Convention, to develop, produce, otherwise acquire, retain, transfer, and use toxic chemicals and their precursors for purposes not prohibited under the Convention. The First Review Conference affirmed that the OPCW continues to provide a forum for discussing matters related to the observance of these rights among States Parties.

56. The First Review Conference reaffirmed that the provisions of the Convention related to activities not prohibited under it shall be implemented in a manner that avoids hampering the economic and technological development of the States Parties and international cooperation in the field of chemical activities not prohibited by the Convention, including the international exchange of information and chemicals and equipment for the production, processing or use of chemicals for purposes not prohibited by the Convention.

57. The First Review Conference reaffirmed the obligation of the States Parties to adopt the necessary measures to ensure that toxic chemicals and their precursors are developed, produced, otherwise acquired, retained, transferred, or used within their territories or in any other places under their jurisdiction or control, only for purposes not prohibited by the Convention.

58. The First Review Conference noted that progress has been made since the entry into force of the Convention in relation to the implementation of an effective verification regime in accordance with Article VI of the Convention. Major achievements in this connection include the submission of initial and annual declarations, and the conduct of on-site inspections by the Secretariat to verify that activities at declared chemical facilities were consistent with the obligations undertaken under the Convention, and consistent with the information to be provided in declarations.

59. The First Review Conference reaffirmed the importance of national implementation as an essential element of the implementation of the verification and other provisions of Article VI and Parts VI through IX of the Verification Annex. It addressed this issue in detail under agenda item 7(c) (v). The First Review Conference encouraged States Parties to share their experiences about the most effective ways to implement the Convention, and to cooperate in the resolution of issues they may encounter in the implementa-

tion of these provisions. The First Review Conference encouraged the Secretariat to continue providing technical assistance to States Parties, by mutual consent, in relation to the identification of declarable facilities, the submission of declarations under Article VI, the receipt of OPCW inspections and other technical questions that may arise in the implementation of the provisions related to activities not prohibited under the Convention.

Declarations

60. In relation to initial declarations, the First Review Conference recalled the serious concern it had, for several years after the entry into force of the Convention, about the level of implementation by all States Parties of this important provision, in particular in relation to the timeliness of submissions. The First Review Conference emphasised the importance of the timely submission of accurate and complete initial declarations by all States Parties, including by States joining the treaty in the future.

61. The First Review Conference noted that significant progress had been made since the entry into force of the Convention in relation to agreeing on common guidelines and criteria for the submission of declarations under Article VI. However, some important issues remain unresolved. The First Review Conference urged the Council to continue, with the support of the Secretariat, to work towards the early resolution of the unresolved Article VI declaration issues.

62. The First Review Conference stressed how important it is that all States Parties with facilities declarable under Article VI submit annual declarations in an accurate, complete, and timely manner. The same applies to the other declarations required under Article VI (aggregate national data, and notifications and declarations of transfers of Schedule 1 chemicals).

63. Furthermore, and recalling the decision taken by the Conference at its First Session on changes to annual declarations (C-I/DEC.38, dated 16 May 1997), the First Review Conference urged States Parties to implement, on a voluntary basis, the recommendation contained in paragraph 5 of the Annex to this decision to inform the Secretariat of cases when plants or plant sites that have been declared to undertake activities in relation to Schedule 2 or Schedule 3 chemicals cease to do so, and requested the Council to consider whether to require such submissions from States Parties.

Developments in science and technology

64. The First Review Conference considered scientific and technological developments in regard to activities not prohibited under the Convention, and recognised that the chemical industry is subject to change over time. The OPCW should therefore adapt its verification regime for the chemical industry so as to maintain its effectiveness and relevance, and its consistency with the inspection procedures established by the Convention.

65. The First Review Conference noted the Note of the Director-General submitting the Report of the Scientific Advisory Board to the First Review Conference (RC-1/DG.2, dated 23 April 2003), and recalled in this context its recommendation contained in paragraph 30 above.

Schedule 1 chemicals and facilities

66. In relation to the conduct of inspections at Schedule 1 facilities, the First Review Conference noted that all these facilities have been subjected to systematic inspections as required by the Convention. The First Review Conference recalled information submitted by the Secretariat indicating that only a small number of these facilities were at this moment involved with the production or storage of significant amounts of Schedule 1 chemicals. The provisions of the Convention on the number, intensity, duration, timing, and mode of inspections at Schedule 1 facilities are based on the quantities of Schedule 1 chemicals produced, the characteristics of the facilities, and the nature of the activities carried out there (paragraphs 23 and 30 of Part VI of the Verification Annex). Guidelines on this matter, however, have yet to be considered and approved by the Conference. The First Review Conference noted that these guidelines would assist in the future optimisation of the use of resources set aside for verification under Part VI of the Verification Annex, and requested the Council, assisted by the Secretariat, to prepare these guidelines for consideration and adoption as early as possible.

67. The First Review Conference also addressed transfers of Schedule 1 chemicals. In this context, it received a proposal to introduce a *de minimis* rule for the notification of transfers of Schedule 1 chemicals, and requested the Council to study this issue and, if agreed, to prepare a proposal for consideration by the Conference at one of its forthcoming annual sessions.

The verification regime in the chemical industry and the re-examination of Part IX of the Verification Annex

68. In relation to inspections of Schedule 2 facilities, the First Review Conference noted that almost all initial inspections had already been conducted, and that re-inspection had begun. Inspections of Schedule 3 facilities had been conducted at 100 facilities as at 31 December 2002 (23% of the inspectable facilities). Inspections of other chemical production facilities producing discrete organic chemicals, including PSF chemicals, commenced in 2000 as provided for by the Convention. Ninety-seven other chemical production facility inspections had been completed by 31 December 2002.

69. In accordance with the provisions of the Convention, inspections of other chemical production facilities commenced only in May 2000. The inspections conducted have indicated the usefulness of OCPF inspections and their value for increasing confidence in the chemical activities of the States Parties. At the same time, the current selection algorithm does not use all the weighting factors provided for by the Convention and must be further improved. The First Review Conference also received the recommendations of the Director-General on the observations made by the SAB on the nature of other chemical production facilities (RC-1/DG.2, dated 23 April 2003). The First Review Conference agreed that there was a need to:

(a) fully implement all parts of the selection mechanism provided for in paragraph 11 of Part IX of the Verification Annex;

(b) reach early agreement on what basis (e.g., regional) proposals by States Parties for inspection should be presented to be taken into account as a weighting factor in the selection process specified in paragraph 11 of Part IX of the Verification Annex;

(c) take account of the other chemical production facilities declared by the States Parties, of their technical characteristics and activities, and of trends in science and technology that impact on these parameters, to increase the number of other chemical production facility inspections to the extent found appropriate as the budget process unfolds in ensuing years; and

(d) review the conduct of other chemical production facility inspections to ensure that they are conducted in a way that efficiently fulfils the inspection aims set out by the Convention.

The First Review Conference requested the Council to continue working on these issues, together with the Secretariat, and to prepare recommendations for the Conference's consideration at an early date.

70. In relation to the verification regime for the chemical industry as a whole, the First Review Conference confirmed the validity of the overall balance provided for in the Convention. The States Parties also affirmed the need to ensure the adequate frequency and intensity of inspections for each category of declared facilities under Article VI, taking into account, as relevant, all factors envisaged in the Convention, including risk to the object and purpose of the Convention, activities, characteristics, and equitable geographical distribution.

71. The First Review Conference concluded that the allocation of resources to the verification regime for the chemical industry needs to be further optimised, taking due account of the nature of the declared facilities, the inspection experience gathered, developments in science and technology, and the principles set out in Article VI. To this end, the First Review Conference encouraged the Council, assisted by the Secretariat, to work toward:

(a) resolving outstanding chemical industry cluster issues and submitting recommendations to the Conference at an early date;

(b) improving the submission and handling of industry declarations (including, *inter alia*, common criteria and standards, simplified declaration forms, and the submission of declaration data in electronic form);

(c) refining inspection conduct to improve consistency, efficiency and effectiveness (including, *inter alia*, a common approach to verifying the absence of Schedule 1 chemicals at inspected plant sites, the simplification of the format used to record preliminary findings, and sampling and analysis procedures);

(d) providing guidance to the Secretariat in respect to reporting on verification results in the chemical industry in order to increase the utility of the information provided to the States Parties; and

(e) studying the need for a recommendation about the future treatment of salts of Schedule 1 chemicals that are not explicitly mentioned in Schedule 1.

Transfer regulations

72. In relation to transfers of scheduled chemicals to or from States not Party, the First Review Conference recalled the prohibitions on any such transfers of Schedule 1 chemicals and, since 29 April 2000, of Schedule 2 chemicals. The First Review Conference

urged all States Parties to fully and effectively implement these prohibitions, including by enacting the necessary legislation, and to share experiences about the implementation of these provisions. The First Review Conference noted the impact that the full and effective implementation of these provisions can have on universality.

73. The question of whether there is a need for other measures in relation to transfers of Schedule 3 chemicals to States not Party remains under consideration in the Council. The First Review Conference reviewed this issue in the wider context of implementing effective transfer controls vis-à-vis States not Party. It concluded that all States Parties should take the necessary measures to ensure the full implementation of the Convention's requirement for end-use certification by recipient States not Party. This would be important for the consideration of potential non-proliferation benefits, the impact on universality, and the economic consequences of any other measures in relation to transfers of Schedule 3 chemicals. The First Review Conference requested the Council to continue working towards an early resolution of these issues, and to submit a recommendation on this matter to the next regular session of the Conference.

Agenda item 7(c) (v): National implementation measures

74. The First Review Conference affirmed that national implementation is one of the essential conditions for the functioning of the Convention and for its full, effective, and non-discriminatory implementation.

75. National implementation is also important in relation to the ability of the Convention to respond to changes in the security environment or in science and technology that may affect the Convention. It contributes to meeting new challenges, including the possible use of toxic materials by non-state actors such as terrorists.

76. The First Review Conference noted that some progress had been made since the entry into force of the Convention in relation to the establishment or designation of National Authorities. One hundred and fifteen States Parties have now notified the OPCW of the establishment or designation of their National Authority. The First Review Conference noted with concern, however, that a large number of States Parties have yet to designate or establish a National Authority, and agreed that this situation needed urgent attention.

77. The adoption, in accordance with each State Party's constitutional process, of implementing legislation including penal legislation is an important State Party responsibility. The First Review Conference took note of the current status of national implementation measures. A major concern was the fact that a large number of States Parties had still not notified the OPCW of the legislative and administrative measures they had taken to implement the Convention, as required under paragraph 5 of Article VII. Furthermore, the information provided by the Secretariat indicates that an even larger number of States Parties have not adopted legislation covering all areas essential to adequate national enforcement of Convention obligations. Some States Parties may thus not be able to enforce the prohibitions required by the Convention, to provide legal cooperation to other States Parties, or to afford the appropriate form of legal assistance to facilitate the implementation of the obligations assumed under paragraph 1 of Article VII.

78. The First Review Conference noted that the Council has taken up the matter of implementing legislation, most recently in the context of its working group on terrorism.

The First Review Conference noted that, while the threat of the use by terrorists of toxic chemicals has given added importance and urgency to the need to enact implementing legislation, the requirement that the States Parties adopt the necessary legislative and administrative measures to implement the Convention has its origin in the Convention itself.

79. The First Review Conference noted that a valuable aspect of national implementation measures involves ensuring that the chemical industry, the scientific and technological communities, the armed forces of the States Parties, and the public at large are aware of and knowledgeable about the prohibitions and requirements of the Convention.

80. The First Review Conference welcomed the efforts made by States Parties to assist each other in the development and enactment of implementing legislation, and in sharing experiences. The First Review Conference noted the value of both bilateral assistance, and networking within and among regions, especially for States Parties with limited resources.

81. The First Review Conference also noted that the Secretariat has developed a programme for implementation support aimed at providing technical assistance and technical evaluation in the implementation of the provisions of the Convention to States Parties, upon request. These include, *inter alia*, the provision of technical assistance and technical evaluation on-site, the training of National Authority personnel, the rendering of legal assistance, projects aimed at national capacity-building in areas relevant to the implementation of the Convention, support for regional networking among National Authorities, the development of tools and documentation to assist National Authorities, and other projects. The First Review Conference encouraged States Parties and the Secretariat to consult so as to further enhance the utility and effectiveness of these programmes.

82. The First Review Conference further agreed that the availability of effective support in the area of national implementation measures, rendered either by individual States Parties bilaterally or by the Secretariat, or in joint projects involving States Parties and the Secretariat, can help to promote the universality of the Convention.

83. The First Review Conference called upon States Parties that have not already done so to inform the OPCW by the next regular session of the Conference of the status of their adoption of the legislative and administrative measures necessary for or taken by them to implement the Convention, of any problems they have encountered, and of any assistance they require. Having considered the importance of national implementation measures for the proper functioning of the Convention, and having reviewed the activities undertaken by the States Parties as well as the Secretariat, the First Review Conference:

(a) called upon States Parties that still have to designate or establish their National Authorities to do so as a matter of priority, and to notify the Secretariat accordingly;

(b) called upon States Parties that have yet to prepare and enact implementing legislation, including penal legislation, and to adopt the required administrative and enforcement measures, either in whole or in part, to complete their internal preparations as soon as possible;

(c) called upon States Parties to provide the OPCW with the full text of their national implementing legislation, including updates, or, in the case of States Parties with a monist legal system, with information on the specific measures they have taken to implement the Convention;

(d) encouraged States Parties to take measures to raise awareness about the prohibitions and requirements of the Convention, *inter alia* in their armed forces, in industry, and in their scientific and technological communities;

(e) encouraged States Parties to lend advice, upon request, to other States Parties in drafting and adopting national measures necessary to implement the Convention, *inter alia* to ensure that the laws reflect the comprehensive nature of the Convention by covering all activities that are to be prohibited or required in accordance with the Convention, and that involve the use of any toxic chemicals and their precursors; to cover the provision of annual declarations on past and anticipated activities; to ensure the implementation of the provisions related to transfers of scheduled chemicals; and to cover the annual submission of information on national protective programs in accordance with paragraph 4 of Article X;

(f) encouraged the Secretariat to further develop and improve its implementation support programme, including by mobilising States Parties' efforts so as to provide, upon request and within the limits on available resources, technical assistance and technical evaluations to States Parties in the implementation of the provisions of the Convention, including in the areas identified in subparagraph 83(e) above;

(g) urged States Parties that have not yet done so to review their existing regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of the Convention;

(h) agreed to develop, at its next regular session, a plan of action based on a recommendation from the Council regarding the implementation of Article VII obligations, with the objective of fostering the full and effective implementation of the Convention by all States Parties;

(i) called upon the Council, in cooperation with the Secretariat, to closely monitor progress toward achieving effective implementation of Article VII obligations by all States Parties, and, at an appropriate time, to make suitable recommendations to the Conference regarding measures to ensure compliance with Article VII; and

(j) encouraged the Secretariat as well as the States Parties to develop partnerships with relevant regional organisations and agencies that could render support to States Parties in their implementation work.

Agenda item 7(c) (vi): Consultation, cooperation, and fact-finding

84. The First Review Conference reaffirmed the commitment of the States Parties to consult and cooperate, directly among themselves or through the OPCW, or by using other appropriate international procedures, including those within the framework of the UN and in accordance with its Charter, on any matter that may be raised relating to the object and purpose, or the implementation of the provisions of the Convention.

85. The First Review Conference recalled that, without prejudice to the right of any State Party to request a challenge inspection, States Parties should, whenever possible, first make every effort to clarify and resolve, through the exchange of information and consultation among themselves, any matter which may cause doubt about compliance with the Convention, or which gives rise to concerns about a related matter which may be considered ambiguous.

86. The First Review Conference noted that bilateral consultations to clarify issues had been used, and that this mechanism was valuable in ensuring compliance with the provisions of the Convention, and in clarifying and resolving concerns. The First Review Conference encouraged the States Parties to make full use of this bilateral-consultation mechanism.

87. The First Review Conference noted that the Council had received no clarification requests under paragraphs 3 to 7 of Article IX since entry into force. The First Review Conference reiterated that the Convention provides for all necessary arrangements to receive and expeditiously deal with any clarification request that a State Party may decide to submit in accordance with the applicable provisions of Article IX.

88. The First Review Conference noted that no challenge inspection had been requested since the entry into force of the Convention. The First Review Conference reaffirmed the right of each State Party to request an on-site challenge inspection, as provided for by the Convention, for the sole purpose of clarifying and resolving any questions concerning possible non-compliance with the provisions of the Convention. The First Review Conference also reaffirmed the right and obligation of each inspected State Party to make every reasonable effort to demonstrate its compliance, its obligation to provide access within the requested site for the sole purpose of establishing facts relevant to the compliance concern, and its right to take measures to protect sensitive installations and to prevent disclosure of confidential information and data not related to the Convention.

89. The First Review Conference recalled the provisions of the Convention intended to avoid abuse of the challenge inspection mechanism, and expressed its confidence that the States Parties will continue to uphold the value of the challenge inspection mechanism for compliance and compliance assurance, and at the same time keep any challenge inspection request within the scope of the Convention, and refrain from requests that are unfounded or abusive.

90. The First Review Conference noted that a number of issues related to challenge inspections are yet to be resolved. The First Review Conference requested the Council to continue its deliberations in order to expeditiously resolve them.

91. The First Review Conference took note of the preparations that the Secretariat had undertaken since entry into force in order to respond swiftly and effectively to any request for a challenge inspection. The First Review Conference noted the value, to the States Parties as well as the Secretariat, of challenge inspection exercises, and it recalled with appreciation the support provided by States Parties in this respect and invited them to continue to offer it in the future. The First Review Conference requested the Secretariat to continue maintaining a high standard of readiness to conduct a challenge inspection in accordance with the provisions of the Convention, to keep the Council informed about its readiness, and to report any problems that may arise in relation to maintaining the necessary level of readiness to conduct a challenge inspection.

Agenda item 7(c) (vii): Assistance and protection against chemical weapons

92. The First Review Conference reaffirmed the continuing relevance and importance of the provisions of Article X, and of the activities of the OPCW in relation to assistance and protection against chemical weapons. These have gained additional relevance in today's security context. The First Review Conference reaffirmed the rights of the States Parties to conduct research into, develop, produce, acquire, transfer, or use means of protection against chemical weapons, for purposes not prohibited under the Convention.

93. The First Review Conference also noted concerns related to the possibility that chemical facilities may become the object of attack, including by terrorists, which could lead to deliberate releases or theft of toxic chemicals. The First Review Conference was cognisant of the fact that some States Parties had taken measures to minimise these risks, and in this context recalled that the OPCW had been established as a forum for consultation and cooperation among the States Parties. States Parties could, if they so decided, make use of this framework to exchange experiences and to discuss issues related to this matter.

94. In relation to the annual provision by each State Party, for transparency purposes, of information on its national programme related to protective purposes, the First Review Conference noted that only 42 States Parties had submitted such information since the entry into force of the Convention. The First Review Conference reaffirmed the obligation of the States Parties to fully implement this requirement. The implementation of the requirement to submit this information annually would benefit from an early agreement on the procedures for such submissions. The First Review Conference requested the Council to expeditiously develop and submit for adoption the procedures called for by the Convention.

95. The First Review Conference requested the Secretariat to continue working on the OPCW data bank on protection, invited States Parties to contribute to the development of this data bank by submitting freely available information concerning various means of protection against chemical weapons and other relevant material for inclusion in the data bank, and encouraged States Parties to render support to the Secretariat in respect to the development, implementation, and maintenance of a database. The First Review Conference expressed concern about the hitherto-slow progress in establishing this data bank.

96. In relation to the provision of expert advice by the Secretariat to States Parties that wish to further develop and improve their protective capacity, the First Review Conference noted the work of the OPCW protection network. The First Review Conference also noted that the number of requests for such expert advice received from States Parties recently exceeded the capacity of the Secretariat. The First Review Conference reiterated that the Secretariat must respond to such requests in an effective manner, within the limits on the resources available to it. Furthermore, States Parties should, on a voluntary basis, provide support to the OPCW so it can respond more effectively to requests for expert advice.

97. The First Review Conference noted with appreciation the measures elected by States Parties in relation to how they would provide assistance through the OPCW. It noted with concern, however, that only 63 States Parties had elected one or more such meas-

ures, and called upon the remaining States Parties to take the measures necessary to implement this requirement of the Convention.

98. The First Review Conference noted the need for the Secretariat to evaluate the assistance offers made in accordance with subparagraph 7(c) of Article X, in order to identify gaps, redundancies, and incompatibilities, and to help minimise the resource requirements for the OPCW. The First Review Conference requested the Secretariat to keep the policy-making organs informed about the status of assistance pledges by States Parties, and about any problems requiring attention and resolution.

99. In relation to a response to an assistance request in accordance with paragraph 8 of Article X, the First Review Conference noted that progress had been made in relation to the development and adoption of an operational concept of assistance. The First Review Conference noted in this context the OPCW's readiness for the delivery of assistance in the case of the use or threat of use of chemical weapons.

100. The First Review Conference stressed the importance of investigations of alleged use or threat of use of chemical weapons. For such situations, the OPCW must have the capacity, and be ready at all times, to investigate the need for follow-on action by the OPCW and by individual Member States, and to facilitate the delivery of assistance. The First Review Conference noted that the Secretariat had established the Assistance Coordination and Assessment Team (ACAT), the overall function of which had yet to be defined. This was an important and urgent matter. ACAT has been tested in assessment mode in exercises. The First Review Conference requested the Council to take up the possible function of the OPCW in facilitating the efficient delivery of assistance. In this context, the need was stressed for the OPCW to coordinate its activities in an assistance operation with other international agencies involved in an emergency response, in particular the UN Office for the Coordination of Humanitarian Affairs. Three principles were highlighted by the First Review Conference:

(a) the principle that the OPCW's role in such an emergency-response context should be firmly based on its mandate as provided by the Convention and on its particular experience and competence;

(b) the need to avoid duplication of efforts; and

(c) the need for coordination among all the agencies involved.

101. The First Review Conference encouraged the Secretariat to identify and engage relevant international organisations that are likely partners in situations where the OPCW needs to respond to an assistance request by a Member State, and to submit proposals to the policy-making organs.

102. The First Review Conference stressed the comprehensive nature of the definition of 'Assistance" contained in paragraph 1 of Article X, and the right of any State Party to conduct research into, develop, produce, acquire, transfer, or use means of protection against chemical weapons for purposes not prohibited by the Convention.

103. The First Review Conference reaffirmed the undertaking of the States Parties to facilitate, and their right to participate in, the fullest possible exchange of equipment, material, and scientific and technological information concerning means of protection against chemical weapons.

Agenda item 7(c) (viii): Economic and technological development

104. The First Review Conference reaffirmed the importance of the provisions of Article XI of the Convention relating to the economic and technological development of the States Parties. It recalled in this context that the full, effective, and non-discriminatory implementation of these provisions contributes to universality.

105. The First Review Conference reaffirmed the commitment of the States Parties to fully implement the provisions of the Convention on economic and technological development. It reaffirmed that the States Parties have the obligation to undertake to facilitate, and have the right to participate in, the fullest possible exchange of chemicals, equipment, and technical information relating to the development and application of chemistry for purposes not prohibited by the Convention. The First Review Conference stressed that the international cooperation programmes of the OPCW should also make a contribution to the development of States Parties' capacities required to implement the Convention.

106. The First Review Conference reaffirmed that the Convention shall be implemented in a manner that avoids hampering the economic or technological development of States Parties, and international cooperation in the field of chemical activities for purposes not prohibited by the Convention, including the international exchange of scientific and technical information, and chemicals and equipment for the production, processing, or use of chemicals for purposes not prohibited under the Convention.

107. The First Review Conference reaffirmed the provision of Article XI that the States Parties shall:

(a) not maintain among themselves any restrictions, including those in international agreements, incompatible with the obligations undertaken under the Convention, which would restrict or impede trade and the development and promotion of scientific and technological knowledge in the field of chemistry for industrial, agricultural, research, medical, pharmaceutical, and other peaceful purposes;

(b) not use the Convention as grounds for applying any measures other than those provided for, or permitted, under the Convention nor any other international agreement for pursuing an objective inconsistent with the Convention; and

(c) undertake to review their existing national regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of the Convention.

The First Review Conference called upon the States Parties to fully implement these provisions of the Convention. It also urged the Council to continue its facilitation efforts to reach early agreement on the issue of the full implementation of Article XI, taking into account earlier and recent proposals submitted.

108. The First Review Conference stressed the importance of international cooperation and its valuable contribution to the promotion of the Convention as a whole, including its universality, and in this context it:

(a) reaffirmed the commitment of the Conference to foster international cooperation for peaceful purposes in the field of chemical activities, and further reaffirmed its desire to promote international cooperation and exchange of scientific and technical information in the field of chemical activities;

(b) stressed the desirability of cooperation projects among States Parties in areas related to the peaceful uses of chemistry. The OPCW could facilitate the provision of expert advice on the peaceful uses of chemistry, as required and upon request, to and among States Parties;

(c) recognised the importance of assistance and national capacity-building in the field of chemical activities for peaceful purposes, particularly as it applies to the implementation of the Convention. An important component of these activities involves facilitating the provision of direct support on-site-bilaterally, regionally, or through or by the OPCW, for example, by experts from other States Parties or the Secretariat-to assist National Authorities with specific implementation tasks. The Secretariat should, in consultation with the States Parties, review and develop existing implementation support programmes;

(d) noted the relevance of the existing International Cooperation and Assistance Programmes and recalled that all OPCW programmes should be improved through evaluation to optimise resource use and effectiveness, with consultations between the States Parties and the Secretariat aimed at achieving a clear understanding of the competencies available, the needs of the States Parties, and the requirements of the Convention;

(e) recognised the need for adequate resources, and concluded that decisions on adequate budgetary allocations for international cooperation should be based on the States Parties' needs, and how the programme addresses these needs, bearing in mind overall resource constraints;

(f) emphasised how important it is that the OPCW coordinate its activities with those of other relevant international and regional organisations, as appropriate, in order to build on existing competencies, develop synergies, and avoid duplication of efforts. The OPCW should further integrate itself as a partner in the establishment of international programme-coordination mechanisms in the field of international cooperation, assistance, and capacity-building related to the peaceful uses of chemistry;

(g) encouraged the OPCW to continue to establish relations and partnerships, as appropriate, with relevant regional and international organisations, including chemical industry associations and civil society, in order to promote universal adherence and awareness of the objectives and purposes of the Convention; and

(h) encouraged the OPCW to continue to develop its relationship with the private sector and in particular maintain, through the States Parties concerned, a productive and lasting partnership with the chemical industry, *inter alia* so that the industry the world over stays aware of the Convention and remains committed to its full implementation.

109. The First Review Conference concluded that there was a need to develop guiding principles to be applied when determining international-cooperation programmes. These guiding principles should then be taken into account by the Secretariat when it is further developing proposals for such programmes. The Council should elaborate such guidelines on international cooperation programmes, and apply them when evaluating both reports by the Secretariat on existing programmes, and proposals it makes for new ones.

Agenda item 7(c) (ix): Final clauses: Articles XII to XXIV

110. The First Review Conference reaffirmed the continued relevance of the provisions of Articles XII through XXIV of the Convention.

Agenda item 7(c) (x): The protection of confidential information

111. The First Review Conference reiterated the importance that it attaches to the need for the OPCW to thoroughly protect confidential information, in accordance with the provisions of the Convention. The OPCW remains strongly committed to the principles and provisions set out in the Convention in relation to the protection of confidentiality, in particular in the Confidentiality Annex. The First Review Conference recalled, in this context, the important role of the Director-General in ensuring the protection of confidential information, as well as the responsibility of each staff member of the Secretariat to comply with all rules and regulations pertaining to the protection of confidential information.

112. The First Review Conference noted that the Secretariat continues to improve the implementation of the confidentiality regime in order to avoid breaches of confidentiality. There have been incidents, but these have not compromised the effectiveness of the OPCW's regime to protect confidentiality. The strict implementation of the OPCW's confidentiality procedures should, however, be further improved.

113. Proper conduct on the part of staff is essential to the effective implementation of a robust confidentiality regime, and the First Review Conference underlined the need for adequate training.

114. The First Review Conference stressed the importance of the procedures to be applied in cases of alleged breaches of confidentiality. The First Review Conference reaffirmed, furthermore, the important role of the Commission for the settlement of disputes related to confidentiality (hereinafter 'the Confidentiality Commission") in settling any dispute related to breaches in confidentiality and involving both a State Party and the OPCW.

115. The First Review Conference noted that only 44 States Parties had, as required by the Confidentiality Annex, provided details, at the request of the OPCW, on their handling of information it had provided to them. The First Review Conference urged States Parties to provide that information expeditiously, as requested by the Secretariat.

116. The First Review Conference took cognisance of the fact that 85% of the information submitted to the Secretariat had been classified as confidential by the originating States Parties. The First Review Conference requested the Council, assisted by the Secretariat, to study the situation in relation to the classification of information held by the OPCW. The First Review Conference encouraged the Secretariat and the States Parties to review their respective practices in assigning levels of classification to such information, and if possible, and in accordance with the State Party's confidentiality procedures, to reduce the classification level they assign to such information, in order to increase work efficiency and ensure the smooth functioning of the system to protect confidentiality.

117. The First Review Conference recalled that, following an external security audit, the Secretariat was operating a Secure Critical Network (SCN) for the processing and storage of confidential information related to the verification activities of the OPCW. With the support of States Parties, and taking account of the advice rendered by the external security audit team, the Secretariat is continuing its work towards the development of a relational-database management system to be operated on the SCN to support verification activities. The First Review Conference noted the security audit team recommendation to adopt the ISO-17799 information-security management standard, and requested the Secretariat to evaluate what resources would be required to do this, and to inform the Council of its findings.

118. The First Review Conference noted that current confidentiality guidelines provide neither for the destruction of confidential documents and other data, including those kept on the Secretariat's SCN, nor for the downgrading of their classification levels over the long term. The First Review Conference encouraged the OPCW to take steps to reach agreement on developing and implementing guidelines regarding the long-term handling of confidential information.

119. The First Review Conference noted the need to ensure that the conditions in relation to the protection of confidentiality of information are met when the OPCW proceeds to the submission of declarations in electronic form (e.g., on CD-ROM; see also paragraph 39(f) above).

Agenda item 7(d): The functioning of the Organisation for the Prohibition of Chemical Weapons

120. The States Parties have established the OPCW to achieve the object and purpose of the Convention, to ensure the implementation of its provisions, including those for international verification of compliance with it, and to provide a forum for consultation and cooperation among the States Parties. Its effective functioning has a direct impact on the operation of the Convention.

121. The work of the policy-making organs is an important aspect of the OPCW's effective functioning. They provide policy guidance to the OPCW, and the effectiveness of their work is essential to the involvement of all States Parties in the work of the OPCW. The First Review Conference called upon all States Parties to fully participate in the activities of the OPCW's policy-making organs.

122. The Council, as part of its powers and functions under the Convention, promotes the effective implementation of the Convention and compliance with it, supervises the activities of the Secretariat, cooperates with the National Authorities of the States Parties, facilitates consultation and cooperation among them, and reports to the Conference. It is therefore especially important that the Council function effectively. The First Review Conference noted how important it was for the Chairperson and Vice-Chairpersons of the Council to be engaged with the work of the facilitation groups. The First Review Conference also noted that focused agendas for both the formal meetings and the intersessional consultations of the Council were required in order for the Council to make decisions effectively.

123. The First Review Conference expressed concern about delays in the Council's implementation of Conference decisions on the resolution of unresolved issues. The

First Review Conference noted that the Council had included important, long-standing, unresolved issues in its work programme, and urged it to increase momentum and strive to conclude all unresolved issues.

124. The First Review Conference reviewed the functioning of the subsidiary advisory bodies, and noted the following:

(a) The Confidentiality Commission has been established in accordance with the Convention's Confidentiality Annex and the OPCW Policy on Confidentiality to consider any cases of disputes concerning breaches or alleged breaches of confidentiality involving both a State Party and the OPCW. No such disputes have been brought before the Confidentiality Commission since entry into force. The First Review Conference stressed the need for the Confidentiality Commission to be fully operational at all times, and requested the Secretariat to ensure that all necessary support is provided for this purpose.

(b) The SAB was established by the Director-General following the direction given by the Conference on this matter, to enable him, in the performance of his functions, to render specialised advice in areas of science and technology relevant to the Convention, to the Conference, to the Council, or to the States Parties. The SAB has met in regular annual sessions since 1998, and its work has been supported by temporary working groups on a number of issues submitted to it for its consideration. The First Review Conference noted the advice rendered to the States Parties by the Director-General, following contributions made by the SAB, and recommended that the interaction between the SAB and delegations should continue and be further enhanced, in the context of the Council's facilitation process. The First Review Conference noted, furthermore, that the SAB had prepared a report to the First Review Conference on relevant scientific and technological developments that the States Parties should take into account in their review.

(c) The Advisory Body for Administrative and Financial Matters (ABAF) has been established as a panel of experts of recognised standing to provide expert advice to the OPCW on administrative and financial matters. It has made valuable contributions to the work of the OPCW and prepared recommendations on financial and administrative matters on a regular basis.

125. The Secretariat assists the Conference and the Council in performing their functions, and carries out the verification measures provided for in the Convention, and other functions entrusted to it under the Convention, as well as those functions delegated to it by the Conference or the Council. The First Review Conference noted with satisfaction the dedication of Secretariat staff. The OPCW has at its disposal qualified and trained staff, and equipment and procedures fit for the tasks to be fulfilled under the Convention. Possible future improvements have been identified in the review by the First Review Conference of the operation of the Convention, and are recorded in different parts of this report.

126. The First Review Conference stressed the responsibility of the Director-General, as the head and chief administrative officer of the Secretariat, for the appointment of staff and for the organisation and functioning of the Secretariat. The First Review Conference, furthermore, recalled the provisions of paragraph 44 of Article VIII.

127. The First Review Conference considered the budgetary and financial mechanisms of the OPCW as they have evolved since entry into force. The First Review Conference stressed the need for the Council, with the support of the Secretariat, to continue monitoring and improving the implementation of these mechanisms. The First Review Conference underlined the importance of putting in place a more effective budgetary process, based on early consultations between the Secretariat and the States Parties, on thoughtful consideration and prioritisation of the programme objectives, and on regular assessments of whether these objectives are being met. The First Review Conference encouraged the Director-General to move ahead with the stepwise introduction of results-based budgeting. Furthermore, the First Review Conference noted the need for the Council to accelerate its deliberations on the outstanding issues in relation to the OPCW's Financial Rules.

128. The First Review Conference welcomed the decision by the Council on the effective starting date of tenure of staff, and recalled the Conference's decision at its Second Special Session on 30 April 2003 (C-SS-2/DEC.1, dated 30 April 2003). These decisions will now be implemented, and the First Review Conference stressed the need to monitor the implementation of the OPCW's tenure policy, and the need for regular reporting by the Director-General to the Council on its implementation, and in particular on the implementation of the guiding principles in effecting the turnover of staff. The First Review Conference also noted that the issue of the OPCW's Staff Rules and amendments to Staff Regulation 3.3, and the issue of the classification of posts, remain within the purview of the Council and should be resolved without delay.

129. The First Review Conference reaffirmed the importance to the effective functioning of the Secretariat of the principles set out in the Convention on the employment of staff. The First Review Conference reaffirmed that the paramount consideration in the employment of staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence, and integrity. Due regard shall be paid to the importance of recruiting staff on as wide a geographical basis as possible. Recruitment shall be guided by the principle that the staff shall be kept to the minimum necessary for the proper discharge of the responsibilities of the Secretariat.

130. The First Review Conference stressed that Secretariat staff, and in particular its inspectors, need to keep abreast with developments in science and technology in order to maintain professional excellence and to efficiently discharge their responsibilities. The First Review Conference requested that the Director-General bear these requirements in mind when identifying the future training needs of the Secretariat.

131. The First Review Conference stressed that the Secretariat should seek to apply information technology more efficiently to improve the functioning of the OPCW.

132. The First Review Conference also recalled the Conference's decision on the equal treatment of all official OPCW languages, and requested the Secretariat to continue its efforts to fully implement this decision.

133. The First Review Conference expressed its satisfaction at the excellent relations between the OPCW and the Host Country. The First Review Conference invited the Director-General to report to the Council, as appropriate, on this relationship.

134. The First Review Conference noted the evolving relationships between the OPCW and other international, regional, and sub-regional organisations, and in particular

stressed the importance of the relationship with the UN, as provided for by the Agreement concerning the Relationship between the UN and the Organisation for the Prohibition of Chemical Weapons (EC-MXI/DEC.1, dated 1 September 2000, and C-VI/DEC.5, dated 17 May 2001).

5. Political Declaration of the First Special Session of the Conference of the States Parties to Review the Operation of the Chemical Weapons Convention (9 May 2003)

The States Parties to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (hereinafter "the Convention"), having convened in The Hague for the First Special Session of the Conference of the States Parties to Review the Operation of the Convention (hereinafter "the First Review Conference"), solemnly declare the following:

1. The States Parties reaffirm their commitment to achieving the object and purpose of the Convention, as set out in its Preamble and provisions. The Convention and its implementation contribute to enhancing international peace and security. Its full, universal and effective implementation will exclude completely, for the sake of all humankind, the possibility of the use of chemical weapons, which is prohibited by the Convention. Furthermore, the Convention mandates the elimination of chemical weapons stockpiles and chemical weapons production capacities by all States Parties, aims at chemical weapons non-proliferation and at confidence building among States Parties, establishes an international system for verification of compliance with its provisions, and provides for the fostering of international cooperation and assistance in the peaceful uses of chemistry.

2. The States Parties will continue to take account of developments in science and technology in the implementation of the Convention, in accordance with its provisions.

3. The States Parties reaffirm their commitment to comply with all their obligations under all the provisions of the Convention, and their commitment to implement them fully, effectively, and in a manner which is non-discriminatory and which further enhances confidence among the States Parties and between the States Parties and the Technical Secretariat of the Organisation for the Prohibition of Chemical Weapons (OPCW).

4. The States Parties note that universality of the Convention is fundamental to the achievement of its object and purpose. Much progress has been made since the entry into force of the Convention, to which there are now 151 States Parties. However, serious concerns exist that there remain States not Party to the Convention. The States Parties reaffirm, in particular, that achieving the goals of the Convention requires ratification or accession by those States that cause serious concern. The States Parties pledge to intensify their bilateral and multilateral efforts towards universality of the Convention, and urge all States not Party to join the Convention without delay.

5. The States Parties, recognising the role of the United Nations (UN) in the global fight against terrorism in all its forms and manifestations, stress that the full and effective implementation of all provisions of the Convention is in itself an important contribution to this fight. Universality of the Convention, in conjunction with its full and effective implementation, helps to prevent access to chemical weapons by terrorists.

6. The States Parties reaffirm, in order to resolve any matter which may be raised relating to the object and purpose, or the implementation of the provisions, of the Convention, their undertaking to consult and cooperate, directly among themselves or through the OPCW, or by following other appropriate international procedures.

7. The States Parties, without prejudice to the right to request a challenge inspection, should, whenever possible, first make every effort to clarify and resolve any ambiguity or concern about compliance by exchanging information and by conducting consultations among themselves. The OPCW must ensure that requests for clarification and fact-finding, including requests for challenge inspections that meet the requirements of the Convention, can be dealt with expeditiously and effectively.

8. The States Parties reaffirm the obligation to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Convention. The possessor States Parties are fully committed to meeting their destruction obligations and the verification costs, as required by the Convention. There has been progress in chemical weapons disarmament. However, there have been difficulties in the destruction of chemical weapons stockpiles, and the Conference of the States Parties has taken action on delays in some States Parties and granted extensions of destruction time limits, as provided for by the Convention.

9. The States Parties welcome the cooperation afforded by many States Parties to assist some possessor States Parties in meeting their obligation to destroy their chemical weapons stockpiles, and invite States Parties that are willing and able to do so, upon request, to continue to cooperate in this field, using, as appropriate, relevant international mechanisms.

10. The States Parties reaffirm the obligation to destroy or otherwise dispose of old chemical weapons, in accordance with the Convention, and note the progress made in this regard. The States Parties, furthermore, attach importance to the destruction of abandoned chemical weapons and to the cooperation that has developed between the Territorial and Abandoning States Parties. Such cooperation would also be necessary for any abandoned chemical weapons discovered in the future.

11. The States Parties note that the OPCW has established an effective international verification system based on declarations and on-site inspections. This provides for the systematic verification of chemical weapons stockpiles and chemical weapons production facilities, including their destruction. Furthermore, it provides for the verification of activities not prohibited under the Convention that are of importance to its object and purpose. The effective application of the verification system builds confidence in compliance with the Convention by States Parties. It also provides for challenge inspections as one of the mechanisms for the resolution of concerns about possible non-compliance, and for the investigation of allegations of the use, or threat of use, of chemical weapons.

12. The States Parties stress that this verification system should be applied in a non-discriminatory, efficient, and cost-effective manner, and take into account relevant developments in science, technology and industry, in accordance with the provisions of the Convention.

13. The States Parties underline the importance of, and their commitment to, a credible and effective verification regime related to chemical weapons and their destruction. The same applies to the destruction of chemical weapons production facilities, as well as to converted chemical weapons production facilities. They stress the importance of further assessing the verification regime applied to chemical weapons storage, production and destruction facilities, with a view to optimising verification measures, in accordance with the Convention.

14. The States Parties stress the importance of a credible verification regime related to the chemical industry and other facilities used for purposes not prohibited under the Convention, and of improving its effectiveness and efficiency, with a view to achieving the non-proliferation and confidence-building aims of the Convention, and to contributing to ensuring that toxic chemicals and their precursors are only developed, produced, otherwise acquired, retained, transferred or used for purposes not prohibited by the Convention. The States Parties also affirm the need to ensure adequate inspection frequency and intensity for each category of declared facilities under Article VI, taking into account, as relevant, all factors envisaged in the Convention, including, inter alia, risk to the object and purpose of the Convention, activities, characteristics and equitable geographical distribution.

15. The States Parties underline the importance of providing confidence in the implementation of the Convention by all States Parties, through submitting information to, and receiving information from, the OPCW, subject to the provisions of the Convention, including its Confidentiality Annex.

16. The States Parties stress that national implementation is one of the essential elements for the effective operation of the Convention. The States Parties will make every effort to overcome difficulties and delays in order to fully meet their obligation to adopt, in accordance with their respective constitutional processes, the necessary implementation measures, including penal legislation. They will cooperate with each other, through the OPCW or bilaterally, towards this objective and afford each other the appropriate legal assistance, upon request, to facilitate the adoption of national implementation measures, and will cooperate, as appropriate, to ensure the safety of people and to protect the environment.

17. The States Parties reaffirm that national implementation measures must reflect all relevant provisions of the Convention and the comprehensive nature of its prohibitions, to ensure that they apply to all toxic chemicals and precursors except where intended for purposes not prohibited under the Convention, as long as their types and quantities are consistent with such purposes.

18. The States Parties stress the very important nature of the Convention's provisions on assistance and protection against the use, or threat of use, of chemical weapons. The States Parties will review and, where possible, further enhance the measures they have elected to provide assistance, with a view to ensuring an effective and timely response to any assistance request.

19. The States Parties reaffirm their undertaking to foster international cooperation for peaceful purposes in the field of chemical activities of the States Parties. The States Parties stress the importance of international cooperation and its contribution to the promotion of the Convention as a whole. The States Parties invite the OPCW to further enhance its international cooperation programmes, and to develop partnerships with other relevant international and regional organisations. In this regard, each State Party is encouraged to take into account relevant developments in science, technology and industry for the common benefit, consistent with their applications for purposes not prohibited under the Convention.

20. The States Parties reaffirm their desire to promote free trade in chemicals as well as international cooperation and the exchange of scientific and technical information in the

field of chemical activities for purposes not prohibited under the Convention, in order to enhance the economic and technological development of the States Parties. They also reaffirm their commitment to facilitate the fullest possible exchange of chemicals, equipment and scientific and technical information relating to the development and application of chemistry for purposes not prohibited under the Convention.

21. The States Parties reaffirm their commitment to implement the Convention in a manner which avoids hampering their economic and technological development for purposes not prohibited under the Convention. They further reaffirm their undertaking not to maintain among themselves any restrictions that are incompatible with the obligations undertaken under the Convention, which would restrict or impede trade and the development and promotion of scientific and technological knowledge in the field of chemistry for peaceful purposes.

22. The States Parties pledge to further strengthen the OPCW in order to achieve the object and purpose of the Convention and to ensure the full and effective implementation of its provisions.

23. The First Review Conference expresses its appreciation to the international community, including the UN and other international and regional organisations, the chemical industry sector, non-governmental organisations and civil society, for their active cooperation with, and support for, the work of the OPCW to help fulfil the object and purpose of the Convention.

6. The Australia Group:[1] Guidelines for Transfers of Sensitive Chemical or Biological Items (as of June 2004)

The Government of …has, after careful consideration and consistent with its obligations under the BTWC and the CWC, decided that, when considering the transfer of equipment, materials, and technology that could contribute to chemical and biological weapons activities, it will act in accordance with the following Guidelines.

1. The purpose of these Guidelines is to limit the risks of proliferation and terrorism involving chemical and biological weapons (CBW) by controlling transfers that could contribute to CBW activities by states or non-state actors, consistent with Article III of the Biological Weapons Convention, Article I of the Chemical Weapons Convention, and all relevant United Nations Security Council Resolutions. In accordance with Article X of the Biological Weapons Convention and Article XI of the Chemical Weapons Convention, these Guidelines are not intended to impede chemical or biological trade or international cooperation that could not contribute to CBW activities or terrorism. These Guidelines, including the attached Australia Group (AG) control lists and subsequent amendments thereto, form the basis for controlling transfers to any destination beyond the Government's national jurisdiction or control of materials, equipment, and technology that could contribute to CBW activities. The Government will implement these Guidelines in accordance with its national legislation.

2. These Guidelines will be applied to each transfer of any item in the AG control lists. However, it is a matter for the Government's discretion to determine whether and to what extent to apply expedited licensing measures in the case of transfers to destinations it judges possess consistently excellent non proliferation credentials. Vigilance will be exercised in the consideration of all transfers of items on the Australia Group control lists. Transfers will be denied if the Government judges, on the basis of all available, persuasive information, evaluated according to factors including those in paragraph 3, that the controlled items are intended to be used in a chemical weapons or biological weapons program, or for CBW terrorism, or that a significant risk of diversion exists. It is understood that the decision to transfer remains the sole and sovereign judgment of the Government.

3. In fulfilling the purposes of these Guidelines, national export control legislation, including enforcement and sanctions for violations, plays an important role.

4. To fulfil the purposes of these Guidelines, the evaluation of export applications will take into account the following non-exhaustive list of factors:

a) Information about proliferation and terrorism involving CBW, including any proliferation or terrorism-related activity, or about involvement in clandestine or illegal procurement activities, of the parties to the transaction;

[1] Participants of the Australia Group are: Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Estonia, European Commission, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Cyprus, Republic of Korea, Republic of Turkey, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, United States of America.

b) The capabilities and objectives of the chemical and biological activities of the recipient state;

c) The significance of the transfer in terms of (1) the appropriateness of the stated end-use, including any relevant assurances submitted by the recipient state or end-user, and (2) the potential development of CBW;

d) The assessment of the end-use of the transfer, including whether a transfer has been previously denied to the end-user, whether the end-user has diverted for unauthorized purposes any transfer previously authorized, and, to the extent possible, whether the end-user is capable of securely handling and storing the item transferred;

e) The applicability of relevant multilateral agreements, including the BTWC and CWC;

f) The applicability of relevant multilateral agreements, including the BTWC and CWC.

5. In a manner consistent with its national legislation and practices, the Government should, before authorizing a transfer of an AG-controlled item, either

(a) satisfy itself that goods are not intended for reexport;

(b) satisfy itself that, if reexported, the goods would be controlled by the recipient government pursuant to these guidelines; or

(c) obtain satisfactory assurances that its consent will be secured prior to any retransfer to a third country.

6. The objective of these Guidelines should not be defeated by the transfer of any non-controlled item containing one or more controlled components where the controlled component(s) are the principal element of the item and can feasibly be removed or used for other purposes. (In judging whether the controlled component(s) are to be considered the principal element, the Government will weigh the factors of quantity, value, and technological know-how involved and other special circumstances that might establish the controlled component or components as the principal element of the item being procured.) The objective of these Guidelines also should not be defeated by the transfer of a whole plant, on any scale, that has been designed to produce any CBW agent or Australia Group-controlled precursor chemical.

7. The Government reserves the discretion to:

(a) apply additional conditions for transfer that it may consider necessary;

(b) apply these guidelines to items not on the Australia Group control lists; and

c) apply measure to restrict exports for other reasons of public policy consistent with its treaty obligations.

8. In furtherance of the effective operation of the Guidelines, the Government will, as necessary and appropriate, exchange relevant information with other governments applying the same Guidelines.

9. The Government encourages the adherence of all states to these Guidelines in the interest of international peace and security.

Further provisions applicable to Australia Group Participants

In addition, participants in the Australia Group, consistent with their obligations under the BTWC and CWC and in accordance with their national legislation have, after careful consideration, decided also to give equal respect to the following provisions.

Catch-All

1. Participant states will ensure that their regulations require the following:

(a) an authorisation for the transfer of non-listed items where the exporter is informed by the competent authorities of the Participant State in which it is established that the items in question may be intended, in their entirety or part, for use in connection with chemical or biological weapons activities;

(b) that if the exporter is aware that non-listed items are intended to contribute to such activities it must notify the authorities referred to above, which will decide whether or not it is expedient to make the export concerned subject to authorisation.

2. Participant states are encouraged to share information on these measures on a regular basis, and to exchange information on catch-all denials relevant for the purpose of the Australia Group.

No Undercut Policy

3. In accordance with the Group's agreed procedures, a license for an export that is essentially identical to one denied by another Australia Group participant will only be granted after consultations with that participant, provided it has not expired or been rescinded. Essentially identical is defined as being the same biological agent or chemical or, in the case of dual-use equipment, equipment which has the same or similar specifications and performance being sold to the same consignee. The terms of the Group's 'no undercut policy' do not apply to denials of items under national catch-all provisions.

Common Approaches

4. Australia Group participants implement these Guidelines in accordance with the Group's agreed common approaches on end-user undertakings and chemical mixtures.

Intra EU Trade[1]

5. So far as trade within the European Union is concerned, each member State of the European Union will implement the Guidelines in the light of its commitments as a member of the Union."

[1] This provision applies to members of the European Union.

7. The Australia Group: List of Chemical Weapons Precursors Chemicals (as of November 2004)

Precursor Chemical	**CAS NO.**	**Schedule**
1. Thiodiglycol	(111-48-8)	2 B
2. Phosphorus Oxychloride	(10025-87-3)	3B
3. Dimethyl Methylphosphonate	(756-79-6)	2B
4. Methyl Phosphonyl Difluoride (DF)	(676-99-3)	1B
5. Methyl Phosphonyl Dichloride (DC)	(676-97-1)	2B
6. Dimethyl Phosphite (DMP)	(868-85-9)	3B
7. Phosphorus Trichloride	(7719-12-2)	3B
8. Trimethyl Phosphite (TMP)	(121-45-9)	3B
9. Thionyl Chloride	(7719-09-7)	3B
10. 3-Hydroxy-1-methylpiperidine	(3554-74-3)	Not Listed
11. N,N-Diisopropyl-(beta)-Aminoethyl Chloride	(96-79-7)	2B
12. N,N-Diisopropyl-(beta)-Aminoethane Thiol	(5842-07-9)	2B
13. 3-Quinuclidinol	(1619-34-7)	2B
14. Potassium Fluoride	(7789-23-3)	Not Listed
15. 2-Chloroethanol	(107-07-3)	Not Listed
16. Dimethylamine	(124-40-3)	Not Listed
17. Diethyl Ethylphosphonate	(78-38-6)	2B
18. Diethyl N,N-Dimethylosphoramidate	(2404-03-7)	2B
19. Diethyl Phosphite	(762-04-9)	3B
20. Dimethylamine Hydrochloride	(506-59-2)	Not Listed
21. Ethyl Phosphinyl Dichloride	(1498-40-4)	2B
22. Ethyl Phosphonyl Dichloride	(1066-50-8)	2B
23. Ethyl Phosphonyl Difluoride	(753-98-0)	1B
24. Hydrogen Fluoride	(7664-39-3)	Not Listed
25. Methyl Benzilate	(76-89-1)	Not Listed
26. Methyl Phosphinyl Dichloride	(676-83-5)	2B
27. N,N-Diisopropyl-(beta)-Amino Ethanol	(96-80-0)	2B
28. Pinacolyl Alcohol	(464-07-3)	2B

29. O-Ethyl 2-Diisopropylaminoethyl Methylphosphonite (QL)	(57856-11-8)	1B
30. Triethyl Phosphite	(122-52-1)	3B
31. Arsenic Trichloride	(7784-34-1)	2B
32. Benzilic Acid	(76-93-7)	2B
33. Diethyl Methylphosphonite	(15715-41-0)	2B
34. Dimethyl Ethylphosphonate	(6163-75-3)	2B
35. Ethyl Phosphinyl Difluoride	(430-78-4)	2B
36. Methyl Phosphinyl Difluoride	(753-59-3)	2B
37. 3-Quinuclidone	(3731-38-2)	Not Listed
38. Phosphorus Pentachloride	(10026-13-8)	3B
39. Pinacolone	(75-97-8)	Not Listed
40. Potassium Cyanide	(151-50-8)	Not Listed
41. Potassium Bifluoride	(7789-29-9)	Not Listed
42. Ammonium Bifluoride	(1341-49-7)	Not Listed
43. Sodium Bifluoride	(1333-83-1)	Not Listed
44. Sodium Fluoride	(7681-49-4)	Not Listed
45. Sodium Cyanide	(143-33-9)	Not Listed
46. Tri-ethanolamine	(102-71-6)	3B
47. Phosphorus Pentasulphide	(1314-80-3)	Not Listed
48. Di-isopropylamine	(108-18-9)	Not Listed
49. Diethylaminoethanol	(100-37-8)	Not Listed
50. Sodium Sulphide	(1313-82-2)	Not Listed
51. Sulphur Monochloride	(10025-67-9)	3B
52. Sulphur Dichloride	(10545-99-0)	3B
53. Triethanolamine Hydrochloride	(637-39-8)	Not Listed
54. N,N-Diisopropyl-2-Aminoethyl Chloride Hydrochloride	(4261-68-1)	2B
55. Methylphosphonic acid	(993-13-5)	2B
56. Diethyl methylphosphonate	(683-08-9)	2B
57. N,N-Dimethylaminophosphoryl dichloride	(677-43-0)	2B
58. Triisopropyl phosphite	(116-17-6)	Not listed

59. Ethyldiethanolamine	(139-87-7)	3B
60. O,O-Diethyl phosphorothioate	(2465-65-8)	Not listed
61. O,O-Diethyl phosphorodithioate	(298-06-6)	Not listed
62. Sodium hexafluorosilicate	(16893-85-9)	Not listed
63. Methylphosphonothioic dichloride	(676-98-2)	2B

8. The Australia Group: Control List of Dual-Use Chemical Manufacturing Facilities and Equipment and Related Technology (as of June 2006)

I. Manufacturing Facilities and Equipment

Note 1. The objective of these controls should not be defeated by the transfer of any non-controlled item containing one or more controlled components where the controlled component or components are the principal element of the item and can feasibly be removed or used for other purposes.
N.B. In judging whether the controlled component or components are to be considered the principal element, governments should weigh the factors of quantity, value, and technological know-how involved and other special circumstances which might establish the controlled component or components as the principal element of the item being procured.
Note 2. The objective of these controls should not be defeated by the transfer of a whole plant, on any scale, which has been designed to produce any CW agent or AG-controlled precursor chemical.

1. Reaction Vessels, Reactors or Agitators

Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume greater than 0.1 m^3 (100 l) and less than 20 m^3 (20000 l), where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) tantalum or tantalum alloys;

(f) titanium or titanium alloys;

(g) zirconium or zirconium alloys; or

(h) niobium (columbium) or niobium alloys.

Agitators for use in the above-mentioned reaction vessels or reactors; and impellers, blades or shafts designed for such agitators, where all surfaces of the agitator or component that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) tantalum or tantalum alloys;

(f) titanium or titanium alloys;

(g) zirconium or zirconium alloys; or

(h) niobium (columbium) or niobium alloys.

2. Storage Tanks, Containers or Receivers

Storage tanks, containers or receivers with a total internal (geometric) volume greater than 0.1 m^3 (100 l) where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) tantalum or tantalum alloys;

(f) titanium or titanium alloys;

(g) zirconium or zirconium alloys; or

(h) niobium (columbium) or niobium alloys.

3. Heat Exchangers or Condensers

Heat exchangers or condensers with a heat transfer surface area of greater than 0.15 m^2, and less than 20 m^2; and tubes, plates, coils or blocks (cores) designed for such heat exchangers or condensers, where all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) graphite or carbon graphite;

(f) tantalum or tantalum alloys;

(g) titanium or titanium alloys;

(h) zirconium or zirconium alloys;

(i) silicon carbide;

(j) titanium carbide; or

(k) niobium (columbium) or niobium alloys.

Technical note: carbon graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

4. Distillation or Absorption Columns

Distillation or absorption columns of internal diameter greater than 0.1 m; and liquid distributors, vapour distributors or liquid collectors designed for such distillation or absorption columns, where all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) graphite or carbon graphite;

(f) tantalum or tantalum alloys;

(g) titanium or titanium alloys;

(h) zirconium or zirconium alloys; or

(i) niobium (columbium) or niobium alloys.

Technical note: carbon graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

5. Filling Equipment

Remotely operated filling equipment in which all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight; or

(b) alloys with more than 25% nickel and 20% chromium by weight.

6. Valves

Valves with nominal sizes greater than 1.0 cm (3/8") and casings (valve bodies) or preformed casing liners designed for such valves, in which all surfaces that come in direct contact with the chemical(s) being produced, processed, or contained are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) tantalum or tantalum alloys;

(f) titanium or titanium alloys;

(g) zirconium or zirconium alloys; or

(h) niobium (columbium) or niobium alloys.

7. Multi-Walled Piping

Multi-walled piping incorporating a leak detection port, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) graphite or carbon graphite;

(f) tantalum or tantalum alloys;

(g) titanium or titanium alloys;

(h) zirconium or zirconium alloys; or

(i) niobium (columbium) or niobium alloys.

Technical note: carbon graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

8. Pumps

Multiple-seal, canned drive, magnetic drive, bellows or diaphragm pumps, with manufacturer's specified maximum flow-rate greater than 0.6 m^3/h, or vacuum pumps with the manufacturer's specified maximum flow-rate greater than 5 m^3/h (under standard temperature (0o C) and pressure (101.30 kPa) conditions); and casings (pump bodies), preformed casing liners, impellors, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come in direct contact with the chemical(s) being processed are made from the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight;

(c) fluoropolymers;

(d) glass or glass-lined (including vitrified or enamelled coating);

(e) graphite or carbon graphite;

(f) tantalum or tantalum alloys;

(g) titanium or titanium alloys;

(h) zirconium or zirconium alloys;

(i) ceramics;

(j) ferrosilicon; or

(k) niobium (columbium) or niobium alloys.

Technical note: carbon graphite is a composition consisting of amorphous carbon and graphite, in which the graphite content is eight percent or more by weight.

9. Incinerators

Incinerators designed to destroy CW agents, AG-controlled precursors or chemical munitions, having specially designed waste supply systems, special handling facilities, and an average combustion chamber temperature greater than 1000o C, in which all surfaces in the waste supply system that come into direct contact with the waste products are made from or lined with the following materials:

(a) nickel or alloys with more than 40% nickel by weight;

(b) alloys with more than 25% nickel and 20% chromium by weight; or

(c) ceramics.

Statement of Understanding

These controls do not apply to equipment which is specially designed for use in civil applications (for example food processing, pulp and paper processing, or water purification, etc) and is, by the nature of its design, inappropriate for use in storing, processing, producing or conducting and controlling the flow of chemical warfare agents or any of the AG-controlled precursor chemicals.

II. Toxic Gas Monitoring Systems and Detectors

Toxic gas monitoring systems and dedicated detectors:

(a) designed for continuous operation and usable for the detection of chemical warfare

agents or AG-controlled precursors at concentrations of less than 0.3 mg/m^3; or

(b) designed for the detection of cholinesterase-inhibiting activity.

III. Related Technology

The transfer of 'technology', including licenses, directly associated with -

- CW agents;

- AG-controlled precursors; or

- AG-controlled dual-use equipment items,

to the extent permitted by national legislation.

Technical assistance is subject to control. Controls on 'technology' transfer, including 'technical assistance', do not apply to information 'in the public domain' or to 'basic scientific research' or the minimum necessary information for patent application.

The approval for export of any AG-controlled item of dual-use equipment also authorises the export to the same end-user of the minimum 'technology' required for the installation, operation, maintenance or repair of that item.

Definition of Terms

'Technology'

Specific information necessary for the 'development', 'production' or 'use' of a product. The information takes the form of 'technical data' or 'technical assistance'.

'Basic scientific research'

Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not primarily directed towards a specific practical aim or objective.

'Development'

'Development' is related to all phases before 'production' such as:

- design
- design research
- design analysis
- design concepts
- assembly of prototypes
- pilot production schemes
- design data
- process or transforming design data into a product
- configuration design
- integration design
- layouts

'in the public domain'

In the public domain', as it applies herein, means technology that has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove technology from being in the public domain).

'Production'

Production means all production phases such as:

- construction
- production engineering
- manufacture
- integration
- assembly (mounting)

- inspection
- testing
- quality assurance

'Technical assistance'

May take forms, such as: instruction, skills, training, working knowledge, consulting services.

N.B. 'Technical assistance' may involve transfer of 'technical data'.

'Technical data'

May take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

'Use'

Operation, installation (including on-site installation), maintenance (checking), repair, overhaul or refurbishing.

'Export'

An actual shipment or transmission of AG-controlled items out of the country. This includes transmission of technology by electronic media, fax or telephone.

9. The Australia Group: List of Biological Agents for Export Control (as of July 2006)

Core List[1]

Viruses

V1. Chikungunya virus

V2. Congo-Crimean haemorrhagic fever virus

V3. Dengue fever virus

V4. Eastern equine encephalitis virus

V5. Ebola virus

V6. Hantaan virus

V7. Junin virus

V8. Lassa fever virus

V9. Lymphocytic choriomeningitis virus

V10. Machupo virus

V11. Marburg virus

V12. Monkey pox virus

V13. Rift Valley fever virus

V14. Tick-borne encephalitis virus (Russian Spring-Summer encephalitis virus)

V15. Variola virus

V16. Venezuelan equine encephalitis virus

V17. Western equine encephalitis virus

V18. White pox

V19. Yellow fever virus

V20. Japanese encephalitis virus

V21. Kyasanur Forest virus

V22. Louping ill virus

[1] Biological agents are controlled when they are an isolated live culture of a pathogen agent, or a preparation of a toxin agent which has been isolated or extracted from any source, or material including living material which has been deliberately inoculated or contaminated with the agent. Isolated live cultures of a pathogen agent include live cultures in dormant form or in dried preparations, whether the agent is natural, enhanced or modified. An agent is covered by this list except when it is in the form of a vaccine. A vaccine is a medicinal product in a pharmaceutical formulation licensed by, or having marketing or clinical trial authorisation from, the regulatory authorities of either the country of manufacture or of use, which is intended to stimulate a protective immunological response in humans or animals in order to prevent disease in those to whom or to which it is administered.

V23. Murray Valley encephalitis virus

V24. Omsk haemorrhagic fever virus

V25. Oropouche virus

V26. Powassan virus

V27. Rocio virus

V28. St Louis encephalitis virus

V29. Hendra virus (Equine morbillivirus)

V30. South American haemorrhagic fever (Sabia, Flexal, Guanarito)

V31. Pulmonary & renal syndrome-haemorrhagic fever viruses (Seoul, Dobrava, Puumala, Sin Nombre)

V32. Nipah virus

Rickettsiae

R1. Coxiella burnetii

R2. Bartonella quintana (Rochalimea quintana, Rickettsia quintana)

R3. Rickettsia prowazeki

R4. Rickettsia rickettsii

Bacteria

B1. Bacillus anthracis

B2. Brucella abortus

B3. Brucella melitensis

B4. Brucella suis

B5. Chlamydia psittaci

B6. Clostridium botulinum

B7. Francisella tularensis

B8. Burkholderia mallei (Pseudomonas mallei)

B9. Burkholderia pseudomallei (Pseudomonas pseudomallei)

B10. Salmonella typhi

B11. Shigella dysenteriae

B12. Vibrio cholerae

B13. Yersinia pestis

B14. Clostridium perfringens, epsilon toxin producing types[1]

[1] It is understood that limiting this control to epsilon toxin-producing strains of Clostridium perfringens therefore exempts from control the transfer of other Clostridium perfringens strains to be used as positive control cultures for food testing and quality control.

B15. Enterohaemorrhagic Escherichia coli, serotype O157 and other verotoxin producing serotypes

Toxins as follow and subunits thereof:[1]

T1. Botulinum toxins[2]

T2. Clostridium perfringens toxins

T3. Conotoxin

T4. Ricin

T5. Saxitoxin

T6. Shiga toxin

T7. Staphylococcus aureus toxins

T8. Tetrodotoxin

T9. Verotoxin

T10. Microcystin (Cyanginosin)

T11. Aflatoxins

T12. Abrin

T13. Cholera toxin

T14. Diacetoxyscirpenol toxin

T15. T-2 toxin

T16. HT-2 toxin

T17. Modeccin toxin

T18. Volkensin toxin

T19. Viscum Album Lectin 1 (Viscumin)

Fungi

F1. Coccidioides immitis

F2. Coccidioides posadasii

1. Biological agents are controlled when they are an isolated live culture of a pathogen agent, or a preparation of a toxin agent which has been isolated or extracted from any source, or material including living material which has been deliberately inoculated or contaminated with the agent. Isolated live cultures of a pathogen agent include live

[1] Excluding immunotoxins.

[2] Excluding botulinum toxins in product form meeting all of the following criteria:

- are pharmaceutical formulations designed for human administration in the treatment of medical conditions;

- are pre-packaged for distribution as medical products;

- are authorised by a state authority to be marketed as medical products.

cultures in dormant form or in dried preparations, whether the agent is natural, enhanced or modified.

An agent is covered by this list except when it is in the form of a vaccine. A vaccine is a medicinal product in a pharmaceutical formulation licensed by, or having marketing or clinical trial authorisation from, the regulatory authorities of either the country of manufacture or of use, which is intended to stimulate a protective immunological response in humans or animals in order to prevent disease in those to whom or to which it is administered.

2. It is understood that limiting this control to epsilon toxin-producing strains of Clostridium perfringens therefore exempts from control the transfer of other Clostridium perfringens strains to be used as positive control cultures for food testing and quality control.

3. Excluding immunotoxins.

4. Excluding botulinum toxins and conotoxins in product form meeting all of the following criteria:

- are pharmaceutical formulations designed for testing and human dministration in the treatment of medical conditions;

- are pre-packaged for distribution as clinical or medical products; and

- are authorised by a state authority to be marketed as clinical or medical products.

Genetic Elements and Genetically-modified Organisms:

G1 Genetic elements that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the list.

G2 Genetic elements that contain nucleic acid sequences coding for any of the toxins in the list, or for their sub-units.

G3 Genetically-modified organisms that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the list.

G4 Genetically-modified organisms that contain nucleic acid sequences coding for any of the toxins in the list or for their sub-units.

Technical note: Genetic elements include inter alia chromosomes, genomes, plasmids, transposons, and vectors whether genetically modified or unmodified.

Nucleic acid sequences associated with the pathogenicity of any of the micro-organisms in the list means any sequence specific to the relevant listed micro-organism:

- that in itself or through its transcribed or translated products represents a significant hazard to human, animal or plant health; or

- that is known to enhance the ability of a listed micro-organism, or any other organism into which it may be inserted or otherwise integrated, to cause serious harm to human, animal or plant health.

These controls do not apply to nucleic acid sequences associated with the pathogenicity of enterohaemorrhagic Escherichia coli, serotype O157 and other verotoxin producing strains, other than those coding for the verotoxin, or for its sub-units.

Warning List[1]

Bacteria

WB1. Clostridium tetani[2]

WB4. Legionella pneumophila

WB5. Yersinia pseudotuberculosis

Genetic Elements and Genetically-modified Organisms:

WG1 Genetic elements that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the list.

WG2 Genetic elements that contain nucleic acid sequences coding for any of the toxins in the list, or for their sub-units.

WG3 Genetically-modified organisms that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the list.

WG4 Genetically-modified organisms that contain nucleic acid sequences coding for any of the toxins in the list or for their sub-units.

Technical note: Genetic elements include inter alia chromosomes, genomes, plasmids, transposons, and vectors whether genetically modified or unmodified"
Nucleic acid sequences associated with the pathogenicity of any of the micro-organisms in the list means any sequence specific to the relevant listed micro-organism:

- that in itself or through its transcribed or translated products represents a significant hazard to human, animal or plant health; or
- that is known to enhance the ability of a listed micro-organism, or any other organism into which it may be inserted or otherwise integrated, to cause serious harm to human, animal or plant health.

[1] Biological agents are controlled when they are an isolated live culture of a pathogen agent, or a preparation of a toxin agent which has been isolated or extracted from any source, or material including living material which has been deliberately inoculated or contaminated with the agent. Isolated live cultures of a pathogen agent include live cultures in dormant form or in dried preparations, whether the agent is natural, enhanced or modified. An agent is covered by this list except when it is in the form of a vaccine. A vaccine is a medicinal product in a pharmaceutical formulation licensed by, or having marketing or clinical trial authorisation from, the regulatory authorities of either the country of manufacture or of use, which is intended to stimulate a protective immunological response in humans or animals in order to prevent disease in those to whom or to which it is administered.

[2] Australia Group recognises that this organisms is ubiquitous, but, as it has been acquired in the past as part of biological warfare programs, itis worthy of special caution.

10. The Australia Group: List of Plant Pathogens for Export Controls (as of April 2005)

Core List

Bacteria

PB1. Xanthomonas albilineans

PB2. Xanthomonas campestris pv. Citri

PB3. Xanthomonas oryzae pv. oryzae (Pseudomonas campestris pv. oryzae)

PB4. Clavibacter michiganensis subsp. sepedonicus (Corynebacterium michiganensis subsp. sepedonicum or Corynebacterium sepedonicum)

PB5. Ralstonia solanacearum races 2 and 3 (Pseudomonas solanacearum races 2 and 3 or Burkholderia solanacearum races 2 and 3)

Fungi

PF1. Colletotrichum coffeanum var. virulans (Colletotrichum kahawae)

PF2. Cochliobolus miyabeanus (Helminthosporium oryzae)

PF3. Microcyclus ulei (syn. Dothidella ulei)

PF4. Puccinia graminis (syn. Puccinia graminis f. sp. tritici)

PF5. Puccinia striiformis (syn. Puccinia glumarum)

PF6. Pyricularia grisea / Pyricularia oryzae

Viruses

PV1. Potato Andean latent tymovirus

PV2. Potato spindle tuber viroid

Genetic Elements and Genetically-modified Organisms:

PG1 Genetic elements that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the Core List.

PG2 Genetically-modified organisms that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the Core List.

Technical note: Genetic elements include inter alia chromosomes, genomes, plasmids, transposons, and vectors whether genetically modified or unmodified.

Nucleic acid sequences associated with the pathogenicity of any of the micro-organisms in the list means any sequence specific to the relevant listed micro-organism:

- that in itself or through its transcribed or translated products represents a significant hazard to human, animal or plant health; or

- that is known to enhance the ability of a listed micro-organism, or any other organism into which it may be inserted or otherwise integrated, to cause serious harm to human, animal or plant health.

Items for Inclusion in Awareness-raising Guidelines

Bacteria

PWB1. Xylella fastidiosa

Fungi

PWF1. Deuterophoma tracheiphila (syn. Phoma tracheiphila)

PWF2. Monilia rorei (syn. Moniliophthora rorei)

Viruses

PWV1. Banana bunchy top virus

Genetic Elements and Genetically-modified Organisms:

PWG1 Genetic elements that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the Awareness-raising Guidelines.

PWG2 Genetically-modified organisms that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the Awareness-raising Guidelines.

Technical note: Genetic elements include inter alia chromosomes, genomes, plasmids, transposons, and vectors whether genetically modified or unmodified.

Nucleic acid sequences associated with the pathogenicity of any of the micro-organisms in the list means any sequence specific to the relevant listed micro-organism:

- that in itself or through its transcribed or translated products represents a significant hazard to human, animal or plant health; or

- that is known to enhance the ability of a listed micro-organism, or any other organism into which it may be inserted or otherwise integrated, to cause serious harm to human, animal or plant health.

11. The Australia Group: List of Animal Pathogens[1] for Export Control (as of April 2005)

Viruses

AV1. African swine fever virus

AV2. Avian influenza virus[2]

AV3. Bluetongue virus

AV4. Foot and mouth disease virus

AV5. Goat pox virus

AV6. Herpes virus (Aujeszky's disease)

AV7. Hog cholera virus (synonym: swine fever virus)

AV8. Lyssa virus

AV9. Newcastle disease virus

AV10. Peste des petits ruminants virus

AV11. Porcine enterovirus type 9 (synonym: swine vesicular disease virus)

AV12. Rinderpest virus

AV13. Sheep pox virus

AV14. Teschen disease virus

AV15. Vesicular stomatitis virus

AV16. Lumpy skin disease virus

AV17. African horse sickness virus

Bacteria

AB3. Mycoplasma mycoides

Genetic Elements and Genetically-modified Organisms

AG1 Genetic elements that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the list.

AG2 Genetically-modified organisms that contain nucleic acid sequences associated with the pathogenicity of any of the microorganisms in the list.

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[1] Except where the agent is in the form of a vaccine.

[2] This includes only those Avian influenza viruses of high pathogenicity as defined in EC Directive 92/40/EC: "Type A viruses with an IVPI (intravenous pathogenicity index) in 6 week old chickens of greater than 1.2: or Type A viruses H5 or H7 subtype for which nucleotide sequencing has demonstrated multiple basic amino acids at the cleavage site of haemagglutinin".

Technical note: Genetic elements include inter alia chromosomes, genomes, plasmids, transposons, and vectors whether genetically modified or unmodified.
Nucleic acid sequences associated with the pathogenicity of any of the micro-organisms in the list means any sequence specific to the relevant listed micro-organism:

- that in itself or through its transcribed or translated products represents a significant hazard to human, animal or plant health; or

- that is known to enhance the ability of a listed micro-organism, or any other organism into which it may be inserted or otherwise integrated, to cause serious harm to human, animal or plant health.

12. Australia Group: Control List of Dual-Use Biological Equipment and related Technology (as of April 2005)

I. Equipment

1. Complete containment facilities at P3 or P4 containment level

Complete containment facilities that meet the criteria for P3 or P4 (BL3, BL4, L3, L4) containment as specified in the WHO Laboratory Biosafety manual (2nd edition, Geneva, 1993) should be subject to export control.

2. Fermenters

Fermenters capable of cultivation of pathogenic micro-organisms, viruses or for toxin production, without the propagation of aerosols, having a capacity of 20 litres or greater. Fermenters include bioreactors, chemostats and continuous-flow systems.

3. Centrifugal Separators

Centrifugal separators capable of the continuous separation of pathogenic micro-organisms, without the propagation of aerosols, and having all the following characteristics:

a) one or more sealing joints within the steam containment area;

b) a flow rate greater than 100 litres per hour;

c) components of polished stainless steel or titanium;

d) capable of in-situ steam sterilisation in a closed state.

Technical note: Centrifugal separators include decanters.

4. Cross (tangential) Flow Filtration Equipment

Cross (tangential) flow filtration equipment capable of separation of pathogenic micro-organisms, viruses, toxins or cell cultures, without the propagation of aerosols, having all the following characteristics:

a) a total filtration area equal to or greater than 1 square metre

b) capable of being sterilized or disinfected in-situ.

(N.B. This control excludes reverse osmosis equipment, as specified by the manufacturer.)

Cross (tangential) flow filtration components (eg modules, elements, cassettes, cartridges, units or plates) with filtration area equal to or greater than 0.2 square metres for each component and designed for use in cross (tangential) flow filtration equipment as specified above.

Technical note: In this control, 'sterilized' denotes the elimination of all viable microbes from the equipment through the use of either physical (eg steam) or chemical agents. 'Disinfected' denotes the destruction of potential microbial infectivity in the equipment through the use of chemical agents with a germicidal effect. 'Disinfection' and 'sterilization' are distinct from 'sanitization', the latter referring to cleaning procedures designed to lower the microbial content of equipment without necessarily achieving elimination of all microbial infectivity or viability.

5. Freeze-drying Equipment

Steam sterilisable freeze-drying equipment with a condenser capacity of 10 kgs of ice or greater in 24 hours and less than 1000 kgs of ice in 24 hours.

6. Protective and containment equipment as follows:

a) protective full or half suits, or hoods dependent upon a tethered external air supply and operating under positive pressure;
Technical note: This does not control suits designed to be worn with self-contained breathing apparatus.

b) class III biological safety cabinets or isolators with similar performance standards (e.g. flexible isolators, dry boxes, anaerobic chambers, glove boxes, or laminar flow hoods (closed with vertical flow)).

7. Aerosol inhalation chambers

Chambers designed for aerosol challenge testing with micro-organisms, viruses or toxins and having a capacity of 1 cubic metre or greater.

8. Spraying or fogging systems and components therefore, as follows:

- Complete spraying or fogging systems, specially designed or modified for fitting to aircraft, lighter than air vehicles or UAVs, capable of delivering, from a liquid suspension, an initial droplet "VMD" of less than 50 microns at a flow rate of greater than two litres per minute.

- Spray booms or arrays of aerosol generating units, specially designed or modified for fitting to aircraft, lighter than air vehicles or UAVs, capable of delivering, from a liquid suspension, an initial droplet "VMD" of less than 50 microns at a flow rate of greater than two litres per minute.

- Aerosol generating units specially designed for fitting to systems that fulfil all the criteria specified in paragraphs 8.a and 8.b.
Technical Notes:
Aerosol generating units are devices specially designed or modified for fitting to aircraft such as nozzles, rotary drum atomisers and similar devices.
This entry does not control spraying or fogging systems and components as specified in paragraph 8 above that are demonstrated not to be capable of delivering biological agents in the form of infectious aerosols.
Pending definition of international standards, the following guidelines should be followed:

Droplet size for spray equipment or nozzles specially designed for use on aircraft or UAVs should be measured using either of the following methods:

Doppler laser method

Forward laser diffraction method

Items for inclusion in Awareness Raising Guidelines

Experts propose that the following items be included in awareness raising guidelines to industry:

1. Equipment for the micro-encapsulation of live micro-organisms and toxins in the range of 1-10 um particle size, specifically:

a) interfacial polycondensors;

b) phase separators.

2. Fermenters of less than 20 litre capacity with special emphasis on aggregate orders or designs for use in combined systems.

3. Conventional or turbulent air-flow clean-air rooms and self-contained fan-HEPA filter units that may be used for P3 or P4 (BL3, BL4, L3, L4) containment facilities.

II. Related Technology

The transfer of 'technology' for 'development' or 'production' of:

AG-controlled biological agents; or

AG-controlled dual-use biological equipment items.

Controls on 'technology' transfer do not apply to information 'in the public domain' or to 'basic scientific research' or the minimum necessary information for patent application.

The approval for export of any AG-controlled item of dual-use equipment also authorises the export to the same end-user of the minimum 'technology' required for the installation, operation, maintenance, or repair of that item.

Definition of Terms

'Basic scientific research'

Experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not primarily directed towards a specific practical aim or objective.

'Development'

'Development' is related to all stages before production such as:

design,

design research,

design analysis,

design concepts,

assembly of prototypes,

pilot production schemes,

design data,

process or transforming design data into a product,

configuration design,

integration design, and

layouts.

'In the public domain'

'In the public domain', as it applies herein, means technology that has been made available without restrictions upon its further dissemination. (Copyright restrictions do not remove technology from being in the public domain.)

'Lighter than air vehicles'

Balloons and airships that rely on hot air or on lighter-than-air gases such as helium or hydrogen for their lift.

'Production'

Production means all production phases such as:

construction,

production engineering,

manufacture,

integration,

assembly (mounting),

inspection,

testing, and

quality assurance.

'Technical assistance'

May take forms, such as: instruction, skills, training, working knowledge, consulting services. 'Technical assistance' may involve transfer of 'technical data'.

'Technical data'

May take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

'Technology'

Specific information necessary for the ‘development’, ‘production’, or ‘use’ of a product. The information takes the form of ‘technical data’ or ‘technical assistance’.

‘UAVs’

Unmanned Aerial Vehicles.

‘Use’

Operation, installation, (including on-site installation), maintenance, (checking), repair, overhaul or refurbishing.

‘VMD’

Volume Median Diameter (note: for water-based systems, VMD equates to MMD – the Mass Median Diameter).

E. The Role of the United Nations

1. The Charter of the United Nations (excerpts)

PREAMBLE

We the Peoples of the United Nations determined

to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and

to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and

to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

to promote social progress and better standards of life in larger freedom,

and for these ends

to practice tolerance and live together in peace with one another as good neighbours, and

to unite our strength to maintain international peace and security, and

to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

to employ international machinery for the promotion of the economic and social advancement of all peoples,

Have resolved to combine our efforts to accomplish theses aims

Accordingly, our respective Governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

CHAPTER I: PURPOSES AND PRINCIPLES

Article 1

The Purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion; and

4. To be a centre for harmonizing the actions of nations in the attainment of these common ends.

Article 2

The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles.

1. The Organization is based on the principle of the sovereign equality of all its Members.

2. All Members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

4. All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.

5. All Members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The Organization shall ensure that states which are not Members of the United Nations act in accordance with these Principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

CHAPTER V: THE SECURITY COUNCIL

COMPOSITION

Article 23

1. The Security Council shall consist of fifteen Members of the United Nations. The Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom

of Great Britain and Northern Ireland, and the United States of America shall be permanent members of the Security Council. The General Assembly shall elect ten other Members of the United Nations to be non-permanent members of the Security Council, due regard being specially paid, in the first instance to the contribution of Members of the United Nations to the maintenance of international peace and security and to the other purposes of the Organization, and also to equitable geographical distribution.

2. The non-permanent members of the Security Council shall be elected for a term of two years. In the first election of the non-permanent members after the increase of the membership of the Security Council from eleven to fifteen, two of the four additional members shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.

3. Each member of the Security Council shall have one representative.

FUNCTIONS and POWERS

Article 24

1. In order to ensure prompt and effective action by the United Nations,its Members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf.

2. In discharging these duties the Security Council shall act in accordance with the Purposes and Principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII, and XII.

3. The Security Council shall submit annual and, when necessary, special reports to the General Assembly for its consideration.

Article 25

The Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.

Article 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and economic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee referred to in Article 47, plans to be submitted to the Members of the United Nations for the establishment of a system for the regulation of armaments.

VOTING

Article 27

1. Each member of the Security Council shall have one vote.

2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of nine members.

3. Decisions of the Security Council on all other matters shall be made by an affirmative vote of nine members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI, and under paragraph 3 of Article 52, a party to a dispute shall abstain from voting.

PROCEDURE

Article 28

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at all times at the seat of the Organization.

2. The Security Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of the government or by some other specially designated representative.

3. The Security Council may hold meetings at such places other than the seat of the Organization as in its judgment will best facilitate its work.

Article 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

Article 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its President.

Article 31

Any Member of the United Nations which is not a member of the Security Council may participate, without vote, in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that Member are specially affected.

Article 32

Any Member of the United Nations which is not a member of the Security Council or any state which is not a Member of the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate, without vote, in the

discussion relating to the dispute. The Security Council shall lay down such conditions as it deems just for the participation of a state which is not a Member of the United Nations.

CHAPTER VI: PACIFIC SETTLEMENT OF DISPUTES

Article 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

Article 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.

Article 35

1. Any Member of the United Nations may bring any dispute, or any situation of the nature referred to in Article 34, to the attention of the Security Council or of the General Assembly.

2. A state which is not a Member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party if it accepts in advance, for the purposes of the dispute, the obligations of pacific settlement provided in the present Charter.

3. The proceedings of the General Assembly in respect of matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

Article 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.

2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

3. In making recommendations under this Article the Security Council should also take into consideration that legal disputes should as a general rule be referred by the parties

to the International Court of Justice in accordance with the provisions of the Statute of the Court.

Article 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that Article, they shall refer it to the Security Council.

2. If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

Article 38

Without prejudice to the provisions of Articles 33 to 37, the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

CHAPTER VII: ACTION WITH RESPECT TO THREATS TO THE PEACE, BREACHES OF THE PEACE, AND ACTS OF AGGRESSION

Article 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.

Article 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.

Article 41

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

Article 42

Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.

Article 43

1. All Members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance, and facilities, including rights of passage, necessary for the purpose of maintaining international peace and security.

2. Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.

3. The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council. They shall be concluded between the Security Council and Members or between the Security Council and groups of Members and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes.

Article 44

When the Security Council has decided to use force it shall, before calling upon a Member not represented on it to provide armed forces in fulfilment of the obligations assumed under Article 43, invite that Member, if the Member so desires, to participate in the decisions of the Security Council concerning the employment of contingents of that Member's armed forces.

Article 45

In order to enable the United Nations to take urgent military measures, Members shall hold immediately available national air-force contingents for combined international enforcement action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined within the limits laid down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Staff Committee.

Article 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

Article 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on all questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.

2. The Military Staff Committee shall consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any Member of the United Nations not permanently represented on the Committee shall be invited by the Committee to be associated with it when the efficient discharge of the Committee's responsibilities requires the participation of that Member in its work.

3. The Military Staff Committee shall be responsible under the Security Council for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.

4. The Military Staff Committee, with the authorization of the Security Council and after consultation with appropriate regional agencies, may establish regional sub-committees.

Article 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the Members of the United Nations or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the Members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

Article 49

The Members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

Article 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a Member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

2. Summit Meeting of the Security Council on 31 January 1992, Declaration Read by the President of the Council

The Security Council met at the Headquarters of the United Nations in New York on 31 January 1992, for the first time at the level of Heads of State and Government. The members of the Council considered, within the framework of their commitment to the United Nations Charter, 'The responsibility of the Security Council in the maintenance of international peace and security'.

"The members of the Security Council consider that their meeting is a timely recognition of the fact that there are new favourable international circumstances under which the Security Council has begun to fulfil more effectively its primary responsibility for the maintenance of international peace and security.

A time of chance

This meeting takes place at a time of momentous change. The ending of the Cold War has raised hopes for a safer, more equitable and more humane world, Rapid progress has been made, in many regions of the world, towards democracy and responsive forms of government, as well as towards achieving the Purposes set out in the Charter. The completion of the dismantling of apartheid in South Africa would constitute a major contribution to these Purposes and positive trends, including to the encouragement of respect for human rights and fundamental freedoms.

Last year, under the authority of the United Nations, the international community succeeded in enabling Kuwait to regain its sovereignty and territorial integrity, which it had lost as a result of Iraqi aggression. The resolutions adopted by the Security Council remain essential to the restoration of peace and stability in the region and must be fully implemented. At the same time the members of the Council are concerned by the humanitarian situation of the innocent civilian population of Iraq.

The members of the Council support the Middle East peace process, facilitated by the Russian Federation and the United States, and hope that it will be brought to a successful conclusion on the basis of Council resolutions 242 (1967) and 338 (1973).

"They welcome the role the United Nations has been able to play under the Charter in progress towards settling long-standing regional disputes, and will work for further progress towards their resolution.

They applaud the valuable contribution being made by United Nations peace-keeping forces now operating in Asia, Africa, Latin America and Europe.

The members of the Council note that United Nations peace-keeping tasks have increased, and broadened considerably in recent years. Election monitoring, human rights verification and the repatriation of refugees have in the settlement of some regional conflicts, at the request or with the agreement of the parties concerned, been integral parts of the Security Council's effort to maintain international peace and security. They welcome these developments.

The members of the Council also recognize that change, however welcome, has brought new risks for stability and security. Some of the most acute problems result from

changes to State structures. The members of the Council will encourage all efforts to help achieve peace, stability and cooperation during these changes,

The international community therefore faces new challenges in the search for peace. All Member States expect the United Nations to play a central role at this crucial stage. The members of the Council stress the importance of strengthening and improving the United Nations to increase its effectiveness. They are determined to assume fully their responsibilities within the United Nations Organisation in the framework of the Charter.

The absence of war and military conflicts amongst States does not in itself ensure international peace and security. The non-military sources of instability in the economic, social, humanitarian and ecological fields have become threats to peace and security. The United Nations membership as a whole, working through the appropriate bodies, needs to give the highest priority to the solution of these matters.

Commitment to collective security

The members of the Council pledge their commitment to international law and to the United Nations Charter. All disputes between States should be peacefully resolved in accordance with the provisions of the Charter.

The members of the Council reaffirm their commitment to the collective security system of the Charter to deal with threats to peace and to reverse acts of aggression.

The members of the Council express their deep concern over acts of international terrorism and emphasize the need for the international community to deal effectively with all such acts.

Peacemaking and peace-keeping

To strengthen the effectiveness of these commitments, and in order that the Security Council should have the means to discharge its primary responsibility under the Charter for the maintenance of international peace and security, the members of the Council have decided on the following approach.

They invite the Secretary-General to prepare, for circulation to the Members of the United Nations by 1 July 1992, his analysis and recommendations on ways of strengthening and making more efficient within the framework and provisions of the Charter the capacity of the United Nations for preventive diplomacy, for peacemaking and for peace-keeping.

The Secretary-General's analysis and recommendations could cover the role of the United Nations in identifying potential crises and areas of instability as well as the contribution to be made by regional organizations in accordance with Chapter VIII of the United Nations Charter in helping the work of the Council. They could also cover the need for adequate resources, both material and financial. The Secretary-General might draw on lessons learned in recent United Nations peace-keeping missions to recommend ways of making more effective Secretariat planning and operations. He could also consider how greater use might be made of his good Offices, and of his other functions under the United Nations Charter.

Disarmament, arms control and weapons of mass destruction

"The members of the Council, while fully conscious of the responsibilities of other organs of the United Nations in the fields of disarmament, arms control and non-proliferation, reaffirm the crucial contribution which progress in these areas can make to the maintenance of international peace and security. They express their commitment to take concrete steps to enhance the effectiveness of the United Nations in these areas.

"The members of the Council underline the need for all Member States to fulfil their obligations in relation to arms control and disarmament; to prevent the proliferation in all its aspects of all weapons of mass destruction; to avoid excessive and destabilising accumulations and transfers of arms; and to resolve peacefully in accordance with the Charter any problems concerning these matters threatening or disrupting the maintenance of regional and global stability. They emphasize the importance of the early ratification and implementation by the States concerned of all international and regional arms control arrangements, especially the START and CFE Treaties.

The proliferation of all weapons of mass destruction constitutes a threat to international peace and security. The members of the Council commit themselves to working to prevent the spread of technology related to the research for or production of such weapons and to take appropriate action to that end.

On nuclear proliferation, they note the importance of the decision of many countries to adhere to the Non-Proliferation Treaty and emphasize the integral role in the implementation of that Treaty of fully effective IAEA safeguards, as well as the importance of effective export controls. The members of the Council will take appropriate measures in the case of any violations notified to them by the IAEA.

On chemical weapons, they support the efforts of the Geneva Conference with a view to reaching agreement on the conclusion, by the end of 1992, of a universal convention, including a verification regime, to prohibit chemical weapons.

On conventional armaments, they note the General Assembly's vote in favour of a United Nations register of arms transfers as a first step, and in this connection recognize the importance of all States providing all the information called for in the General Assembly's resolution.

In conclusion, the members of the Security Council affirm their determination to build on the initiative of their meeting in order to secure positive advances in promoting international peace and security. They agree that the United Nations Secretary-General has a crucial role to play. The members of the Council express their deep appreciation to the outgoing Secretary-General, His Excellency Mr. Javier Perez de Cuellar, for his outstanding contribution to the work of the United Nations, culminating in the signature of the El Salvador peace agreement. They welcome the new Secretary-General, His Excellency Dr. Boutros Boutros-Ghali, and note with satisfaction his intention to strengthen and improve the functioning of the United Nations. They pledge their full support to him, and undertake to work closely with him, and his staff in fulfilment of their shared objectives, including a more efficient and effective United Nations system.

The members of the Council agree that the world now has the best chance of achieving international peace and security since the foundation of the United Nations. They undertake to work in close cooperation with) other United Nations Member States in their

own efforts to achieve this, as well as to address urgently all the other problems, in particular those of economic and social development, requiring the collective response of the international community. They recognize that peace and prosperity are indivisible and that lasting peace and stability require effective international cooperation for the eradication of poverty and the promotion of a better life for all in larger freedom.

3. United Nations Security Council Resolution 1540 on the Proliferation of Weapons of Mass Destruction (28 April 2004)

The Security Council,

Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery,[1] constitutes a threat to international peace and security,

Reaffirming, in this context, the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on 31 January 1992 (S/23500), including the need for all Member States to fulfil their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction,

Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,

Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, chemical and biological weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter,

Affirming its support for the multilateral treaties whose aim is to eliminate or prevent the proliferation of nuclear, chemical or biological weapons and the importance for all States parties to these treaties to implement them fully in order to promote international stability,

Welcoming efforts in this context by multilateral arrangements which contribute to non-proliferation,

Affirming that prevention of proliferation of nuclear, chemical and biological weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes while goals of peaceful utilization should not be used as a cover for proliferation,

Gravely concerned by the threat of terrorism and the risk that non-State actors[2] such as those identified in the United Nations list established and maintained by the Committee established under Security Council resolution 1267 and those to whom resolution 1373

[1] Definitions for the purpose of this resolution only: Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use. Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution. Related materials: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.

[2] Definitions for the purpose of this resolution only: Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use. Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution. Related materials: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.

applies, may acquire, develop, traffic in or use nuclear, chemical and biological weapons and their means of delivery,

Gravely concerned by the threat of illicit trafficking in nuclear, chemical, or biological weapons and their means of delivery, and related materials,[1] which adds a new dimension to the issue of proliferation of such weapons and also poses a threat to international peace and security,

Recognizing the need to enhance coordination of efforts on national, subregional, regional and international levels in order to strengthen a global response to this serious challenge and threat to international security,

Recognizing that most States have undertaken binding legal obligations under treaties to which they are parties, or have made other commitments aimed at preventing the proliferation of nuclear, chemical or biological weapons, and have taken effective measures to account for, secure and physically protect sensitive materials, such as those required by the Convention on the Physical Protection of Nuclear Materials and those recommended by the IAEA Code of Conduct on the Safety and Security of Radioactive Sources,

Recognizing further the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, chemical or biological weapons and their means of delivery,

Encouraging all Member States to implement fully the disarmament treaties and agreements, to which they are party,

Reaffirming the need to combat by all means, in accordance with the Charter of the United Nations, threats to international peace and security caused by terrorist acts,

Determined to facilitate henceforth an effective response to global threats in the area of non-proliferation,

Acting under Chapter VII of the Charter of the United Nations,

1. Decides that all States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery;

2. Decides also that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;

3. Decides also that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall:

(a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;

(b) Develop and maintain appropriate effective physical protection measures;

(c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;

(d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

4. Decides to establish, in accordance with rule 28 of its provisional rules of procedure, for a period of no longer than two years, a Committee of the Security Council, consisting of all members of the Council, which will, calling as appropriate on other expertise, report to the Security Council for its examination, on the implementation of this resolution, and to this end calls upon States to present a first report no later than six months from the adoption of this resolution to the Committee on steps they have taken or intend to take to implement this resolution;

5. Decides that none of the obligations set forth in this resolution shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons;

6. Recognizes the utility in implementing this resolution of effective national control lists and calls upon all Member States, when necessary, to pursue at the earliest opportunity the development of such lists;

7. Recognizes that some States may require assistance in implementing the provisions of this resolution within their territories and invites States in a position to do so to offer assistance as appropriate in response to specific requests to the States lacking the legal and regulatory infrastructure, implementation experience and/or resources for fulfilling the above provisions;

8. Calls upon all States:

(a) To promote the universal adoption and full implementation, and, where necessary, strengthening of multilateral treaties to which they are parties, whose aim is to prevent the proliferation of nuclear, biological or chemical weapons;

(b) To adopt national rules and regulations, where it has not yet been done, to ensure compliance with their commitments under the key multilateral non-proliferation treaties;

(c) To renew and fulfil their commitment to multilateral cooperation, in particular within the framework of the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons and the Biological and Toxin Weapons Convention, as important means of pursuing and achieving their common objectives in the area of non-proliferation and of promoting international cooperation for peaceful purposes;

(d) To develop appropriate ways to work with and inform industry and the public regarding their obligations under such laws;

9. Calls upon all States to promote dialogue and cooperation on non-proliferation so as to address the threat posed by proliferation of nuclear, chemical, or biological weapons, and their means of delivery;

10. Further to counter that threat, calls upon all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials;

11. Expresses its intention to monitor closely the implementation of this resolution and, at the appropriate level, to take further decisions which may be required to this end;

12. Decides to remain seized of the matter.

4. United Nations Security Council Resolution 1673 on the implementation of UNSC Res. 1540 (27 April 2006)

The Security Council,

Having considered the report of the Security Council Committee established pursuant to resolution 1540 (2004), hereafter the 1540 Committee (S/2006/257), and reaffirming its resolution 1540 (2004) of 28 April 2004,

Reaffirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security,

Endorsing the work already carried out by the 1540 Committee, particularly in its consideration of the national reports submitted by States pursuant to resolution 1540 (2004),

Recalling that not all States have presented to the 1540 Committee their reports on the steps they have taken or intend to take to implement resolution 1540 (2004),

Reaffirming its decision that none of the obligations in resolution 1540 (2004) shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons,

Noting that the full implementation of resolution 1540 (2004) by all States, including the adoption of national laws and measures to ensure the implementation of these laws, is a long-term task that will require continuous efforts at national, regional and international levels,

Acting under Chapter VII of the Charter of the United Nations,

1. Reiterates its decisions in and the requirements of resolution 1540 (2004) and emphasizes the importance for all States to implement fully that resolution;

2. Calls upon all States that have not yet presented a first report on steps they have taken or intend to take to implement resolution 1540 (2004) to submit such a report to the 1540 Committee without delay;

3. Encourages all States that have submitted such reports to provide, at any time or upon the request of the 1540 Committee, additional information on their implementation of resolution 1540 (2004);

4. Decides to extend the mandate of the 1540 Committee for a period of two years, with the continued assistance of experts, until 27 April 2008;

5. Decides that the 1540 Committee shall intensify its efforts to promote the full implementation by all States of resolution 1540 (2004) through a work programme which shall include the compilation of information on the status of States' implementation of all aspects of resolution 1540 (2004), outreach, dialogue, assistance and cooperation, and which shall address in particular all aspects of paragraphs 1 and 2 of that resolution, as well as of paragraph 3 which encompasses (a) accountability, (b) physical protection, (c) border controls and law enforcement efforts and (d) national export and trans-shipment controls including controls on providing funds and services such as financing to such export and trans-shipment, and in that regard:

(a) encourages the pursuit of the ongoing dialogue between the 1540 Committee and States on the full implementation of resolution 1540 (2004), including on further actions needed from States to that end and on technical assistance needed and offered;

(b) invites the 1540 Committee to explore with States and international, regional and subregional organizations experience-sharing and lessons learned in the areas covered by resolution 1540 (2004), and the availability of programmes which might facilitate the implementation of resolution 1540 (2004);

6. Decides that the 1540 Committee will submit to the Security Council a report no later than 27 April 2008 on compliance with resolution 1540 (2004) through the achievement of the implementation of its requirements;

7. Decides to remain seized of the matter.

5. United Nations Security Council Resolution 1695 on missile launches by the Democratic People's Republic of Korea (15 July 2006)

The Security Council,

Reaffirming its resolutions 825 (1993) of 11 May 1993 and 1540 (2004) of 28 April 2004,

Bearing in mind the importance of maintaining peace and stability on the Korean peninsula and in north-east Asia at large,

Reaffirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security,

Expressing grave concern at the launch of ballistic missiles by the Democratic People's Republic of Korea (DPRK), given the potential of such systems to be used as a means to deliver nuclear, chemical or biological payloads,

Registering profound concern at the DPRK's breaking of its pledge to maintain its moratorium on missile launching,

Expressing further concern that the DPRK endangered civil aviation and shipping through its failure to provide adequate advance notice,

Expressing its grave concern about DPRK's indication of possible additional launches of ballistic missiles in the near future,

Expressing also its desire for a peaceful and diplomatic solution to the situation and welcoming efforts by Council members as well as other Member States to facilitate a peaceful and comprehensive solution through dialogue,

Recalling that the DPRK launched an object propelled by a missile without prior notification to the countries in the region, which fell into the waters in the vicinity of Japan on 31 August 1998,

Deploring the DPRK's announcement of withdrawal from the Treaty on Non-Proliferation of Nuclear Weapons (the Treaty) and its stated pursuit of nuclear weapons in spite of its Treaty on Non-Proliferation of Nuclear Weapons and International Atomic Energy Agency (IAEA) safeguards obligations,

Stressing the importance of the implementation of the Joint Statement issued on 19 September 2005 by China, DPRK, Japan, Republic of Korea, the Russian Federation and the United States,

Affirming that such launches jeopardize peace, stability and security in the region and beyond, particularly in light of the DPRK's claim that it has developed nuclear weapons,

Acting under its special responsibility for the maintenance of international peace and security,

1. Condemns the multiple launches by the DPRK of ballistic missiles on 5 July 2006 local time;

2. Demands that the DPRK suspend all activities related to its ballistic missile programme, and in this context re-establish its pre-existing commitments to a moratorium on missile launching;

3. Requires all Member States, in accordance with their national legal authorities and legislation and consistent with international law, to exercise vigilance and prevent missile and missile-related items, materials, goods and technology being transferred to DPRK's missile or WMD programmes;

4. Requires all Member States, in accordance with their national legal authorities and legislation and consistent with international law, to exercise vigilance and prevent the procurement of missiles or missile related-items, materials, goods and technology from the DPRK, and the transfer of any financial resources in relation to DPRK's missile or WMD programmes;

5. Underlines, in particular to the DPRK, the need to show restraint and refrain from any action that might aggravate tension, and to continue to work on the resolution of non-proliferation concerns through political and diplomatic efforts;

6. Strongly urges the DPRK to return immediately to the Six-Party Talks without pre-condition, to work towards the expeditious implementation of 19 September 2005 Joint Statement, in particular to abandon all nuclear weapons and existing nuclear programmes, and to return at an early date to the Treaty on Non-Proliferation of Nuclear Weapons and International Atomic Energy Agency safeguards;

7. Supports the six-party talks, calls for their early resumption, and urges all the participants to intensify their efforts on the full implementation of the 19 September 2005 Joint Statement with a view to achieving the verifiable denuclearization of the Korean Peninsula in a peaceful manner and to maintaining peace and stability on the Korean Peninsula and in north-east Asia;

8. Decides to remain seized of the matter.

6. United Nations Security Council Resolution 1696 on Iran's nuclear programme (31 July 2006)

The Security Council,

Recalling the Statement of its President, S/PRST/2006/15, of 29 March 2006,

Reaffirming its commitment to the Treaty on the Non-proliferation of Nuclear Weapons, and recalling the right of States Party, in conformity with Articles I and II of that Treaty, to develop research, production and use of nuclear energy for peaceful purposes without discrimination,

Noting with serious concern the many reports of the IAEA Director General and resolutions of the IAEA Board of Governors related to Iran's nuclear programme, reported to it by the IAEA Director General, including IAEA Board resolution GOV/2006/14,

Noting with serious concern that the IAEA Director General's report of 27 February 2006 (GOV/2006/15) lists a number of outstanding issues and concerns on Iran's nuclear programme, including topics which could have a military nuclear dimension, and that the IAEA is unable to conclude that there are no undeclared nuclear materials or activities in Iran,

Noting with serious concern the IAEA Director General's report of 28 April 2006 (GOV/2006/27) and its findings, including that, after more than three years of Agency efforts to seek clarity about all aspects of Iran's nuclear programme, the existing gaps in knowledge continue to be a matter of concern, and that the IAEA is unable to make progress in its efforts to provide assurances about the absence of undeclared nuclear material and activities in Iran,

Noting with serious concern that, as confirmed by the IAEA Director General's report of 8 June 2006 (GOV/2006/38) Iran has not taken the steps required of it by the IAEA Board of Governors, reiterated by the Council in its statement of 29 March and which are essential to build confidence, and in particular Iran's decision to resume enrichment-related activities, including research and development, its recent expansion of and announcements about such activities, and its continued suspension of cooperation with the IAEA under the Additional Protocol,

Emphasizing the importance of political and diplomatic efforts to find a negotiated solution guaranteeing that Iran's nuclear programme is exclusively for peaceful purposes, and noting that such a solution would benefit nuclear non-proliferation elsewhere,

Welcoming the statement by the Foreign Minister of France, Philippe Douste-Blazy, on behalf of the Foreign Ministers of China, France, Germany, the Russian Federation, the United Kingdom, the United States and the High Representative of the European Union, in Paris on 12 July 2006 (S/2006/573),

Concerned by the proliferation risks presented by the Iranian nuclear programme, mindful of its primary responsibility under the Charter of the United Nations for the maintenance of international peace and security, and being determined to prevent an aggravation of the situation, Acting under Article 40 of Chapter VII of the Charter of the United Nations in order to make mandatory the suspension required by the IAEA,

1. Calls upon Iran without further delay to take the steps required by the IAEA Board of Governors in its resolution GOV/2006/14, which are essential to build confidence in the exclusively peaceful purpose of its nuclear programme and to resolve outstanding questions;

2. Demands, in this context, that Iran shall suspend all enrichment-related and reprocessing activities, including research and development, to be verified by the IAEA;

3. Expresses the conviction that such suspension as well as full, verified Iranian compliance with the requirements set out by the IAEA Board of Governors, would contribute to a diplomatic, negotiated solution that guarantees Iran's nuclear programme is for exclusively peaceful purposes, underlines the willingness of the international community to work positively for such a solution, encourages Iran, in conforming to the above provisions, to re-engage with the international community and with the IAEA, and stresses that such engagement will be beneficial to Iran;

4. Endorses, in this regard, the proposals of China, France, Germany, the Russian Federation, the United Kingdom and the United States, with the support of the European Union's High Representative, for a long-term comprehensive arrangement which would allow for the development of relations and cooperation with Iran based on mutual respect and the establishment of international confidence in the exclusively peaceful nature of Iran's nuclear programme (S/2006/521);

5. Calls upon all States, in accordance with their national legal authorities and legislation and consistent with international law, to exercise vigilance and prevent the transfer of any items, materials, goods and technology that could contribute to Iran's enrichment-related and reprocessing activities and ballistic missile programmes;

6. Expresses its determination to reinforce the authority of the IAEA process, strongly supports the role of the IAEA Board of Governors, commends and encourages the Director General of the IAEA and its secretariat for their ongoing professional and impartial efforts to resolve all remaining outstanding issues in Iran within the framework of the Agency, underlines the necessity of the IAEA continuing its work to clarify all outstanding issues relating to Iran's nuclear programme, and calls upon Iran to act in accordance with the provisions of the Additional Protocol and to implement without delay all transparency measures as the IAEA may request in support of its ongoing investigations;

7. Requests by 31 August a report from the Director General of the IAEA primarily on whether Iran has established full and sustained suspension of all activities mentioned in this resolution, as well as on the process of Iranian compliance with all the steps required by the IAEA Board and with the above provisions of this resolution, to the IAEA Board of Governors and in parallel to the Security Council for its consideration;

8. Expresses its intention, in the event that Iran has not by that date complied with this resolution, then to adopt appropriate measures under Article 41 of Chapter VII of the Charter of the United Nations to persuade Iran to comply with this resolution and the requirements of the IAEA, and underlines that further decisions will be required should such additional measures be necessary;

9. Confirms that such additional measures will not be necessary in the event that Iran complies with this resolution;

10. Decides to remain seized of the matter.

7. United Nations Security Council Resolution 1718 on nuclear weapons tests undertaken by the Democratic People's Republic of Korea (14 October 2006)

The Security Council,

Recalling its previous relevant resolutions, including resolution 825 (1993), resolution 1540 (2004) and, in particular, resolution 1695 (2006), as well as the statement of its President of 6 October 2006 (S/PRST/2006/41),

Reaffirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security,

Expressing the gravest concern at the claim by the Democratic People's Republic of Korea (DPRK) that it has conducted a test of a nuclear weapon on 9 October 2006, and at the challenge such a test constitutes to the Treaty on the Non-Proliferation of Nuclear Weapons and to international efforts aimed at strengthening the global regime of non-proliferation of nuclear weapons, and the danger it poses to peace and stability in the region and beyond,

Expressing its firm conviction that the international regime on the non-proliferation of nuclear weapons should be maintained and recalling that the DPRK cannot have the status of a nuclear-weapon state in accordance with the Treaty on the Non-Proliferation of Nuclear Weapons,

Deploring the DPRK's announcement of withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons and its pursuit of nuclear weapons,

Deploring further that the DPRK has refused to return to the Six-Party talks without precondition,

Endorsing the Joint Statement issued on 19 September 2005 by China, the DPRK, Japan, the Republic of Korea, the Russian Federation and the United States,

Underlining the importance that the DPRK respond to other security and humanitarian concerns of the international community,

Expressing profound concern that the test claimed by the DPRK has generated increased tension in the region and beyond, and determining therefore that there is a clear threat to international peace and security,

Acting under Chapter VII of the Charter of the United Nations, and taking measures under its Article 41,

1. Condemns the nuclear test proclaimed by the DPRK on 9 October 2006 in flagrant disregard of its relevant resolutions, in particular resolution 1695 (2006), as well as of the statement of its President of 6 October 2006 (S/PRST/2006/41), including that such a test would bring universal condemnation of the international community and would represent a clear threat to international peace and security;

2. Demands that the DPRK not conduct any further nuclear test or launch of a ballistic missile;

3. Demands that the DPRK immediately retract its announcement of withdrawal from the Treaty on the Non-Proliferation of Nuclear Weapons;

4. Demands further that the DPRK return to the Treaty on the Non-Proliferation of Nuclear Weapons and International Atomic Energy Agency (IAEA) safeguards, and underlines the need for all States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to continue to comply with their Treaty obligations;

5. Decides that the DPRK shall suspend all activities related to its ballistic missile programme and in this context re-establish its pre-existing commitments to a moratorium on missile launching;

6. Decides that the DPRK shall abandon all nuclear weapons and existing nuclear programmes in a complete, verifiable and irreversible manner, shall act strictly in accordance with the obligations applicable to parties under the Treaty on the Non-Proliferation of Nuclear Weapons and the terms and conditions of its International Atomic Energy Agency (IAEA) Safeguards Agreement (IAEA INFCIRC/403) and shall provide the IAEA transparency measures extending beyond these requirements, including such access to individuals, documentation, equipments and facilities as may be required and deemed necessary by the IAEA;

7. Decides also that the DPRK shall abandon all other existing weapons of mass destruction and ballistic missile programme in a complete, verifiable and irreversible manner;

8. Decides that:

(a) All Member States shall prevent the direct or indirect supply, sale or transfer to the DPRK, through their territories or by their nationals, or using their flag vessels or aircraft, and whether or not originating in their territories, of:

(i) Any battle tanks, armoured combat vehicles, large calibre artillery systems, combat aircraft, attack helicopters, warships, missiles or missile systems as defined for the purpose of the United Nations Register on Conventional Arms, or related materiel including spare parts, or items as determined by the Security Council or the Committee established by paragraph 12 below (the Committee);

(ii) All items, materials, equipment, goods and technology as set out in the lists in documents S/2006/814 and S/2006/815, unless within 14 days of adoption of this resolution the Committee has amended or completed their provisions also taking into account the list in document S/2006/816, as well as other items, materials, equipment, goods and technology, determined by the Security Council or the Committee, which could contribute to DPRK's nuclear-related, ballistic missile-related or other weapons of mass destruction-related programmes;

(iii) Luxury goods;

(b) The DPRK shall cease the export of all items covered in subparagraphs (a) (i) and (a) (ii) above and that all Member States shall prohibit the procurement of such items from the DPRK by their nationals, or using their flagged vessels or aircraft, and whether or not originating in the territory of the DPRK;

(c) All Member States shall prevent any transfers to the DPRK by their nationals or from their territories, or from the DPRK by its nationals or from its territory, of tech-

nical training, advice, services or assistance related to the provision, manufacture, maintenance or use of the items in subparagraphs (a) (i) and (a) (ii) above;

(d) All Member States shall, in accordance with their respective legal processes, freeze immediately the funds, other financial assets and economic resources which are on their territories at the date of the adoption of this resolution or at any time thereafter, that are owned or controlled, directly or indirectly, by the persons or entities designated by the Committee or by the Security Council as being engaged in or providing support for, including through other illicit means, DPRK's nuclear-related, other weapons of mass destruction-related and ballistic missile related programmes, or by persons or entities acting on their behalf or at their direction, and ensure that any funds, financial assets or economic resources are prevented from being made available by their nationals or by any persons or entities within their territories, to or for the benefit of such persons or entities;

(e) All Member States shall take the necessary steps to prevent the entry into or transit through their territories of the persons designated by the Committee or by the Security Council as being responsible for, including through supporting or promoting, DPRK policies in relation to the DPRK's nuclear-related, ballistic missile-related and other weapons of mass destruction-related programmes, together with their family members, provided that nothing in this paragraph shall oblige a state to refuse its own nationals entry into its territory;

(f) In order to ensure compliance with the requirements of this paragraph, and thereby preventing illicit trafficking in nuclear, chemical or biological weapons, their means of delivery and related materials, all Member States are called upon to take, in accordance with their national authorities and legislation, and consistent with international law, cooperative action including through inspection of cargo to and from the DPRK, as necessary;

9. Decides that the provisions of paragraph 8 (d) above do not apply to financial or other assets or resources that have been determined by relevant States:

(a) To be necessary for basic expenses, including payment for foodstuffs, rent or mortgage, medicines and medical treatment, taxes, insurance premiums, and public utility charges, or exclusively for payment of reasonable professional fees and reimbursement of incurred expenses associated with the provision of legal services, or fees or service charges, in accordance with national laws, for routine holding or maintenance of frozen funds, other financial assets and economic resources, after notification by the relevant States to the Committee of the intention to authorize, where appropriate, access to such funds, other financial assets and economic resources and in the absence of a negative decision by the Committee within five working days of such notification;

(b) To be necessary for extraordinary expenses, provided that such determination has been notified by the relevant States to the Committee and has been approved by the Committee; or

(c) To be subject of a judicial, administrative or arbitral lien or judgement, in which case the funds, other financial assets and economic resources may be used to satisfy that lien or judgement provided that the lien or judgement was entered prior to the date of the present resolution, is not for the benefit of a person referred to in para-

graph 8 (d) above or an individual or entity identified by the Security Council or the Committee, and has been notified by the relevant States to the Committee;

10. Decides that the measures imposed by paragraph 8 (e) above shall not apply where the Committee determines on a case-by-case basis that such travel is justified on the grounds of humanitarian need, including religious obligations, or where the Committee concludes that an exemption would otherwise further the objectives of the present resolution;

11. Calls upon all Member States to report to the Security Council within thirty days of the adoption of this resolution on the steps they have taken with a view to implementing effectively the provisions of paragraph 8 above;

12. Decides to establish, in accordance with rule 28 of its provisional rules of procedure, a Committee of the Security Council consisting of all the members of the Council, to undertake the following tasks:

(a) To seek from all States, in particular those producing or possessing the items, materials, equipment, goods and technology referred to in paragraph 8 (a) above, information regarding the actions taken by them to implement effectively the measures imposed by paragraph 8 above of this resolution and whatever further information it may consider useful in this regard;

(b) To examine and take appropriate action on information regarding alleged violations of measures imposed by paragraph 8 of this resolution;

(c) To consider and decide upon requests for exemptions set out in paragraphs 9 and 10 above;

(d) To determine additional items, materials, equipment, goods and technology to be specified for the purpose of paragraphs 8 (a) (i) and 8 (a) (ii) above;

(e) To designate additional individuals and entities subject to the measures imposed by paragraphs 8 (d) and 8 (e) above;

(f) To promulgate guidelines as may be necessary to facilitate the implementation of the measures imposed by this resolution;

(g) To report at least every 90 days to the Security Council on its work, with its observations and recommendations, in particular on ways to strengthen the effectiveness of the measures imposed by paragraph 8 above;

13. Welcomes and encourages further the efforts by all States concerned to intensify their diplomatic efforts, to refrain from any actions that might aggravate tension and to facilitate the early resumption of the Six-Party Talks, with a view to the expeditious implementation of the Joint Statement issued on 19 September 2005 by China, the DPRK, Japan, the Republic of Korea, the Russian Federation and the United States, to achieve the verifiable denuclearization of the Korean Peninsula and to maintain peace and stability on the Korean Peninsula and in north-east Asia;

14. Calls upon the DPRK to return immediately to the Six-Party Talks without precondition and to work towards the expeditious implementation of the Joint Statement issued on 19 September 2005 by China, the DPRK, Japan, the Republic of Korea, the Russian Federation and the United States;

15. Affirms that it shall keep DPRK's actions under continuous review and that it shall be prepared to review the appropriateness of the measures contained in paragraph 8 above, including the strengthening, modification, suspension or lifting of the measures, as may be needed at that time in light of the DPRK's compliance with the provisions of the resolution;

16. Underlines that further decisions will be required, should additional measures be necessary;

17. Decides to remain actively seized of the matter.

F: The Role of Europe

1. Implications of the Terrorist Threat for EU Policy: "Targeted Initiative" (10 December 2001)

Non-proliferation, disarmament and arms control remain an indispensable element of cooperative security between States. They can also make an essential contribution in the global fight against terrorism by reducing the risk of non-state actors gaining access to weapons of mass destruction, radioactive materials and means of delivery as well as by preventing the spread of conventional weapons.

The elimination, reduction or control of certain weapons, their means of delivery and relevant materials according to the relevant bilateral and multilateral instruments as well as national initiatives enforcing this goal, together with their effective national implementation significantly reduces the risk of proliferation to non-state actors. Furthermore, multilateral instruments and regimes for disarmament, arms control and non-proliferation as well as national initiatives enforcing this goal foster confidence between States and enhance security. They thereby contribute to the building and strengthening of the international coalition against terrorism.

In conformity with the Plan of Action approved by the European Council to combat terrorism and the Union's determination to contribute to the global coalition against terrorism, the Council today decides to launch a targeted Initiative to respond effectively to the international threat of terrorism, which focuses on the following elements:

> – Multilateral instruments: In consistence with their ongoing review process, the Council sees an urgent need to strengthen relevant multilateral instruments in the field of non-proliferation, disarmament and arms control with a view to promoting their universalisation and ensuring their effective implementation. The Council shall continue to actively support the international negotiation process to finalise the draft international code of conduct against ballistic missile proliferation.
>
> – Export controls: The Council considers that the EU should focus on concrete measures to strengthen export controls to prevent terrorist groups and States which harbour them from acquiring materials relative to weapons of mass destruction. The Council notes that the full implementation by the Member States of the European Union Code of Conduct on export of military equipment will continue to minimise the risk of any diversion of weapons of European origin to terrorist organisations. The Council sees merit in targeted EU assistance to third countries to help strengthen export control and enforcement.
>
> – International cooperation: The Council emphasises the importance of protection and assistance against the use or threat of chemical and biological weapons as well as measures to maintain physical control of nuclear material worldwide. The Council sees merit in sustaining and developing – where needed – assistance to States to eliminate or reduce as foreseen in the relevant treaties existing stocks of weapons of mass destruction, thereby reducing the risk of proliferation to non-state actors.

– Political dialogue: The Council decides to enhance the political dialogue with third countries in the field of non-proliferation, arms control and disarmament. In this context, the Union will continue to strengthen its partnership with the relevant countries and shall further develop an active dialogue with other countries to promote their support to non-proliferation, disarmament and arms control policies as a means of combating terrorism.

The Council notes that further work continues towards the adoption of a list of concrete measures in the four abovementioned fields.

2. Implications of the terrorist threat on the non-proliferation, disarmament and arms control policy of the EU – Measures agreed on by the European Council on 15 April 2002

At its extraordinary meeting on 21 September 2001, the European Council declared that terrorism is a real challenge to the world and to Europe and that the fight against terrorism will be a priority objective of the European Union. In pursuing this priority objective, on 10 December 2001 the foreign ministers of the European Union launched a targeted initiative to respond effectively in the field of non-proliferation, disarmament and arms control to the international threat of terrorism, which focuses on multilateral instruments, export controls, international co-operation and political dialogue.

In implementing this targeted initiative the Council today adopts the following list of concrete measures:

Chapter I: Multilateral instruments

A. Support all activities related to the universalisation of existing multilateral instruments (i.a. CWC, BWC, Geneva Protocol, NPT, CTBT, CCW and Ottawa Convention)

The EU as such and its Member States will:

1. Promote, at a political level, universal adherence to instruments relating to weapons of mass destruction (BWC, CWC, Geneva Protocol, NPT, CTBT, Safeguards Agreements and Additional Protocols with the IAEA, CPPNM);

2. Lobby for the withdrawal of all relevant reservations on the Geneva Protocol;

3. Act at a political level in view of reaching a wider adherence and effective implementation of other relevant instruments in the field of conventional weapons.

B. Work for the effective implementation of the international instruments as well as political commitments world-wide

The EU as such and its Member States will promote:

1. Compliance with obligations and commitments under the international instruments as agreed by the States Parties, including - where the international instruments provide for- the destruction of prohibited weapons, the prevention of their diversion and illegal use, as well as the prevention of diversion of their technologies;

2. Enactment and strict application of national implementation legislation as required by the international instruments;

3. Full implementation of the Non-Proliferation Treaty and of the Final Documents of the 2000 and 1995 Review Conferences to the Non-Proliferation Treaty;

4. Enactment of the provisions of the Convention of the Physical Protection of Nuclear Material (CPPNM) and encourage those concerned states to take into consideration relevant IAEA recommendations and to request, when appropriate, an IPPAS mission;

5. Timely, consistent and full implementation of reporting obligations imposed either by the international instruments or by the final reports of review conferences (Chemical

Weapons Convention declarations, BWC-CBMs, reports on the Amended II Protocol to the CCW, Article 7 reports regarding the Ottawa Convention) and the creation of necessary conditions for processing the resulting information (e.g. translate and process information coming from BWC-CBMs in usable databases);

6. Implementation of confidence building measures like, inter alia, submission of national reports to the UN register on conventional weapons and expansion of the register;

7. Implementation of the United Nations' programme of action on the fight against the illicit trade in small arms and light weapons and of the OSCE document on SALW.

C. Support the work of the international organisations (e.g. OPCW, CTBTO, IAEA) in their endeavour, in particular by:

1. Reviewing the financial resources required by the international organisations in order to provide sufficient funding to enable them to discharge their monitoring activities, including those undertaken in the light of the new threats post September 11, and ensuring that the funds provided are used in the most effective way;

2. Sustaining and expanding the OPCW capabilities to conduct effective inspections especially challenge inspections and investigations into alleged use. More realistic and frequent training exercises, especially practice inspections, provide an ideal mechanism to maintain and enhance such capabilities;

3. Supporting the statutory activities of the IAEA and strengthening its work to assist Member States to deal with the following:

- physical protection of nuclear material and installations;

- safe and secure management of radioactive sources including the implementation of the code of conduct on the safety and security of radioactive sources;

- illicit trafficking in nuclear and radioactive material.

D. Reinforce, where needed, the multilateral instruments, in particular by:

1. Working actively to fill identified gaps in the current pattern of multilateral instruments in the field of disarmament, arms control and non-proliferation;

2. Review and, if needed, strengthen national implementation measures of multilateral instruments in the field of disarmament, arms control and non-proliferation;

3. Continuing efforts to promote the universalisation of the draft International Code of Conduct against ballistic missile proliferation with a view to its adoption before the end of 2002;

4. Continuing the efforts to promote the strengthening of the IAEA safeguards system through the signature and ratification of the Additional Protocols;

5. Speeding up completion by EU Member States of the necessary formalities to bring the IAEA Additional Protocols into force for the EU;

6. Making a special effort to overcome the stalemate in the Conference on Disarmament and promote the commencement of negotiations of a Fissile Material Cut-off Treaty;

7. Drafting of an international instrument on marking and tracing of SALW (i.a. French-Swiss proposal) as well as an international instrument on brokering as a priority;

8. Working for the successful conclusion of a reconvened 5th BWC Review Conference in November 2002;

9. Working in favour or a successful and early conclusion of negotiations under way in Vienna to expand the scope and application of the Convention of the Physical Protection of Nuclear Material;

10. Strengthening the CCW, through the promotion of measures aimed at verifying compliance with the convention and its protocols, and through the development of legally binding instruments, especially on explosive remnants of war.

In order to achieve the aims contained in this Chapter, the EU and its Member States will exchange information about the results of demarches with a view to establishing a country focused database.

Chapter II: Export controls

The EU as such and its Member States will:

1. Assess appropriate ways of improving the existing export control mechanisms: Nuclear Suppliers' Group, Zanger Committee, Missile Technology Control Regime, Australia Group and the Wassenaar Arrangement, as a contribution in the fight against terrorism, in order to prevent the diversion by terrorists of any weapons or "dual use" items or technologies.

2. Establish or further develop EU co-ordinating mechanisms with the aim to improve information exchange practices in different export control regimes and arrangements, in order to provide accurate and up to date information on risks of proliferation involving non-state actors and states that support them.

3. Promote, within the regimes and arrangements, common understanding and strict adherence to their guidelines, principles and practices.

4. Promote the inclusion of "prevention of terrorism" in the objectives of all existing export control regimes and arrangements.

5. Promote, where applicable, in the framework of intensified out-reach activities, adherence to effective export control criteria by countries outside the existing export control regimes and arrangements.

6. Examine measures, in close co-operation with the Commission, to improve the enforcement of the common control system based on the Council Regulation (EC) No 1334/2000 on dual use items and technology and consider whether there are further regulatory measures that could be adopted to render the control system more effective regarding non-proliferation by, among others, the following measures:

- more regular exchanges of information between Member States (e.g. in the co-ordination group);

- examine implementation by Member States of controls on transhipment, transit and post-clearance, according to the provisions of the Community customs code.

7. Invite the relevant EU institutions to consider initiating a review of the denial notice system to ensure that is operating efficiently after more than three years since its inception.

Chapter III: International co-operation.

The EU as such and its Member States will:

1. Improve preparation for international assistance in relation to the CWC and the BWC to protect states against the use or threat of chemical and biological weapons in consistence with the decisions agreed upon by the European Council of Ghent.

2. Provide, as appropriate, international assistance through the OPCW, in accordance with Article X of the Chemical Weapons Convention.

3. Continue its efforts to maintain and upgrade, where appropriate, a high level of physical protection on nuclear material and facilities, and to make use of the relevant provisions of the CPPMN regarding international cooperation in the case of misuse or theft of nuclear material.

4. Make full use, as regards sources and radioactive materials, of the provisions of the convention on assistance in the case of nuclear accident or radiological emergency.

5. Support and enhance, within the EU financial possibilities and building on already existing initiatives in the Russian Federation and other CIS, co-operation programmes for disarmament and non-proliferation with a view to:

- assist in the destruction of weapons of mass destruction and their means of delivery;

- assist in the disposition of the related released materials, including radioactive materials;

- reduce proliferation risks, i.a. through ISTC/SCTU co-ordinated programmes;

- improve the required legislative development and implementation (i.a. export control).

6. Study the possibilities for a targeted assistance programme on export controls for the Central Asian states.

7. Strengthen the co-operation in the field of destruction of SALW and other conventional weapons surpluses, as well as in facilitating the tracing of lines of supply.

Chapter IV: Political dialogue

The EU as such and its Member States will:

1. Intensify the political dialogue on disarmament, arms control and non-proliferation, in particular with countries in Asia and the Middle East.

2. Invite like-minded countries outside of the EU to join the effort to promote the universalisation of multilateral instruments.

3. Intensify and expand co-operation with candidate countries related to export control, with a view to improving their capacity to fulfil the requirements of common export

control, and thus support in concrete terms their membership in all export control regimes. Raise more frequently export control issues with third countries in the context of political dialogue.

4. Promote the implementation of the relevant provisions of the UN Security Council resolutions and decisions.

5. Promote a strict implementation of UN, EU and OSCE arms embargoes.

The Council will consider the adoption of common positions and joint actions to assure the effective implementation of the listed measures.

3. EU Strategy against Proliferation of Weapons of Mass Destruction (12 December 2003)

At Thessaloniki, the European Council adopted a Declaration on non-proliferation of Weapons of Mass Destruction. Member States made the commitment, drawing on the Basic Principles already established, to further elaborate before the end of 2003 a coherent EU strategy to address the threat of proliferation, and to continue to develop and implement the Action Plan adopted in June by the Council as a matter of priority. Delegations will find herewith the draft strategy elaborated to fulfil the commitment taken in Thessaloniki.

Introduction

1. The proliferation of weapons of mass destruction and their means of delivery such as ballistic missiles are a growing threat to international peace and security. While the international treaty regimes and export controls arrangements have slowed the spread of WMD and delivery systems, a number of states have sought or are seeking to develop such weapons. The risk that terrorists will acquire chemical, biological, radiological or fissile materials and their means of delivery adds a new critical dimension to this threat.

2. As the European Security Strategy makes clear, the European Union cannot ignore these dangers. WMD and missile proliferation puts at risk the security of our states, our peoples and our interests around the world. Meeting this challenge must be a central element in the EU's external action. The EU must act with resolve, using all instruments and policies at its disposal. Our objective is to prevent, deter, halt and, where possible, eliminate proliferation programmes of concern worldwide.

3. Non-proliferation, disarmament and arms control can make an essential contribution in the global fight against terrorism by reducing the risk of non state actors gaining access to weapons of mass destruction, radioactive materials, and means of delivery. We recall in this context the Council conclusions of 10 December 2001 on implications of the terrorist threat on the non-proliferation, disarmament, and arms control policy of the EU.

Chapter I: Proliferation of WMD and Means of Delivery is a Growing Threat to international Peace and Security

4. The proliferation of weapons of mass destruction and their means of delivery are a growing threat. Proliferation is driven by a small number of countries and non-state actors, but presents a real threat through the spread of technologies and information and because proliferating countries may help one another. These developments take place outside the current control regime.

5. Increasingly widespread proliferation of weapons of mass destruction increases the risk of their use by States (as shown by the Iran/Iraq conflict) and of their acquisition by terrorist groups who could conduct actions aimed at causing large-scale death and destruction.

6. Nuclear weapons proliferation: the Treaty on the Non-proliferation of Nuclear Weapons (NPT) must be preserved in its integrity. It has helped to slow and in some cases reverse the spread of military nuclear capability, but it has not been able to prevent it completely. The possession of nuclear weapons by States outside the NPT and non-compliance with the Treaty's provisions by states party to the Treaty risk undermining non-proliferation and disarmament efforts.

7. Chemical Weapons Proliferation: A particular difficulty with verification and export control regimes is that the materials, equipment, and know-how are dual use. One way of assessing the level of risk is to see whether there is indigenous ability to produce chemical warfare (CW) agent precursors and to weaponise chemical warfare agents. In addition, several countries still possess large chemical weapons stockpiles that should be destroyed, as provided for in the Chemical Weapons Convention. The possible existence of chemical weapons in States not party to the Chemical Weapons Convention is also a matter of concern.

8. Biological weapons proliferation: although effective deployment of biological weapons requires specialised scientific knowledge including the acquisition of agents for effective dissemination, the potential for the misuse of the dual-use technology and knowledge is increasing as a result of rapid developments in the life sciences. Biological weapons are particularly difficult to defend against (due to their lack of signature). Moreover, the consequence of the use maybe difficult to contain depending on the agent used and whether humans, animals, or plants are the targets. They may have particular attractions for terrorists. Biological weapons, as well as chemical weapons, pose a special threat in this respect.

9. Proliferation of means of delivery related to weapons of mass destruction: development by several countries of concern of ballistic programmes, of autonomous capacity in the production of medium and long range missiles, as well as cruise missiles and UAV are a growing cause of concern.

10. All such weapons could directly or indirectly threaten the European Union and its wider interests. A WMD attack on the EU's territory would involve the risk of disruption on a massive scale, in addition to grave immediate consequences in terms of destruction and casualties. In particular, the possibility of WMD being used by terrorists present a direct and growing threat to our societies in this respect.

11. In areas of tension where there are WMD programmes, European interests are potentially under threat, either through conventional conflicts between States or through terrorist attacks. In those regions, expatriate communities, stationed and deployed troops (bases or external operations), and economic interests (natural resources, investments, export markets) can be affected, whether or not specially targeted.

12. All the States of the Union and the EU institutions have a collective responsibility for preventing these risks by actively contributing to the fight against proliferation.

13. The EU Situation Centre has prepared and will continuously update a threat assessment using all available sources; we will keep this issue under review and continue to support this process, in particular by enhancing our co-operation.

Chapter II: The European Union cannot ignore these Dangers. It must seek an Effective Multilateralist Response to this Threat

14. To address with unceasing determination the threat posed by WMD a broad approach covering a wide spectrum of actions is needed. Our approach will be guided by:

- our conviction that a multilateralist approach to security, including disarmament and non-proliferation, provides the best way to maintain international order and hence our commitment to uphold, implement and strengthen the multilateral disarmament and non-proliferation treaties and agreements;

- our conviction that non-proliferation should be mainstreamed in our overall policies, drawing upon all resources and instruments available to the Union;

- our determination to support the multilateral institutions charged respectively with verification and upholding of compliance with these treaties;

- our view that increased efforts are needed to enhance consequence management capabilities and improve coordination;

- our commitment to strong national and internationally-coordinated export controls;

- our conviction that the EU in pursuing effective non-proliferation should be forceful and inclusive and needs to actively contribute to international stability;

- our commitment to co-operate with the United States and other partners who share our objectives.

At the same time, the EU will continue to address the root causes of instability including through pursuing and enhancing its efforts in the areas of political conflicts, development assistance, reduction of poverty and promotion of human rights.

15. Political and diplomatic preventative measures (multilateral treaties and export control regimes) and resort to the competent international organisations form the first line of defence against proliferation. When these measures (including political dialogue and diplomatic pressure) have failed, coercive measures under Chapter VII of the UN Charter and international law (sanctions, selective or global, interceptions of shipments and, as appropriate, the use of force) could be envisioned. The UN Security Council should play a central role.

A) Effective multilateralism is the cornerstone of the European strategy for combating proliferation of WMD.

16. The EU is committed to the multilateral treaty system, which provides the legal and normative basis for all non-proliferation efforts. The EU policy is to pursue the implementation and universalisation of the existing disarmament and non-proliferation norms. To that end, we will pursue the universalisation of the NPT, the IAEA Safeguard agreements and protocols additional to them, the CWC, the BTWC, the HCOC, and the early entry into force of the CTBT. The EU policy is to work towards the bans on biological and chemical weapons being declared universally binding rules of international law. The EU policy is to pursue an international agreement on the prohibition of the production of fissile material for nuclear weapons or other nuclear explosive devices. The EU will

assist third countries in the fulfilment of their obligations under multilateral conventions and regimes.

17. If the multilateral treaty regime is to remain credible it must be made more effective. The EU will place particular emphasis on a policy of reinforcing compliance with the multilateral treaty regime. Such a policy must be geared towards enhancing the detectability of significant violations and strengthening enforcement of the prohibitions and norms established by the multilateral treaty regime, including by providing for criminalisation of violations committed under the jurisdiction or control of a State. The role of the UN Security Council, as the final arbiter on the consequence of non-compliance – as foreseen in multilateral regimes – needs to be effectively strengthened.

18. To ensure effective detectability of violations and to deter non-compliance the EU will make best use of, and seek improvements to, existing verification mechanisms and systems. It will also support the establishment of additional international verification instruments and, if necessary, the use of non-routine inspections under international control beyond facilities declared under existing treaty regimes. The EU is prepared to enhance, as appropriate, its political, financial and technical support for agencies in charge of verification.

19. The EU is committed to strengthening export control policies and practices within its borders and beyond, in co-ordination with partners. The EU will work towards improving the existing export control mechanisms. It will advocate adherence to effective export control criteria by countries outside the existing regimes and arrangements.

B) Promotion of a stable international and regional environment is a condition for the fight against proliferation of WMD

20. The EU is determined to play a part in addressing the problems of regional instability and insecurity and the situations of conflict which lie behind many weapons programmes, recognising that instability does not occur in a vacuum. The best solution to the problem of proliferation of WMD is that countries should no longer feel they need them. If possible, political solutions should be found to the problems, which lead them to seek WMD. The more secure countries feel, the more likely they are to abandon programmes: disarmament measures can lead to a virtuous circle just as weapons programmes can lead to an arms race.

21. To this end, the EU will foster regional security arrangements and regional arms control and disarmament processes. The EU's dialogue with the countries concerned should take account of the fact that in many cases they have real and legitimate security concerns, with the clear understanding that there can never be any justification for the proliferation of WMD. The EU will encourage these countries to renounce the use of technology and facilities that might cause a particular risk of proliferation. The EU will expand co-operative threat reduction activities and assistance programmes.

22. The EU believes that political solutions to all of the different problems, fears and ambitions of countries in the most dangerous regions for proliferation will not be easy to achieve in the short run. Our policy is therefore to prevent, deter, halt and, where possible, eliminate proliferation programmes of concern, while dealing with their underlying causes.

23. Positive and negative security assurances can play an important role: they can serve both as an incentive to forego the acquisition of WMD and as a deterrent. The EU will promote further consideration of security assurances.

24. Proliferation of WMD is a global threat, which requires a global approach. However, as security in Europe is closely linked to security and stability in the Mediterranean, we should pay particular attention to the issue of proliferation in the Mediterranean area.

C) Close co-operation with key partners is crucial for the success of the global fight against proliferation

25. A common approach and co-operation with key partners is essential in order to effectively implement WMD non-proliferation regime.

26. Co-operation with the US and other key partners such as the Russian Federation, Japan and Canada is necessary to ensure a successful outcome of the global fight against proliferation.

27. In order to tackle and limit the proliferation risk resulting from weaknesses in the administrative or institutional organisation of some countries, the EU should encourage them to be partners in the fight against proliferation, by offering a programme aimed at assisting these countries in improving their procedures, including the enactment and enforcement of implementing penal legislation. Assistance should be associated with regular joint evaluations, reinforcing the collaborative spirit and the confidence building.

28. Appropriate cooperation with the UN and other international organisations will assist in ensuring a successful outcome of the global fight against proliferation. The EU will ensure, in particular, exchange of information and analysis with NATO, within the agreed framework arrangements.

Chapter III: The European Union must Make Use of all its Instruments to Prevent, Deter, Halt, and if Possible Eliminate Proliferation Programmes that Cause Concern at Global Level

29. The elements of the EU's Strategy against proliferation of weapons of mass destruction need to be integrated across the board. We have a wide range of instruments available: multilateral treaties and verification mechanisms; national and internationally-coordinated export controls; cooperative threat reduction programmes; political and economic levers (including trade and development policies); interdiction of illegal procurement activities and, as a last resort, coercive measures in accordance with the UN Charter. While all are necessary, none is sufficient in itself. We need to strengthen them across the board, and deploy those that are most effective in each case. The European Union has special strengths and experience to bring to this collective effort. It is important that the EU's objectives, as set out in this strategy, be factored in its policy approach in each area, so as to maximise its effectiveness.

30. In implementing our strategy we have decided to focus in particular on the specific measures contained in this chapter. It is a "living action plan" whose implementation will be constantly monitored. It will be subjected to regular revision and updating every six months.

A) Rendering multilateralism more effective by acting resolutely against proliferators.

1) Working for the universalisation and when necessary strengthening of the main treaties, agreements and verification arrangements on disarmament and non-proliferation.

- Carrying out diplomatic action to promote the universalisation and reinforcement of multilateral agreements, in implementation of the Council Common Position of 17 November 2003.

2) Fostering the role of the UN Security Council, and enhancing expertise in meeting the challenge of proliferation.

- Working inter alia to enable the Security Council to benefit from independent expertise and a pool of readily available competence, in order to carry out the verification of proliferating activities that are a potential threat to international peace and security. The EU will consider how the unique verification and inspection experience of UNMOVIC could be retained and utilised, for example by setting up a roster of experts.

3) Enhancing political, financial and technical support to verification regimes.

- Now that all EU Member States have ratified the IAEA Additional Protocols, the EU will redouble its efforts to promote their conclusions by third States.

- Fostering measures aimed at ensuring that any possible misuse of civilian programmes for military purposes will be effectively excluded.

- Releasing financial resources to support specific projects conducted by multilateral institutions (i.a. IAEA, CTBTO Preparatory Commission and OPCW) which could assist in fulfilling our objectives.

- Promoting challenge inspections in the framework of the Chemical Weapons Convention and beyond. This issue will be addressed in the CWC competent bodies as well as in the framework of political dialogue with third States.

- Reinforcing the BTWC and the CWC and, in this context, continuing the reflection on verification instruments. The BTWC does not contain at present a verification mechanism. The EU must find ways to strengthen compliance. A group of experts to give advice on how this could be done could be established. The EU will take the lead in efforts to strengthen regulations on trade with material that can be used for the production of biological weapons. The EU will also take the lead in supporting national implementation of the BTWC (e.g. in providing technical assistance). The EU will consider giving support to states with administrative or financial difficulties in their national implementation of the Chemical Weapons Convention and the BTWC.

4) Strengthening export control policies and practices in co-ordination with partners of the export control regimes; advocating, where applicable, adherence to effective export control criteria by countries outside the existing regimes and arrangements; strengthening suppliers regimes and European co-ordination in this area.

- Making the EU a leading co-operative player in the export control regimes by coordinating EU positions within the different regimes, supporting the member-

ship of acceding countries and where appropriate involvement of the Commission, promoting a catch-all clause in the regimes, where it is not already agreed, as well as strengthening the information exchange, in particular with respect to sensitive destinations, sensitive end-users and procurement patterns.

- Reinforcing the efficiency of export control in an enlarged Europe, and successfully conducting a Peer Review to disseminate good practices by taking special account of the challenges of the forthcoming enlargement.

- Setting up a programme of assistance to States in need of technical knowledge in the field of export control.

- Working to ensure that the Nuclear Suppliers Group make the export of controlled nuclear and nuclear related items and technology conditional on ratifying and implementing the Additional Protocol.

- Promoting in the regimes reinforced export controls with respect to intangible transfers of dual-use technology, as well as effective measures relating to brokering and transhipment issues.

- Enhancing information exchange between Member States. Considering exchange of information between the EU SitCen and like-minded countries.

5) Enhancing the security of proliferation-sensitive materials, equipment and expertise in the European Union against unauthorised access and risks of diversion.

- Improving the control of high activity radioactive sources. After the adoption of the Council Directive on the control of high activity sealed radioactive sources, Member States should ensure its fast implementation at national level. The EU should promote the adoption of similar provisions by third countries.

- Enhancing, where appropriate, the physical protection of nuclear materials and facilities, including obsolete reactors and their spent fuel.

- Strengthening of EC and national legislation and control over pathogenic microorganisms and toxins (both in Member States and in Acceding Countries) where necessary. Co-operation between the public health, occupational health and safety and the non-proliferation structures should be reinforced. The creation of an EU Centre for Disease Control and the task that it would perform should be analysed.

- Fostering the dialogue with industry to reinforce awareness. An initiative will be taken in order to promote firstly a dialogue with EU industry with a view to raising the level of awareness of problems related to the WMD and secondly, a dialogue between EU and US industry, in particular in the biological sector.

6) Strengthening identification, control and interception of illegal trafficking.

- Adoption by Member States of common policies related to criminal sanctions for illegal export, brokering and smuggling of WMD-related material.

- Considering measures aimed at controlling the transit and transhipment of sensitive materials.

- Supporting international initiatives aimed at the identification, control and interception of illegal shipments.

B) Promoting a stable international and regional environment

1) Reinforcing EU co-operative threat reduction programmes with other countries, targeted at support for disarmament, control and security of sensitive materials, facilities and expertise.

- Prolonging the Programme on disarmament and non-proliferation in the Russian Federation beyond June 2004.

- Increasing EU co-operative threat reduction funding in the light of financial perspectives beyond 2006. The creation of a specific Community budget line for non-proliferation and disarmament of WMD should be envisaged. Member States should be encouraged to contribute also on a national basis. These efforts should include measures aimed at reinforcing the control of the non-proliferation of WMD related expertise, science and technology.

- Setting up of a programme of assistance to States in need of technical knowledge in order to ensure the security and control of sensitive material, facilities and expertise.

2) Integrate the WMD non-proliferation concerns into the EU's political, diplomatic and economic activities and programmes, aiming at the greatest effectiveness.

- Mainstreaming non-proliferation policies into the EU's wider relations with third countries, in accordance to the GAERC conclusions of 17 November 2003, inter alia by introducing the non-proliferation clause in agreements with third countries.

- Increasing Union efforts to resolve regional conflicts by using all the instruments available to it, notably within the framework of CFSP and ESDP.

C) Co-operating closely with the United States and other key partners.

1) Ensuring adequate follow up to the EU-US declaration on non-proliferation issued at the June 2003 summit.

2) Ensuring coordination and, where appropriate, joint initiatives with other key partners.

D) Developing the necessary structures within the Union

1) Organising a six monthly debate on the implementation of the EU Strategy at the External Relations Council.

2) Setting up, as agreed in Thessaloniki, a unit which would function as a monitoring centre, entrusted with the monitoring of the consistent implementation of the EU Strategy and the collection of information and intelligence, in liaison with the Situation Centre. This monitoring centre would be set up at the Council Secretariat and fully associate the Commission.

4. EU Council Common Position on the universalisation and reinforcement of multilateral agreements in the field of non-proliferation of weapons of mass destruction and means of delivery (17 November 2003)

The Council of the European Union,

Having regard to the Treaty on the European Union, and in particular Article 15 thereof,

Whereas:

(1) At Thessaloniki, the European Council stated that the proliferation of weapons of mass destruction and means of delivery is a growing threat to international peace and security; the risk that terrorists will acquire chemical, biological, radiological or nuclear materials adds a new dimension to this threat. Therefore, the European Council decided that the EU collective effort would focus, *inter alia,* on working towards the universal ratification of, and adherence to, the key disarmament and non-proliferation treaties and agreements and, when necessary, towards the strengthening thereof.

(2) In its Action Plan for the implementation of the Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction, the EU and its Member States undertook to promote at political level universal adherence to instruments relating to weapons of mass destruction and their means of delivery.

(3) The restatement of this policy would serve as a yardstick in the negotiations of EU positions in international forums, and it is therefore appropriate to formulate it in a Council Common Position,

Has adopted this Common Position:

Article 1

The objectives of this Common Position are:

(a) to promote the universal ratification of, and adherence to, the following multilateral agreements and, where necessary, to reinforce their provisions, including by ensuring compliance:

(i) Nuclear Non-Proliferation Treaty and Safeguards Agreements (NPT);

(ii) Additional Protocols with the International Atomic Energy Agency (IAEA Additional Protocols);

(iii) Chemical Weapons Convention;

(iv) Biological and Toxin Weapons Convention;

(v) The Hague Code of Conduct against Ballistic Missile Proliferation;

(b) to promote the early entry into force of the Comprehensive Nuclear Test-Ban Treaty.

These key instruments provide a basis for the international community's disarmament and non-proliferation efforts, which contribute to international confidence, stability and peace, including the fight against terrorism.

Article 2

In pursuit of the objectives set up in Article 1, the EU and its Member States will pay particular attention to the need to reinforce compliance with the multilateral treaty regime by:

- enhancing the detectability of violations, and

- strengthening the enforcement of obligations established by this treaty regime.

To this end, particular emphasis will be placed on making best use of existing verification mechanisms and, where necessary, establishing additional verification instruments as well as strengthening the role of the UN Security Council which has the primary responsibility for the maintenance of international peace and security.

Article 3

The EU and its Member States will focus their diplomatic action on the pursuance of the objectives referred to in Articles 1 and 2, in accordance with the modalities set out below.

Article 4

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is the cornerstone of the global non-proliferation regime and the essential foundation for the pursuit of nuclear disarmament, under Article VI thereof. Achieving universal adherence to the NPT is of crucial importance. To that end, the EU will:

- call on all those States not yet parties to the NPT to accede unconditionally to the NPT as non-nuclear-weapon States and to place all their nuclear facilities and activities under the provisions of the IAEA Comprehensive Safeguards System,

- urge those States not yet having entered into Safeguards Agreements with the IAEA to fulfil their obligations in accordance with Article III of the NPT and to conclude such agreements as a matter of urgency,

- promote all the objectives laid down in the NPT,

- support the Final Document of the 2000 NPT Review Conference and the Decisions and Resolution adopted at the 1995 NPT Review and Extension Conference,

- promote further consideration of security assurances,

- promote measures to ensure that any possible misuse of civilian nuclear programmes for military purposes will be effectively excluded.

Article 5

The EU considers the IAEA Additional Protocols to be an integral part of the IAEA Safeguards System. By raising the standard for compliance and by making it easier to detect violations, the Additional Protocols strengthen the NPT. In order to promote the universal adoption and implementation of the Additional Protocols, the EU will:

- urge the early ratification of the Additional Protocols by the EU Member States and Acceding Countries by the end of 2003,

- urge other regional organisations to do likewise,

- work towards making the Additional Protocols and Safeguards Agreements the standard for the IAEA verification system and work towards universal adherence to the Additional Protocols,

- encourage strong political and financial support for the work of the IAEA.

Article 6

The Chemical Weapons Convention is a unique disarmament and non-proliferation instrument the integrity and strict application of which must be fully guaranteed. Effective national implementation is essential for the effective operation of the Convention. In order to strengthen the Convention, the EU will:

- encourage those countries that have not yet adhered to or ratified the Convention to do so without delay,

- encourage all countries which are parties to the Convention to enact without delay necessary national implementation measures, including penal legislation. Such measures must reflect the comprehensive nature of the Convention's provisions,

- urge those States concerned to ensure compliance with their obligation to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Convention,

- work towards the bans on chemical weapons being declared universally binding rules of international law.

Article 7

The Biological and Toxin Weapons Convention (BTWC) is a cornerstone in the effort to prevent biological agents or toxins from being used as weapons. The EU continues to support the principle of verification of the BTWC.

In order to strengthen the Convention, the EU will:

- make specific efforts to convince States which have not yet adhered to or ratified the Convention to do so without delay,

- work towards identifying effective mechanisms to strengthen and verify compliance within the BTWC,

- work to ensure concrete outcomes from the annual meetings to be held between 2003 and 2005, in preparation for the Sixth Review Conference in 2006,

- put emphasis on, where necessary, strengthening national implementation measures, including penal legislation, and control over pathogenic microorganisms and toxins in the framework of the BTWC,

- work towards the bans on biological and toxin weapons being declared universally binding rules of international law.

Article 8

The Hague Code of Conduct against Ballistic Missile Proliferation is an important tool against the growing proliferation of ballistic missiles capable of carrying weapons of mass destruction. The Code establishes fundamental principles where previously there were none and represents a crucial step towards a possible multilateral arrangement to prevent ballistic missiles proliferation. The EU will:

- convince as many countries as possible to subscribe to it, especially those with ballistic missile capabilities,

- work together with other subscribing States to develop further and implement the Code, in particular the confidence building measures provided for in the Code,

- promote, where possible and appropriate, a closer relationship between the Code and the UN system.

Article 9

The EU will promote the early entry into force of the Comprehensive Nuclear Test-Ban Treaty in accordance with the terms set out in Council Decision 2003/567/CFSP of 21 July 2003 implementing Common Position 1999/533/CFSP relating to the European Union's contribution to the promotion of the early entry into force of the Comprehensive Nuclear Test-Ban Treaty (CTBT)[1]

Article 10

This Common Position shall take effect on the date of its adoption.

Article 11

This Common Position shall be published in the Official Journal of the European Union.

Done at Brussels, 17 November 2003.

[1] OJ L 192, 31.7.2003, p. 53.

5. EU Council Common Position relating to the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (25 April 2005)

The Council of the European Union,

Having regard to the Treaty on European Union, and in particular Article 15 thereof,

Whereas:

(1) The European Union continues to regard the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) as the cornerstone of the global nuclear non-proliferation regime, the essential foundation for the pursuit of nuclear disarmament in accordance with Article VI of the NPT and an important element in the further development of nuclear energy applications for peaceful purposes.

(2) On 17 November 2003 the Council adopted Common Position 2003/805/CFSP on the universalisation and reinforcement of multilateral agreements in the field of nonproliferation of weapons of mass destruction and means of delivery.[1] On 12 December 2003 the European Council adopted a Strategy against proliferation of Weapons of Mass Destruction.

(3) The United Nations Security Council unanimously adopted Resolution 1540 (2004), describing the proliferation of weapons of mass destruction and their means of delivery as a threat to international peace and security.

(4) The 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons with the task of examining the Treaty and the question of its extension adopted decisions on the indefinite extension of the Treaty on the Non-Proliferation of Nuclear Weapons, on principles and objectives for nuclear non proliferation and disarmament and on strengthening the review process for that Treaty and a resolution on the Middle East.

(5) On 13 April 2000 the Council adopted Common Position 2000/297/CFSP relating to the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.[2]

(6) The 2000 NPT Review Conference adopted a final document.

(7) The Preparatory Committee for the 2005 NPT Review Conference held three sessions, from 8 to 19 April 2002 in New York, 28 April to 9 May 2003 in Geneva and 26 April to 7 May 2004 in New York.

(8) On 29 April 1997 the Council adopted Joint Action 97/288/CFSP on the European Union's contribution to the promotion of transparency in nuclear-related export controls(3).

(9) On 17 May 2004 the Council adopted Joint Action 2004/495/CFSP on support for IAEA activities under its Nuclear Security Programme and in the framework of the

[1] OJ L 302, 20.11.2003, p. 34. (3) OJ L 120, 12.5.1997, p. 1.

[2] OJ L 97, 19.4.2000, p. 1. (4) OJ L 182, 19.5.2004, p. 46.

implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction(4).

(10) On 1 June 2004 the Council adopted a statement of support for the Proliferation Security Initiative on Weapons of Mass Destruction.

(11) The Additional Protocol to the Verification Agreement between the Non-Nuclear-Weapon States of the European Atomic Energy Community (EURATOM), EURATOM and the International Atomic Energy Agency (IAEA), the Additional Protocol to the Safeguards Agreement between France, EURATOM and the IAEA, and the Additional Protocol to the Safeguards Agreement between the United Kingdom, EURATOM and the IAEA have been signed and entered into force on 30 April 2004.

(12) In the light of the outcome of the 2000 Review Conference and of the discussions at the three sessions of the Preparatory Committee for the NPT 2005 Review Conference, and bearing in mind the current situation, it is appropriate to update and develop further the objectives set out in Common Position 2000/297/CFSP, and the initiatives carried out under its terms,

Has adopted this Common Position:

Article 1

The objective of the European Union shall be to strengthen the international nuclear non proliferation regime by promoting the successful outcome of the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

Article 2

For the purposes of the objective laid down in Article 1, the European Union shall:

(a) contribute to a structured and balanced review of the operation of the NPT at the 2005 Review Conference, including the implementation of undertakings of the States Parties under the said Treaty, as well as the identification of areas in which, and of means through which, further progress should be sought in future;

(b) help build a consensus on the basis of the framework established by the NPT by supporting the Decisions and the Resolution adopted at the 1995 Review and Extension Conference and the final document of the 2000 NPT Review Conference, and shall bear in mind the current situation and shall promote inter alia the following essential issues, including:

1. undertaking efforts to preserve the integrity of the NPT and strengthen its implementation;

2. recognising that the NPT is a unique and irreplaceable multilateral instrument for maintaining and reinforcing international peace, security and stability, in that it establishes a legal framework for preventing increased proliferation of nuclear weapons and for developing further a verification system guaranteeing that non-nuclear-weapons States use nuclear energy solely for peaceful purposes, and that it represents the essential foundation for the pursuit of nuclear disarmament in accordance with Article VI thereof;

3. working towards universal accession to the NPT;

4. stressing the absolute necessity of full compliance with all the provisions of the NPT by all States Parties;

5. calling on all States not party to the NPT to pledge commitments to non-proliferation and disarmament and calling on those States to become States Parties to the NPT as non nuclear weapon States.

6. recognising that serious nuclear proliferation events have occurred since the end of the 2000 Review Conference;

7. stressing the need to strengthen the role of the UN Security Council, as final arbiter, in order that it can take appropriate action in the event of non-compliance with NPT obligations, in keeping with the Statute of the International Atomic Energy Agency (IAEA), including the application of safeguards;

8. drawing attention to the potential implications for international peace and security of withdrawal from the NPT. Urging the adoption of measures to discourage withdrawal from the said Treaty;

9. calling for nuclear cooperation to be suspended where the IAEA is not able to provide adequate assurances that a State's nuclear programme is designed exclusively for peaceful purposes, until such time as the Agency is able to provide such assurances;

10. calling on all States in the region to make the Middle East into an effectively verifiable zone free of nuclear weapons and other weapons of mass destruction and their delivery systems, in keeping with the Resolution on the Middle East adopted at the 1995 Review and Extension Conference;

11. since security in Europe is linked to security in the Mediterranean, giving top priority to implementation of the nuclear non-proliferation regime in that region;

12. acknowledging the importance of nuclear-weapon-free zones for peace and security, on the basis of arrangements freely entered into between the States of the region concerned;

13. stressing the need to do everything possible to prevent the risk of nuclear terrorism, linked to possible terrorist access to nuclear weapons or materials that could be used in the manufacture of radiological dispersal devices and, in this context, stressing the need for compliance with obligations under Security Council Resolution 1540 (2004). Calling for tighter security for high activity radioactive sources. Supporting G8 and IAEA action in this regard;

14. recognising that, in the light of the increased threat of nuclear proliferation and terrorism, the Proliferation Security Initiative, the Global Threat Reduction Initiative and the G8 Global Partnership Initiative should be approved;

15. calling for universal accession to the Comprehensive Safeguards Agreements and Additional Protocols;

16. recognising that Comprehensive Safeguards Agreements and Additional Protocols have a deterrent effect on nuclear proliferation and form today's verification standard, and continuing to work for increased detectability of any violations of Treaty obligations;

17. working for recognition by the IAEA Board of Governors that the conclusion of a Comprehensive Safeguards Agreement and an Additional Protocol is today's verification standard;

18. highlighting the IAEA's unique role in verifying States' compliance with their nuclear Non-proliferation commitments and helping them, on request, to tighten up the security of nuclear materials and installations, and calling on States to support the Agency;

19. recognising the importance of appropriate effective export controls, in compliance with Security Council Resolution 1540 (2004) and in accordance with Article III.2 of the NPT;

20. implementing, at national level, effective export, transit, transhipment and re-export controls, including appropriate laws and regulations for that purpose;

21. enacting effective criminal sanctions to deter illegal export, transit, brokering, trafficking and related financing, in compliance with UNSC Resolution 1540 (2004);

22. urging the Zangger Committee and the Nuclear Suppliers Group to share their experience on export controls, so that all States can draw on the arrangements of the Zangger Committee and the Nuclear Suppliers Group (NSG) guidelines;

23. pointing up the need to strengthen the (NSG) Guidelines at an early date, to adapt them to new non-proliferation challenges;

24. calling on the States Parties to the Convention on the Physical Protection of Nuclear Material to work for rapid conclusion of an amended Convention;

25. recognising the right of States Parties to the NPT to nuclear energy for peaceful purposes, in accordance with Article IV thereof, with due regard for Articles I, II and III of the Treaty;

26. underlining the importance of continuing international cooperation in order to strengthen nuclear safety, safe waste management and radiological protection and calling upon States that have not yet done so to accede to all the relevant conventions as soon as possible and to implement fully the ensuing commitments;

27. noting that the States Parties to the NPT, may, pursuant to Article IV thereof, have resort to peaceful uses of nuclear energy, inter alia in the area of production of electricity, industry, health and agriculture;

28. urging the formulation of guarantees of access to nuclear fuel services, or to fuel itself, subject to appropriate conditions;

29. noting the report of the IAEA's expert group on multinational approaches to the nuclear fuel cycle and promoting an early start to its scrutiny by the IAEA;

30. stressing, while acknowledging the nuclear arms reductions which have taken place since the end of the cold war, the need for an overall reduction in nuclear arsenals in the pursuit of gradual, systematic nuclear disarmament under Article VI of the NPT and welcoming, in this context, the ratification of the Moscow Treaty by the Russian Federation and the United States of America in 2002, while stressing the need for more progress in reducing their arsenals;

31. stressing the need to implement the declarations made by the Presidents of Russia and America in 1991 and 1992 on unilateral reductions in their stocks of nonstrategic nuclear weapons and calling on all States with non-strategic nuclear weapons to include them in their general arms control and disarmament processes, with a view to their reduction and elimination;

32. recognising application of the principle of irreversibility to guide all measures in the field of nuclear disarmament and arms control, as a contribution to the maintenance and reinforcement of international peace, security and stability, taking these conditions into account;

33. recognising the importance, from the point of view of nuclear disarmament, of the programmes for the destruction and elimination of nuclear weapons and the elimination of fissile material as defined under the G8 World Partnership;

34. pursuing efforts to secure transparency, as a voluntary Confidence Building Measure to support further progress in disarmament;

35. since the Comprehensive Nuclear Test Ban Treaty (CTBT) forms an essential part of the nuclear disarmament and non-proliferation regime and with a view to its entry into force as soon as possible, without conditions, calling on States, particularly those listed in Annex II, to sign and ratify the said Treaty without delay and without conditions and, pending the entry into force of the said Treaty, calling on all States to abide by a moratorium and to refrain from any action contrary to the obligations and provisions of the said Treaty. Highlighting the importance of the work of the CTBT Organisation Preparatory Commission and actively supporting the work of the Special Representative of the States which have ratified the Treaty charged with promoting universal accession to the Treaty;

36. appealing again to the Disarmament Conference for the immediate commencement and early conclusion of a non-discriminatory, universally applicable Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices, without pre-conditions, and bearing in mind the special coordinator's report and the mandate included therein and, pending entry into force of the said Treaty, calling on all States to declare and uphold a moratorium on the production of fissile material for nuclear weapons or other nuclear explosive devices. The EU welcomes the action of those of the five nuclear-weapon States which have decreed the relevant moratorium;

37. calling on all States concerned to take appropriate practical measures in order to reduce the risk of accidental nuclear war;

38. pursuing consideration of the issue of security assurances to the non-nuclear-weapon States Parties to the NPT;

39. calling on nuclear-weapon States to reaffirm existing security assurances noted by the United Nations Security Council in Resolution 984(1995) and to sign and ratify the relevant protocols on nuclear-weapon-free zones, drawn up following the requisite consultations, recognising that Treaty-based security assurances are available to such zones;

40. stressing the need for general disarmament;

41. highlighting the importance of universal accession and implementation of the Biological and Toxins Weapons Convention (BTWC), the Chemical Weapons Convention (CWC) and the conventions, measures and initiatives contributing to conventional arms control;

42. calling for universal accession to and effective implementation of the Hague Code of Conduct against Ballistic Missile Proliferation;

43. working for the resolution of the problems of regional instability and insecurity and of the conflict situations which are often at the root of armament programmes.

Article 3

Action taken by the European Union for the purposes of Article 2 shall comprise:

(a) where appropriate, demarches by the Presidency, pursuant to Article 18 of the Treaty on European Union, with a view to promoting the universality of the NPT;

(b) demarches by the Presidency, pursuant to Article 18 of the Treaty on European Union, with regard to States Parties to the NPT, in order to urge their support for the objectives set out in Article 2 of this Common Position;

(c) the pursuit of agreement by Member States on draft proposals on substantive issues for submission on behalf of the European Union for consideration by States Parties to the NPT which may form the basis for decisions of the NPT 2005 Review Conference;

(d) Statements by the European Union delivered by the Presidency in the General Debate and in the debates in the three Main Committees.

Article 4

This Common Position shall take effect on the date of its adoption.

Article 5

This Common Position shall be published in the Official Journal of the European Union.

Done at Luxembourg, 25 April 2005.

G. The Role of G8 in Multilateral Nonproliferation Diplomacy

1. The G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction (Kananaskis, Canada, 26 June 2002)

The attacks of September 11 demonstrated that terrorists are prepared to use any means to cause terror and inflict appalling casualties on innocent people. We commit ourselves to prevent terrorists, or those that harbour them, from acquiring or developing nuclear, chemical, radiological and biological weapons; missiles; and related materials, equipment and technology. We call on all countries to join us in adopting the set of non-proliferation principles we have announced today.

In a major initiative to implement those principles, we have also decided today to launch a new G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction. Under this initiative, we will support specific cooperation projects, initially in Russia, to address non-proliferation, disarmament, counter-terrorism and nuclear safety issues. Among our priority concerns are the destruction of chemical weapons, the dismantlement of decommissioned nuclear submarines, the disposition of fissile materials and the employment of former weapons scientists. We will commit to raise up to $20 billion to support such projects over the next ten years. A range of financing options, including the option of bilateral debt for program exchanges, will be available to countries that contribute to this Global Partnership. We have adopted a set of guidelines that will form the basis for the negotiation of specific agreements for new projects, that will apply with immediate effect, to ensure effective and efficient project development, coordination and implementation. We will review over the next year the applicability of the guidelines to existing projects.

Recognizing that this Global Partnership will enhance international security and safety, we invite other countries that are prepared to adopt its common principles and guidelines to enter into discussions with us on participating in and contributing to this initiative. We will review progress on this Global Partnership at our next Summit in 2003.

The G8 Global Partnership: Principles to prevent terrorists, or those that harbour them, from gaining access to weapons or materials of mass destruction

The G8 calls on all countries to join them in commitment to the following six principles to prevent terrorists or those that harbour them from acquiring or developing nuclear, chemical, radiological and biological weapons; missiles; and related materials, equipment and technology.

I. Promote the adoption, universalization, full implementation and, where necessary, strengthening of multilateral treaties and other international instruments whose aim is to prevent the proliferation or illicit acquisition of such items; strengthen the institutions designed to implement these instruments.

II. Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage and domestic and international transport; provide assistance to states lacking sufficient resources to account for and secure these items.

III. Develop and maintain appropriate effective physical protection measures applied to facilities which house such items, including defence in depth; provide assistance to states lacking sufficient resources to protect their facilities.

IV. Develop and maintain effective border controls, law enforcement efforts and international cooperation to detect, deter and interdict in cases of illicit trafficking in such items, for example through installation of detection systems, training of customs and law enforcement personnel and cooperation in tracking these items; provide assistance to states lacking sufficient expertise or resources to strengthen their capacity to detect, deter and interdict in cases of illicit trafficking in these items.

V. Develop, review and maintain effective national export and transshipment controls over items on multilateral export control lists, as well as items that are not identified on such lists but which may nevertheless contribute to the development, production or use of nuclear, chemical and biological weapons and missiles, with particular consideration of end-user, catch-all and brokering aspects; provide assistance to states lacking the legal and regulatory infrastructure, implementation experience and/or resources to develop their export and transshipment control systems in this regard.

VI. Adopt and strengthen efforts to manage and dispose of stocks of fissile materials designated as no longer required for defence purposes, eliminate all chemical weapons, and minimize holdings of dangerous biological pathogens and toxins, based on the recognition that the threat of terrorist acquisition is reduced as the overall quantity of such items is reduced.

The G8 Global Partnership: Guidelines for New or Expanded Cooperation Projects

The G8 will work in partnership, bilaterally and multilaterally, to develop, coordinate, implement and finance, according to their respective means, new or expanded cooperation projects to address (i) non-proliferation, (ii) disarmament, (iii) counter-terrorism and (iv) nuclear safety (including environmental) issues, with a view to enhancing strategic stability, consonant with our international security objectives and in support of the multilateral non-proliferation regimes. Each country has primary responsibility for implementing its non-proliferation, disarmament, counter-terrorism and nuclear safety obligations and requirements and commits its full cooperation within the Partnership.

Cooperation projects under this initiative will be decided and implemented, taking into account international obligations and domestic laws of participating partners, within appropriate bilateral and multilateral legal frameworks that should, as necessary, include the following elements:

I. Mutually agreed effective monitoring, auditing and transparency measures and procedures will be required in order to ensure that cooperative activities meet agreed objectives (including irreversibility as necessary), to confirm work performance, to account for the funds expended and to provide for adequate access for donor representatives to work sites;

II. The projects will be implemented in an environmentally sound manner and will maintain the highest appropriate level of safety;

III. Clearly defined milestones will be developed for each project, including the option of suspending or terminating a project if the milestones are not met;

IV. The material, equipment, technology, services and expertise provided will be solely for peaceful purposes and, unless otherwise agreed, will be used only for the purposes of implementing the projects and will not be transferred. Adequate measures of physical protection will also be applied to prevent theft or sabotage;

V. All governments will take necessary steps to ensure that the support provided will be considered free technical assistance and will be exempt from taxes, duties, levies and other charges;

VI. Procurement of goods and services will be conducted in accordance with open international practices to the extent possible, consistent with national security requirements;

VII. All governments will take necessary steps to ensure that adequate liability protections from claims related to the cooperation will be provided for donor countries and their personnel and contractors;

VIII. Appropriate privileges and immunities will be provided for government donor representatives working on cooperation projects; and

IX. Measures will be put in place to ensure effective protection of sensitive information and intellectual property.

Given the breadth and scope of the activities to be undertaken, the G8 will establish an appropriate mechanism for the annual review of progress under this initiative which may include consultations regarding priorities, identification of project gaps and potential overlap, and assessment of consistency of the cooperation projects with international security obligations and objectives. Specific bilateral and multilateral project implementation will be coordinated subject to arrangements appropriate to that project, including existing mechanisms.

For the purposes of these guidelines, the phrase "new or expanded cooperation projects" is defined as cooperation projects that will be initiated or enhanced on the basis of this Global Partnership. All funds disbursed or released after its announcement would be included in the total of committed resources. A range of financing options, including the option of bilateral debt for program exchanges, will be available to countries that contribute to this Global Partnership.

The Global Partnership's initial geographic focus will be on projects in Russia, which maintains primary responsibility for implementing its obligations and requirements within the Partnership.

In addition, the G8 would be willing to enter into negotiations with any other recipient countries, including those of the Former Soviet Union, prepared to adopt the guidelines, for inclusion in the Partnership. Recognizing that the Global Partnership is designed to enhance international security and safety, the G8 invites others to contribute to and join in this initiative.

With respect to nuclear safety and security, the partners agreed to establish a new G8 Nuclear Safety and Security Group by the time of our next Summit.

2. The G8 Action Plan: Global Partnership against Spread of Weapons and Materials of Mass Destruction (Evian, France, 3 June 2003)

The Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, which we launched last year at the Kananaskis Summit, has made significant progress over the past year toward realising the objective of preventing terrorists, or those who harbour them, from acquiring or developing nuclear, chemical, radiological, and biological weapons; missiles; and related materials, equipment, and technology.

With our determined commitment, significant progress has been made:

- Substantial sums have already been pledged by Partners towards their Kananaskis commitment to raise up to $20 billion over ten years;

- The Russian government has made welcomed decisions to ensure implementation of guidelines, in particular full exemption of assistance from taxation, duties and other charges. Other guidelines have also been intensively addressed;

- The recent conclusion of the Multilateral Nuclear Environment Programme for the Russian Federation has demonstrated substantial progress in translating the Global Partnership initiative into concrete actions;

- All Partners have actively engaged in determining co-operation projects to be undertaken, and some significant projects have already been launched or expanded, in accordance with our priorities identified in Kananaskis;

- Outreach activities have been undertaken to invite and facilitate non-G8 countries to participate and contribute, as a result of which Finland, Norway, Poland, Sweden and Switzerland have indicated their interest in joining the Global Partnership as donors.

We commit ourselves to an active programme to continue the implementation of the initiative and to achieve substantial progress by the next Summit. Our goals are:

- To pursue the universal adoption of the non-proliferation principles;

- To reach our Kananaskis commitment of raising up to $20 billion over ten years through contributions from new donors or additional pledges from Partners;

- To significantly expand project activities, building upon preparatory work to establish implementing frameworks and to develop plans for project activities, as well as to sustain steady progress in projects already underway. We will continue to review progress in initiation and implementation of projects over the coming year, and to oversee co-ordination of projects, in order to review priorities, avoid gaps and overlaps, and assess consistency of projects with international security objectives, in accordance with our priorities;

- To resolve all outstanding implementation challenges and to review the implementation of all guidelines in practice, keeping in mind the need for uniform treatment of Partners, reflecting our co-operative approach;

- To expand participation in the Global Partnership to interested non-G8 donor countries that are willing to adopt the Kananaskis documents. While still focusing on projects in Russia, we mandate the Chair to enter into preliminary discussions with new or current recipient countries including those of the former Soviet Union that are prepared to adopt the Kananaskis documents, as the Ukraine has already done;

- To inform other organisations, parliamentary representatives, and publics of the importance of the Global Partnership.

3. The G8 Action Plan on Nonproliferation (Sea Island, Georgia, USA, 9 June 2004)

At Evian, we recognized the proliferation of weapons of mass destruction and their delivery systems, together with international terrorism, as the pre-eminent threat to international peace and security. This challenge requires a long-term strategy and multifaceted approaches.

Determined to prevent, contain, and roll back proliferation, today, at Sea Island, we announce an action plan to reinforce the global nonproliferation regime. We will work together with other concerned states to realize this plan.

All states must fulfill their arms control, disarmament, and nonproliferation commitments, which we reaffirm, and we strongly support universal adherence to and compliance with these commitments under the relevant multilateral treaties. We will help and encourage states in effectively implementing their obligations under the multilateral treaty regimes, in particular implementing domestically their obligations under such treaties, building law enforcement capacity, and establishing effective export controls. We call on all states that have not already done so to subscribe to the Hague Code of Conduct against Ballistic Missile Proliferation.

We strongly support UN Security Council Resolution 1540, calling on all states to establish effective national export controls, to adopt and enforce effective laws to criminalize proliferation, to take cooperative action to prevent non-state actors from acquiring weapons of mass destruction, and to end illicit trafficking in such weapons, their means of delivery, and related materials. We call on all states to implement this resolution promptly and fully, and we are prepared to assist them in so doing, thereby helping to fight the nexus between terrorism and proliferation, and black markets in these weapons and related materials.

1. Nuclear Nonproliferation

The trafficking and indiscriminate spread of sensitive nuclear materials, equipment, and technology that may be used for weapons purposes are a threat to us all. Some states seek uranium enrichment and plutonium reprocessing capabilities for weapons programs contrary to their commitments under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). We reaffirm our commitment to the NPT and to the declarations made at Kananaskis and Evian, and we will work to prevent the illicit diversion of nuclear materials and technology. We announce the following new actions to reduce the risk of nuclear weapons proliferation and the acquisition of nuclear materials and technology by terrorists, while allowing the world to enjoy safely the benefits of peaceful nuclear technology.

- To allow the world to safely enjoy the benefits of peaceful nuclear energy without adding to the danger of weapons proliferation, we have agreed to work to establish new measures so that sensitive nuclear items with proliferation potential will not be exported to states that may seek to use them for weapons purposes, or allow them to fall into terrorist hands. The export of such items should only occur pursuant to criteria consistent with global nonproliferation

norms and to states rigorously committed to those norms. We shall work to amend appropriately the Nuclear Suppliers Group (NSG) guidelines, and to gain the widest possible support for such measures in the future. We aim to have appropriate measures in place by the next G-8 Summit. In aid of this process, for the intervening year, we agree that it would be prudent not to inaugurate new initiatives involving transfer of enrichment and reprocessing equipment and technologies to additional states. We call on all states to adopt this strategy of prudence. We will also develop new measures to ensure reliable access to nuclear materials, equipment, and technology, including nuclear fuel and related services, at market conditions, for all states, consistent with maintaining nonproliferation commitments and standards.

- We seek universal adherence to IAEA comprehensive safeguards and the Additional Protocol and urge all states to ratify and implement these agreements promptly. We are actively engaged in outreach efforts toward this goal, and ready to offer necessary support.
- The Additional Protocol must become an essential new standard in the field of nuclear supply arrangements. We will work to strengthen NSG guidelines accordingly. We aim to achieve this by the end of 2005.

We support the suspension of nuclear fuel cycle cooperation with states that violate their nuclear nonproliferation and safeguards obligations, recognizing that the responsibility and authority for such decisions rests with national governments or the Security Council.

- To enhance the IAEA's integrity and effectiveness, and strengthen its ability to ensure that nations comply with their NPT obligations and safeguards agreements, we will work together to establish a new Special Committee of the IAEA Board of Governors. This committee would be responsible for preparing a comprehensive plan for strengthened safeguards and verification. We believe this committee should be made up of member states in compliance with their NPT and IAEA commitments.
- Likewise, we believe that countries under investigation for non-technical violations of their nuclear nonproliferation and safeguards obligations should elect not to participate in decisions by the IAEA Board of Governors or the Special Committee regarding their own cases.

2. Proliferation Security Initiative

We reiterate our strong commitment to and support for the Proliferation Security Initiative (PSI) and the Statement of Interdiction Principles, which is a global response to a global problem. We will continue our efforts to build effective PSI partnerships to interdict trafficking in weapons of mass destruction, their delivery systems, and related materials. We also will prevent those that facilitate proliferation from engaging in such trafficking and work to broaden and strengthen domestic and international laws supporting PSI. We welcome the increasing level of support worldwide for PSI, which now includes all G-8 members. The Krakow meeting commemorating PSI's first anniversary, attended by 62 countries, evidences growing global support.

We will further cooperate to defeat proliferation networks and coordinate, where appropriate, enforcement efforts, including by stopping illicit financial flows and shutting down illicit plants, laboratories, and brokers, in accordance with national legal authori-

ties and legislation and consistent with international law. Several of us are already developing mechanisms to deny access to our ports and airports for companies and impose visa bans on individuals involved in illicit trade.

We encourage all states to strengthen and expand national and international measures to respond to clandestine procurement activities. Directly, and through the relevant international mechanisms, we will work actively with states requiring assistance in improving their national capabilities to meet international norms.

3. The Global Partnership Against Weapons and Materials of Mass Destruction

Since its launch by G-8 Leaders two years ago at Kananaskis, the Global Partnership has become a significant force worldwide to enhance international safety and security. Global Partnership member states, including the six new donors that joined at Evian, have in the past year launched new cooperative projects in Russia and accelerated progress on those already underway. While much has been accomplished, significant challenges remain. We recommit ourselves to our Kananaskis Statement, Principles, and Guidelines as the basis for Global Partnership cooperation.

We recommit ourselves to raising up to $20 billion for the Global Partnership through 2012.

Expanding the Partnership to include additional donor countries is essential to raise the necessary resources and to ensure the effort is truly global. Today we welcome the decisions of Australia, Belgium, the Czech Republic, Denmark, Ireland, the Republic of Korea, and New Zealand to join.

We will continue to work with other former Soviet states to discuss their participation in the Partnership. We reaffirm that Partnership states will participate in projects according to their national interests and resources.

We reaffirm that we will address proliferation challenges worldwide. We will, for example, pursue the retraining of Iraqi and Libyan scientists involved in past WMD programs. We also support projects to eliminate over time the use of highly-enriched uranium fuel in research reactors worldwide, secure and remove fresh and spent HEU fuel, control and secure radiation sources, strengthen export control and border security, and reinforce biosecurity. We will use the Global Partnership to coordinate our efforts in these areas.

4. Nonproliferation Challenges

The DPRK's announced withdrawal from the NPT, which is unprecedented; its continued pursuit of nuclear weapons, including through both its plutonium reprocessing and its uranium enrichment programs, in violation of its international obligations; and its established history of missile proliferation are serious concerns to us all. We strongly support the Six-Party Process, and strongly urge the DPRK to dismantle all of its nuclear weapons-related programs in a complete, verifiable, and irreversible manner, a fundamental step to facilitate a comprehensive and peaceful solution.

We remain united in our determination to see the proliferation implications of Iran 's advanced nuclear program resolved. Iran must be in full compliance with its NPT obligations and safeguards agreement. To this end, we reaffirm our support for the IAEA Board of Governors' three Iran resolutions. We note that since Evian, Iran has signed the Additional Protocol and has committed itself to cooperate with the Agency, and to suspend its enrichment and reprocessing related activities. While we acknowledge the areas of progress reported by the Director General, we are, however, deeply concerned that Iran 's suspension of enrichment-related activity is not yet comprehensive. We deplore Iran 's delays, deficiencies in cooperation, and inadequate disclosures, as detailed in IAEA Director General reports. We therefore urge Iran promptly and fully to comply with its commitments and all IAEA Board requirements, including ratification and full implementation of the Additional Protocol, leading to resolution of all outstanding issues related to its nuclear program.

We welcome Libya 's strategic decision to rid itself of its weapons of mass destruction and longer-range missiles, to fully comply with the NPT, the Additional Protocol, the Biological and Toxin Weapons Convention (BWC), and the Chemical Weapons Convention (CWC), and to commit not to possess missiles subject to the Missile Technology Control Regime. We note Libya has cooperated in the removal of nuclear equipment and materials and taken steps to eliminate chemical weapons. We call on Libya to continue to cooperate fully with the IAEA and the Organization for the Prohibition of Chemical Weapons.

5. Defending Against Bioterrorism

Bioterrorism poses unique, grave threats to the security of all nations, and could endanger public health and disrupt economies. We commit to concrete national and international steps to: expand or, where necessary, initiate new biosurveillance capabilities to detect bioterror attacks against humans, animals, and crops; improve our prevention and response capabilities; increase protection of the global food supply; and respond to, investigate, and mitigate the effects of alleged uses of biological weapons or suspicious outbreaks of disease. In this context, we seek concrete realization of our commitments at the fifth Review Conference of the BWC. The BWC is a critical foundation against biological weapons' proliferation, including to terrorists. Its prohibitions should be fully implemented, including enactment of penal legislation. We strongly urge all non-parties to join the BWC promptly.

6. Chemical Weapons Proliferation

We support full implementation of the CWC, including its nonproliferation aspects. We strongly urge all non-parties to join the CWC promptly, and will work with them to this end. We also urge CWC States Parties to undertake national legislative and administrative measures for its full implementation. We support the use of all fact-finding, verification, and compliance measures, including, if necessary, challenge inspections, as provided in the CWC.

7. Implementation of the Evian Initiative on Radioactive Source Security

At Evian we agreed to improve controls on radioactive sources to prevent their use by terrorists, and we have made substantial progress toward that goal. We are pleased that the IAEA approved a revised Code of Conduct on the Safety and Security of Radioactive Sources in September 2003. We urge all states to implement the Code and recognize it as a global standard.

We have agreed to export and import control guidance for high-risk radioactive sources, which should only be supplied to authorized end-users in states that can control them. States should ensure that no sources are diverted for illicit use. We seek prompt IAEA approval of this guidance to ensure that effective controls are operational by the end of 2005 and applied in a harmonized and consistent manner. We support the IAEA's program for assistance to ensure that all countries can meet the new standards.

8. Nuclear Safety and Security

Since the horrific 1986 accident at Chernobyl, we have worked with Ukraine to improve the safety and security of the site. We have already made a large financial contribution to build a safe confinement over the remnants of the Chernobyl reactor. We are grateful for the participation and contributions made by 21 other states in this effort. Today, we endorse international efforts to raise the remaining funds necessary to complete the project. We urge Ukraine to support and work closely with us to complete the confinement's construction by 2008 in a way that contributes to radiological safety, in particular in Ukraine and neighboring regions.

An effective, efficient nuclear regulatory system is essential for our safety and security. We affirm the importance for national regulators to have sufficient authority, independence, and competence.

4. Gleneagles Statement on Non-Proliferation, 8 July 2005

1. We acknowledge, as we did at Evian and Sea Island, that the proliferation of weapons of mass destruction (WMD) and their delivery means, together with international terrorism, remain the pre-eminent threats to international peace and security. The threat of the use of WMD by terrorists calls for redoubled efforts.

2. All States have a role to play in meeting the challenge of WMD proliferation by upholding international arms control, disarmament and non-proliferation norms. All must meet their obligations in full, and ensure effective implementation. We reaffirm our commitments in this regard. And we emphasise our determination to meet proliferation challenges decisively, through both national efforts and effective multilateralism.

3. At Sea Island, we agreed an Action Plan on Non-Proliferation. During the past year, we have worked intensively with our international partners on all its aspects.

Universalising and reinforcing the non-proliferation regime

4. Multilaterally agreed norms provide an essential basis for our non-proliferation efforts. We strongly support universal adherence to and compliance with these norms. We will work to strengthen them, including through improved verification and enforcement. We call on all States not party to the Nuclear Non-Proliferation Treaty, an IAEA Comprehensive Safeguards Agreement and Additional Protocol, the Chemical Weapons Convention, the Biological and Toxin Weapons Convention, the 1925 Geneva Protocol and the Hague Code of Conduct Against the Proliferation of Ballistic Missiles, to accede without delay. We remain ready to assist States to this end.

5. We welcome the agreement by the international community of the International Convention on the Suppression of Acts of Nuclear Terrorism, initiated by the Russian Federation. We look forward to its early entry into force.

United Nations

6. We acknowledge the role of the UN Security Council in addressing the challenges of proliferation. We welcome the fact that the majority of UN members have responded to UNSCR 1540 by submitting reports on their domestic nonproliferation provisions including export controls, and their contribution to international co-operation. We urge those who have not yet done so to submit reports without delay. It is essential that all states meet their obligations in full, by enacting and enforcing national legal and regulatory measures including appropriate criminal and civil penalties for violations, and by committing to international cooperation on non-proliferation. We stand ready to consider all requests from states seeking to develop their national procedures. We urge the 1540 Committee to work quickly and effectively, drawing on the support of relevant international organisations. We also urge the Security Council to consider how best to ensure that the work of the committee makes an enduring contribution to non-proliferation.

7. We welcome the attention given to non-proliferation by the UN Secretary General in his report "In Larger Freedom". We stand ready to engage actively at the meeting of Heads of State and Government for the High Level Plenary Event of the General As-

sembly in September. We acknowledge the role of the Conference on Disarmament in advancing our non-proliferation and disarmament objectives and call on it to resume substantive work.

8. We look forward to strengthening the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA) by State Parties at the Diplomatic Conference in October.

Proliferation Security Initiative

9. We reaffirm our commitment to the Proliferation Security Initiative (PSI) and its Statement of Interdiction Principles, which is a global response to a global problem. We welcome the increasing international endorsement for the Initiative. We call on all States to commit themselves to deepen co-operation in order to counter trafficking in WMD, delivery means and related materials.

10. We also call for enhanced efforts to combat proliferation networks and illicit financial flows by developing, on an appropriate legal basis, co-operative procedures to identify, track and freeze relevant financial transactions and assets.

Nuclear Non-Proliferation

Nuclear Non-Proliferation Treaty (NPT)

11. We emphasise that the NPT remains the cornerstone of nuclear non-proliferation. We reaffirm our full commitment to all three pillars of the Treaty. While we note with regret that it was not possible to achieve consensus at the 2005 Review Conference, we welcome the fact that all States Parties reaffirmed the validity of the Treaty. We remain determined that threats and challenges to the nuclear nonproliferation regime be addressed on the basis of the NPT. For our part, we pledge ourselves to redouble our efforts to uphold and strengthen the Treaty.

International Atomic Energy Agency (IAEA)

12. Safeguards are an essential tool for the effective implementation of the NPT. We reaffirm our full support for the IAEA. We are working for the implementation of a Comprehensive Safeguards Agreement and the Additional Protocol to become the universally accepted norm for verifying compliance with NPT safeguards obligations. The Additional Protocol must become an essential new standard in the field of nuclear supply arrangements. We will continue to work together to strengthen NSG guidelines accordingly. We welcome the establishment of the Committee on Safeguards and Verification, which will review the IAEA's ability to ensure compliance with NPT obligations and safeguards Agreements in the light of recent non-proliferation challenges.

Enrichment and Reprocessing Technology

13. Since Sea Island, we have worked to develop further measures to prevent the export of sensitive nuclear items with proliferation potential to states that may seek to use them for weapons purposes or allow them to fall into terrorist hands, while allowing the world to enjoy safely the benefits of peaceful nuclear technology. We agreed at Sea Island that

the export of such items should occur only pursuant to criteria consistent with global non-proliferation norms and to states rigorously committed to these norms. Over the past year, we have made progress in the development of such criteria. We welcome the decision at the recent Plenary Session of the Nuclear Suppliers Group (NSG) to work actively with a view to reaching consensus on this issue. In aid of this process, we continue to agree, as we did at Sea Island, that it would be prudent in the next year not to inaugurate new initiatives involving transfer of enrichment and reprocessing technologies to additional states. We continue to call on all states to adopt this strategy of prudence. We also welcome the adoption by the NSG of important measures which restrict nuclear transfers to States which have violated their non-proliferation and safeguards obligations.

14. We believe that strengthened conditions on the supply of sensitive technology should be accompanied by new measures to ensure that those states which forgo the nuclear fuel cycle and meet all nuclear non-proliferation obligations enjoy assured access to the market for nuclear fuel and related services. We welcome the efforts of the Expert Group, established by the Director-General of the IAEA, which has recently reported on possible Multinational Approaches to the Fuel Cycle. We will work together with all interested partners for a way forward which provides genuine access while minimising the risks of proliferation.

Proliferation Challenges

15. The example of Libya's important renunciation of weapons of mass destruction demonstrates that the international community responds positively to States which desire to be a part of the global non-proliferation mainstream. In this spirit, we are working with determination to address current proliferation challenges.

16. We express profound concern over the threat posed by DPRK's nuclear weapons programme, particularly following its recent statements that it has manufactured nuclear weapons and in the light of its missile programmes and history of missile proliferation. The DPRK has violated its commitments under the NPT and its IAEA safeguards agreement. We reiterate the necessity for the DPRK promptly to return to full compliance with the NPT, and dismantle all its nuclear weapons-related programmes in a complete, verifiable and irreversible manner. It is also essential that the DPRK not contribute to missile proliferation elsewhere, and maintain indefinitely its moratorium on the launching of missiles. We reaffirm our full support for the Six-Party talks, which represent an important opportunity to achieve a comprehensive solution. It is essential that the DPRK return to the Six Party Talks immediately without preconditions, and participate constructively to this end.

17. We remain united in our determination to see the proliferation implications of Iran's advanced nuclear programme resolved. It is essential that Iran provide the international community with objective guarantees that its nuclear programme is exclusively for peaceful purposes in order to build international confidence. We welcome the initiative of France, Germany and the United Kingdom, and the High Representative of the European Union to reach agreement with Iran on long-term arrangements which would provide such objective guarantees as well as political and economic co-operation. We call upon Iran to maintain the suspension of all enrichment- related and reprocessing activities while negotiations on the long term arrangements proceed. We reiterate the need for

Iran to co-operate fully with IAEA requests for information and access, to comply fully with all IAEA Board requirements, and to resolve all outstanding issues related to its nuclear programme. We also urge Iran to ratify the Additional Protocol without delay and, pending its ratification, to act fully in accordance with its provisions.

Defending against biological threats

18. We reaffirm our strong commitment to strengthening our defences against biological threats. Over the last year, our efforts have focussed on enhancing protection of the food supply. We will continue efforts to address biological threats and support work in other relevant international groups.

19. This year marks the 30th anniversary of the entry into force of the Biological and Toxin Weapons Convention. New biological threats mean that full compliance with the Convention remains as relevant today as it was at its inception. We encourage States Party to take a full part in the ongoing programme of work which this year will discuss the content, promulgation and adoption of codes of conduct for scientists. Further, we look forward to a substantive and forward-looking Review Conference in 2006.

20. 2005 also marks the 80th anniversary of the opening for signature of the 1925 Geneva Protocol prohibiting the use in war of asphyxiating, poisonous or other gases and bacteriological methods of warfare. We emphasise the continuing vital relevance of this multilateral rejection of the use in war of chemical and biological weapons.

Chemical Weapons Convention

21. We continue to support full implementation of the Chemical Weapons Convention, including its non-proliferation aspects. While acknowledging the obligation to destroy chemical weapons within the time limits provided for by the chemical weapons convention and to destroy or convert chemical weapons production facilities, we recall that States Party agreed in 2003 to an Action Plan which requires all to have national implementing measures in place by the time of the Conference of States Party scheduled for this November. We urge those States Party who have not yet done so to take all necessary steps to ensure the deadline is met. We stand ready to provide appropriate assistance. We support the use of consultations and cooperation, as well as fact-finding, verification, and compliance measures, including, if necessary, challenge inspections, as provided in the CWC.

Global Partnership against Proliferation of Weapons and Materials of Mass Destruction

22. We reaffirm our commitment to the Global Partnership against the Proliferation of Weapons and materials of Mass Destruction, and to the Kananaskis Statement, Principles, and Guidelines. We will work to build on the considerable progress we have made to implement co-operative projects to which the G8 and thirteen other countries now contribute. We renew our pledge to raise up to $20 billion over ten years to 2012 for Global Partnership priorities, initially in Russia. In this context, we will embark on new projects according to these priorities. We welcome Ukraine's participation, and continue to discuss with a number of countries of the Former Soviet Union their interest in join-

ing the Partnership. We reaffirm our openness in principle to a further expansion of the Partnership to donor and recipient partners which support the Kananaskis documents.

Nuclear Safety and Security

23. We welcome continued co-operation with the IAEA in the area of nuclear and radiological safety and security, including on strengthening regulatory infrastructures and the interface between safety and security. We support the establishment of the Global Threat Reduction Initiative and welcome the progress which has been made so far. We welcome the results of the IAEA's International Conference on Nuclear Security which was held in London in March. We have all signed the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management and urge others to join us.

24. Since the horrific accident in 1986, we have worked with Ukraine to improve the safety and security of the Chernobyl site. This year, together with the EU and 16 other countries, we have increased pledged funding for the construction of a new safe confinement over the remnants of the reactor to approximately $1 billion. We welcome Ukraine's political and financial commitment to this project, and urge Ukraine to ensure that the project can be completed safely by 2009.

Radioactive Source Safety and Security

25. At Evian we resolved to improve controls on radioactive sources to prevent their use by terrorists. We welcome the fact that more than 70 countries have committed to implement the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and urge all other states to adopt the Code. We welcome the IAEA endorsement of the international import and export framework for the control of radioactive sources. We will work towards having effective controls applied by the end of 2005, in a harmonised and consistent manner. We commend the results of the IAEA's International Conference on the Safety and Security of Radioactive Sources which was held in Bordeaux, France in June. We will strengthen our co-operation to improve the security of radioactive sources world wide.

5. G8-Statement on Non-Proliferation, St. Petersburg, 16 July 2006

The proliferation of weapons of mass destruction (WMD) and their means of delivery, together with international terrorism remain the pre-eminent threat to international peace and security. The international community must therefore boldly confront this challenge, and act decisively to tackle this threat. We reaffirm our determination and commitment to work together and with other states and institutions in the fight against the proliferation of WMD, including by preventing them from falling into hands of terrorists.

As an essential element of our efforts to confront proliferation, we are determined to fulfil arms control, disarmament and non-proliferation obligations and commitments under relevant international treaties, conventions and multilaterally agreed arrangements to which we are parties or in which we participate. We call on all other states to meet their obligations and commitments in full in this regard. We rededicate ourselves to the re-invigoration of relevant multilateral fora, beginning with the Conference on Disarmament. These efforts will contribute to the further reinforcement of the global non-proliferation regime.

We call on all states not Party to the Treaty on the Non-proliferation of Nuclear Weapons (NPT), the Chemical Weapons Convention (CWC), the Biological and Toxin Weapons Convention (BTWC) and the 1925 Geneva Protocol to accede to them without delay and those states that have not yet done so to subscribe to the Hague Code of Conduct Against Ballistic Missile Proliferation. We urge all states concerned to strictly observe a moratorium on nuclear weapon test explosions or any other nuclear explosions.

Nuclear Non-Proliferation

NPT

We reaffirm our full commitment to all three pillars of the NPT. We call on all states to comply with their NPT obligations, including IAEA safeguards as well as developing effective measures aimed at preventing trafficking in nuclear equipment, technology and materials.

IAEA Safeguards

We stress the importance of the IAEA safeguards system. We are seeking universal adherence to IAEA comprehensive safeguards agreements for the effective implementation of Article III of the NPT and to the Additional Protocol. In this context we urge all states that have not yet done so, to sign, ratify and implement these instruments promptly. We are actively engaged in efforts toward this goal, with a view to make comprehensive safeguards agreements together with an Additional Protocol the universally accepted verification standard. We will also work together vigorously to establish the Additional Protocol as an essential new standard in the field of nuclear supply arrangements.

Peaceful use of nuclear energy

We recall that Article IV of the NPT stipulates that nothing in the Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of the Treaty. We are committed to facilitate the exchange of equipment, materials and information for the peaceful use of nuclear energy. Full compliance with NPT non-proliferation obligations, including safeguards agreements, is an essential condition for such exchange.

An expansion of the peaceful use of nuclear energy must be carried forward in a manner consistent with nuclear non-proliferation commitments and standards. In this regard, it is important to develop and implement mechanisms assuring access to nuclear fuel related services to states as an alternative to pursuing enrichment and reprocessing activities. In this respect we appreciate the recent potentially complementary Initiative of the President of the Russian Federation on multinational centres to provide nuclear fuel cycle services and the Initiative of the President of the United States on the Global Nuclear Energy Partnership as well as the recent initiative tabled at the IAEA by France, Germany, the Netherlands, the Russian Federation, the United Kingdom and the United States regarding a concept for a multilateral mechanism for reliable access to enrichment services for nuclear fuel. We will work to elaborate further these initiatives. To further strengthen this common approach we will:

- continue reviewing multinational approaches to the fuel cycle, including international centres to provide nuclear fuel cycle services, with the IAEA, as well as relevant practical, legal and organizational solutions;

- facilitate developing credible international assurances of access to nuclear fuel related services; while

- those of us who have or are considering plans relating to use and/or development of safe and secure nuclear energy will promote research and development for safer, more efficient, more environmentally friendly and more proliferation resistant nuclear energy systems, including relevant technologies of the nuclear fuel cycle. Until advanced systems are in place, appropriate interim solutions could be pursued to address back-end fuel cycle issues in accordance with national choices and non-proliferation objectives.

FMCT

We support the early commencement of negotiations on the Fissile Material Cut-Off Treaty in the Conference on Disarmament.

Enrichment and Reprocessing

In accordance with approaches agreed upon at the G8 summits at Sea Island and in Gleneagles, we support the development of measures to prevent transfers of sensitive nuclear equipment, materials and technologies to states that may seek to use them for weapons purposes, or allow them to fall into terrorists' hands.

We will exercise enhanced vigilance with respect to the transfers of nuclear technology, equipment and material, whether in the trigger list, in the dual-use list, or unlisted, which could contribute to enrichment-related and reprocessing activities, and will be particularly vigilant with respect to attempts to acquire such technology, equipment and material by covert and illicit means.

We agreed at Sea Island that the export of such items should occur only pursuant to criteria consistent with global non-proliferation norms and to those states rigorously committed to these norms. Over the last two years we have made significant progress in the development of such criteria. We welcome the progress noted by the Nuclear Suppliers Group and its commitment to work actively with a view to reaching consensus on this issue by 2007.

In aid of this process we continue to agree, as we did at Sea Island and Gleneagles, that it would be prudent in the next year not to inaugurate new initiatives involving transfer of enrichment and reprocessing technologies to additional states. We call upon all other states to adopt this strategy of prudence.

India

We look forward to reinforcing our partnership with India. We note the commitments India has made, and encourage India to take further steps towards integration into the mainstream of strengthening the non-proliferation regime, so as to facilitate a more forthcoming approach towards nuclear cooperation to address its energy requirements, in a manner that enhances and reinforces the global non-proliferation regime.

BTWC

We look forward to a successful 6th BTWC Review Conference dedicated to the effective review of the operation of the Convention. We will facilitate adoption by the Review Conference of decisions aimed at strengthening and enhancing the implementation of the BTWC.

We call upon all States Parties to take necessary measures, including as appropriate the adoption of and implementation of national legislation, including penal legislation, in the framework of the BTWC, in order to prohibit and prevent the proliferation of biological and toxin weapons and to ensure control over pathogenic micro organisms and toxins. We invite the States Parties that have not yet done so to take such measures at the earliest opportunity and stand ready to consider appropriate assistance. In this regard, we welcome initiatives such as the 2006 EU Joint Action in support of the BTWC.

CWC

We continue to support full implementation of the CWC. We note the ongoing destruction of chemical weapons by the possessor states and are encouraged by the fact that the stockpiles of these deadly weapons are gradually decreasing. We acknowledge their obligations to destroy chemical weapons and to destroy or convert chemical weapons production facilities within the time limits provided for by the Chemical Weapons Convention.

We welcome the increasing number of States Parties to the Convention. We acknowledge the value of the Organization for the Prohibition of Chemical Weapons' Action Plan on national implementation measures and improvement of the situation with adoption of such measures. We urge States Parties to continue and intensify efforts in this direction. We stand ready to provide appropriate assistance.

United Nations Security Council Resolution 1540

We reaffirm the key role of the UN Security Council in addressing the challenges of proliferation. We urge all states to implement fully UNSC Resolution 1540, including reporting on their implementation of the Resolution.

We welcome the decision of UN Security Council Resolution 1673 to extend the mandate of the 1540 Committee in promoting the full implementation of the resolution. We intend to continue working actively at national and international levels to achieve this important aim, and stand ready to consider all requests for assistance in this regard.

HCOC

We reaffirm our commitment to work toward the, universalisation of the Hague Code of Conduct Against Ballistic Missile Proliferation, and the full implementation of its confidence-building measures.

PSI

We reaffirm our commitment to the Proliferation Security Initiative, which constitutes an important means to counter trafficking in WMD, their delivery means and related materials. We welcome the increasing international endorsement for the Initiative as it was demonstrated at the High Level Political Meeting in Warsaw. We take note of the discussion at that meeting on how PSI states can work cooperatively to prevent and disrupt proliferation finance, in furtherance of the objectives of UNSCR 1540.

Libya

The international community's positive response to Libya's renunciation of weapons of mass destruction demonstrates the benefits that follow a strategic decision to cooperate with the international community and be a part of the global nonproliferation mainstream.

Iran

We remain seriously concerned over the proliferation implications of Iran's advanced nuclear programme and we remain united in our commitment to see those implications resolved.

We stand fully behind the far reaching proposals presented to Iran on June 6, 2006 on behalf of China, France, Germany, Russia, the United Kingdom, the United States of America with the support of the High Representative of the European Union for a long-term comprehensive agreement with Iran based on cooperation and mutual respect.

We fully support the Statement of the Foreign Ministers of China, France, Germany, Russia, the United Kingdom, the United States of America issued on July 12, Paris, in which the Ministers and the High Representative of the European Union expressed their profound disappointment over the absence of any indication at all from the Iranians that Iran is ready to engage seriously on the substance of the above-mentioned proposals. Iran has failed to take the steps needed to allow negotiations to begin, specifically the suspension of all enrichment related and reprocessing activities, as required by the IAEA and supported in the United Nations Security Council Presidential Statement. The Ministers therefore decided to return the issue to the United Nations Security Council. We, the Leaders of the G-8, fully support this decision and the clear messages it sends to Iran about the choice it must make. We support the Paris appeal to Iran to respond positively to the substantive proposals made on June 6, 2006.

DPRK

We welcome the unanimously adopted UN Security Council Resolution 1695 which represents the clear and strong will of the international community.

We condemn the launching by the Democratic People's Republic of Korea (DPRK) of multiple ballistic missiles on July 5 local time and express serious concerns as this jeopardizes peace, stability and security in the region and beyond. This action violated the DPRK's pledge to maintain a moratorium on missile launches and is inconsistent with the purposes of the Six-Party Talks Joint Statement of September 19, 2005, in which all parties - including the DPRK - committed to joint efforts to lasting peace and stability in Northeast Asia. We also express our grave concern about the DPRK's indication of possible additional launches. We call on the DPRK to reestablish its preexisting commitments to a moratorium on missile launches and to refrain from contributing to missile proliferation. In accordance with the UN Security Council Resolution 1695 we will exercise vigilance in preventing any external cooperation with the DPRK' s missile and WMD programmes.

These missile launches intensify our deep concern over the DPRK's nuclear weapons programmes. We reiterate the necessity for the DPRK promptly to return to full compliance with the NPT. We strongly urge the DPRK to abandon all nuclear weapons and existing nuclear programmes. We reaffirm our full support for the September 19, 2005 Joint Statement and the Six-Party talks. We urge the DPRK to expeditiously return to these talks without precondition and to cooperate to settle the outstanding issues of concern on the basis of this Statement, which reaffirms the common objective of Six Parties; all participants should intensify their efforts to achieve the verifiable denuclearization of the Korean Peninsula in a peaceful manner and to maintain peace and stability on the Korean Peninsula and in Northeast Asia.

Global Partnership

The Global Partnership against the Spread of Weapons and Materials of Mass Destruction has continued its progress in the past year towards achieving the goals set out at Kananaskis. It has become a significant force to enhance international security and safety. Much has been accomplished in all areas but more has to be done to increase the efficiency of our cooperation.

We reaffirm our commitment to the full implementation of all G8 Global Partnership objectives. We also reaffirm our openness to examine the expansion of the Partnership to other recipient countries and donor states which support the Kananaskis documents and to embrace the goals and priorities of all Partnership members. We welcome the progress GP members have made working with Ukraine.

We appreciate the contribution of 13 non-G8 states who joined the Global Partnership.

We remain committed to our pledges in Kananaskis to raise up to $20 billion through 2012 for the Global Partnership, initially in Russia, to support projects to address priority areas identified in Kananaskis and to continue to turn these pledges into concrete actions.

H. Proliferation Security Initiative

Proliferation Security Initiative: Statement of Interdiction Principles (4 September 2003)

The Proliferation Security Initiative (PSI) is a response to the growing challenge posed by the proliferation of weapons of mass destruction (WMD), their delivery systems, and related materials worldwide. The PSI builds on efforts by the international community to prevent proliferation of such items, including existing treaties and regimes. It is consistent with and a step in the implementation of the UN Security Council Presidential statement of January 1992, which states that the proliferation of all WMD constitutes a threat to international peace and security, and underlines the need for member states of the UN to prevent proliferation. The PSI is also consistent with recent statements of the G8 and the European Union, establishing that more coherent and concerted efforts are needed to prevent the proliferation of WMD, their delivery systems, and related materials. PSI participants are deeply concerned about this threat and of the danger that these items could fall into the hands of terrorists, and are committed to working together to stop the flow of these items to and from states and non-state actors of proliferation concern.

The PSI seeks to involve in some capacity all states that have a stake in non-proliferation and the ability and willingness to take steps to stop the flow of such items at sea, in the air, or on land. The PSI also seeks cooperation from any state whose ships, flags, ports, territorial waters, airspace, or land might be used for proliferation purposes by states and non-state actors of proliferation concern. The increasingly aggressive efforts by proliferators to stand outside or to circumvent existing non-proliferation norms, and to profit from such trade, require new and stronger actions by the international community. We look forward to working with all concerned states on measures they are able and willing to take in support of the PSI, as outlined in the following set of "Interdiction Principles".

Interdiction Principles for the Proliferation Security Initiative:

PSI participants are committed to the following interdiction principles to establish a more coordinated and effective basis through which to impede and stop shipments of WMD, delivery systems, and related materials flowing to and from states and non-state actors of proliferation concern, consistent with national legal authorities and relevant international law and frameworks, including the UN Security Council. They call on all states concerned with this threat to international peace and security to join in similarly committing to:

1. Undertake effective measures, either alone or in concert with other states, for interdicting the transfer or transport of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern. "States or non-state actors of proliferation concern" generally refers to those countries or entities that the PSI participants involved establish should be subject to interdiction activities because they are engaged in proliferation through: (a) efforts to develop or acquire chemical, biological,

or nuclear weapons and associated delivery systems; or (b) transfers (either selling, receiving, or facilitating) of WMD, their delivery systems, or related materials.

2. Adopt streamlined procedures for rapid exchange of relevant information concerning suspected proliferation activity, protecting the confidential character of classified information provided by other states as part of this initiative, dedicate appropriate resources and efforts to interdiction operations and capabilities, and maximize coordination among participants in interdiction efforts.

3. Review and work to strengthen their relevant national legal authorities where necessary to accomplish these objectives, and work to strengthen when necessary relevant international laws and frameworks in appropriate ways to support these commitments.

4. Take specific actions in support of interdiction efforts regarding cargoes of WMD, their delivery systems, or related materials, to the extent their national legal authorities permit and consistent with their obligations under international law and frameworks, to include:

> a. Not to transport or assist in the transport of any such cargoes to or from states or non-state actors of proliferation concern, and not to allow any persons subject to their jurisdiction to do so.
>
> b. At their own initiative, or at the request and good cause shown by another state, to take action to board and search any vessel flying their flag in their internal waters or territorial seas or areas beyond the territorial seas of any other state that is reasonably suspected of transporting such cargoes to or from states or non-state actors of proliferation concerns, and to seize such cargoes that are identified.
>
> c. To seriously consider providing consent under the appropriate circumstances to the boarding and searching of its own flag vessels by other states and to the seizure of such WMD-related cargoes in such vessels that may be identified by such states.
>
> d. To take appropriate actions to (1) stop and/or search in their internal waters, territorial seas, or contiguous zones (when declared) vessels that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and to seize such cargoes that are identified; and (2) to enforce conditions on vessels entering or leaving their ports, internal waters or territorial seas that are reasonably suspected of carrying such cargoes, such as requiring that such vessels be subject to boarding, search, and seizure of such cargoes prior to entry.
>
> e. At their own initiative or upon the request and good cause shown by another state, to (1) require aircraft that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and that are transiting their airspace to land for inspection and seize any such cargoes that are identified; and/or (2) deny aircraft reasonably suspected of carrying such cargoes transit rights through their airspace in advance of such flights.
>
> f. If their ports, airfields, or other facilities are used as transshipment points for shipment of such cargoes to or from states or non-state actors of proliferation concern, to inspect vessels, aircraft, or other modes of transport reasonably suspected of carrying such cargoes, and to seize such cargoes that are identified.

This compilation of relevant multilateral treaties, agreements and other documents is meant to serve as a useful reference tool to all interested in the subject of nonproliferation. The compilation is non exhaustive and by necessity selective. Still it is hoped that it will serve its purpose of making available in one volume the most important documents related to the subject.