

## **6. Documents from Other Arrangements**

Although the CWC and the BWC are at the heart of the international regime governing the prohibition of chemical and biological weapons, other arrangements complement and strengthen the norm against the hostile use of chemistry. These arrangements, which range from informal groupings to more formally-constituted groups of States, tend to entail collective agreement to take or renounce certain actions to prevent CBW proliferation. These arrangements are initiated by groups of like-minded States, rather than by widespread international consensus among States, as multilateral treaties are.

### **6.1 Australia Group**

The Australia Group, which began work in 1984/85, seeks to harmonize supply-side controls on dual use technology, including equipment, chemical agents and biological pathogens, applicable to chemical and biological warfare, by promoting common standards for the formation and implementation of national export-control policies. The Australia Group was one of the earliest plurilateral initiatives on non-proliferation, arising as a direct result of the discovery that the chemical weapons that Iraq used in its war with Iran were manufactured using imported 'dual use' commodities and know-how.

Its membership and range of activities have expanded over the years, most notably in the early 1990s, when it extended its scope to include export controls on materials and technologies relevant to biological weapons. Regarding potential proliferation of chemical weapons, the Group now maintains lists of CW precursors, in addition to a list of dual-use chemical manufacturing facilities and equipment and related technology equipment. Updated versions of the two lists are included in this section of the *Resource Guide*. The Australia Group lists form the basis of the CBW-related sections of the European Union's dual-use goods regime, and they have been adopted as the basis for national export controls by many non-participating countries. The Australia Group now has 40 participating countries, plus the European Commission. All Australia Group participants are States Parties to both the BWC and CWC.

### **6.2 Group of Eight Nations / Global Partnership**

The Group of Eight Nations (G8) comprises eight major industrialised nations (Canada, France, Germany, Italy, Japan, Russia, the UK and the US) whose leaders meet annually to discuss issues of mutual concern. At its 2002 summit meeting in Kananaskis, Canada, the G8 launched the Global Partnership against the Spread of Weapons and Materials of Mass Destruction. The Global Partnership originally served to attract and provide a framework for international financing of the destruction of chemical weapons, the dismantling of decommissioned nuclear submarines, the disposition of fissile materials and the employment of former weapons scientists, initially in Russia. The Global Partnership has since broadened its objectives, membership and geographical scope. At the 2011 Summit in Deauville, France, participating states agreed to extend the partnership beyond 2012 with a focus on areas such as nuclear and radiological security, biological safety and security, scientist engagement, implementation of 1540 and limiting WMD knowledge proliferation. At recent summit meetings, the G8 leaders have included references to the CWC in their communiqués; most recently in 2012, expressing their determination 'to strengthen the global non-proliferation regime, including by promoting the implementation and universalization of all relevant multilateral treaties and arrangements that help to prevent and combat proliferation'. The full text of the G8 Declaration on Nonproliferation and Disarmament for 2012 is included in the *Resource Guide*.



## Export Control List: Chemical Weapons Precursors

September 2009

<b>Precursor Chemical</b>	<b>CAS No.</b>	<b>CWC-Schedule</b>
Thiodiglycol	(111-48-8)	2B
Phosphorus oxychloride	(10025-87-3)	3B
Dimethyl methylphosphonate	(756-79-6)	2B
Methylphosphonyl difluoride (DF)	(676-99-3)	1B
Methylphosphonyl dichloride (DC)	(676-97-1)	2B
Dimethyl phosphite (DMP)	(868-85-9)	3B
Phosphorus trichloride	(7719-12-2)	3B
Trimethyl phosphite (TMP)	(121-45-9)	3B
Thionyl chloride	(7719-09-7)	3B
3-Hydroxy-1-methylpiperidine	(3554-74-3)	Not Listed
N,N-Diisopropyl-(beta)-aminoethyl chloride	(96-79-7)	2B
N,N-Diisopropyl-(beta)-aminoethane thiol	(5842-07-9)	2B
3-Quinuclidinol	(1619-34-7)	2B
Potassium fluoride	(7789-23-3)	Not Listed
2-Chloroethanol	(107-07-3)	Not Listed
Dimethylamine	(124-40-3)	Not Listed
Diethyl ethylphosphonate	(78-38-6)	2B
Diethyl N,N-dimethylphosphoramidate	(2404-03-7)	2B
Diethyl phosphite	(762-04-9)	3B
Dimethylamine hydrochloride	(506-59-2)	Not Listed
Ethylphosphinyl dichloride	(1498-40-4)	2B
Ethylphosphonyl dichloride	(1066-50-8)	2B
Ethylphosphonyl difluoride	(753-98-0)	1B
Hydrogen fluoride	(7664-39-3)	Not Listed
Methyl benzilate	(76-89-1)	Not Listed
Methylphosphinyl dichloride	(676-83-5)	2B
N,N-Diisopropyl-(beta)-amino-ethanol	(96-80-0)	2B
Pinacolyl alcohol	(464-07-3)	2B
O-Ethyl 2-diisopropylaminoethyl methylphosphonite (QL)	(57856-11-8)	1B
Triethyl phosphite	(122-52-1)	3B
Arsenic trichloride	(7784-34-1)	2B
Benzilic acid	(76-93-7)	2B
Diethyl methylphosphonite	(15715-41-0)	2B
Dimethyl ethylphosphonate	(6163-75-3)	2B
Ethylphosphinyl difluoride	(430-78-4)	2B
Methylphosphinyl difluoride	(753-59-3)	2B
3-Quinuclidone	(3731-38-2)	Not Listed
Phosphorus pentachloride	(10026-13-8)	3B
Pinacolone	(75-97-8)	Not Listed
Potassium cyanide	(151-50-8)	Not Listed
Potassium bifluoride	(7789-29-9)	Not Listed
Ammonium bifluoride	(1341-49-7)	Not Listed
Sodium bifluoride	(1333-83-1)	Not Listed
Sodium fluoride	(7681-49-4)	Not Listed
Sodium cyanide	(143-33-9)	Not Listed
Triethanolamine	(102-71-6)	3B
Phosphorus pentasulphide	(1314-80-3)	Not Listed
Diisopropylamine	(108-18-9)	Not Listed
Diethylaminoethanol	(100-37-8)	Not Listed
Sodium sulphide	(1313-82-2)	Not Listed
Sulphur monochloride	(10025-67-9)	3B
Sulphur dichloride	(10545-99-0)	3B
Triethanolamine hydrochloride	(637-39-8)	Not Listed
N,N-Diisopropyl-2-aminoethyl chloride hydrochloride	(4261-68-1)	2B
Methylphosphonic acid	(993-13-5)	2B
Diethyl methylphosphonate	(683-08-9)	2B
N,N-Dimethylaminophosphoryl dichloride	(677-43-0)	2B

Triisopropyl phosphite	(116-17-6)	Not Listed
Ethyldiethanolamine	(139-87-7)	3B
O,O-Diethyl phosphorothioate	(2465-65-8)	Not Listed
O,O-Diethyl phosphorodithioate	(298-06-6)	Not Listed
Sodium hexafluorosilicate	(16893-85-9)	Not Listed
Methylphosphonothioic dichloride	(676-98-2)	2B

Technical note - Chemicals are listed by name, Chemical Abstract Service (CAS) number and CWC Schedule (where applicable). Chemicals of the same structural formula (e.g., 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. However, CAS numbers cannot be used as unique identifiers in all situations because some forms of the listed chemical have different CAS numbers, and mixtures containing a listed chemical may also have different CAS numbers.

# CONTROL LIST OF DUAL-USE CHEMICAL MANUFACTURING FACILITIES AND EQUIPMENT AND RELATED TECHNOLOGY AND SOFTWARE

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## I. MANUFACTURING FACILITIES AND EQUIPMENT

June 2011

**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.

**Note 3.** The materials used for gaskets, packing, seals, screws, washers or other materials performing a sealing function do not determine the status of control of the items listed below, provided that such components are designed to be interchangeable.

### 1. Reaction Vessels, Reactors or Agitators

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Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume greater than 0.1 m<sup>3</sup> (100 l) and less than 20 m<sup>3</sup> (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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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

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Storage tanks, containers or receivers with a total internal (geometric) volume

greater than 0.1 m<sup>3</sup> (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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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<sup>2</sup>, and less than 20 m<sup>2</sup>; 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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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

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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

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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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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;
- h. niobium (columbium) or niobium alloys; or
- i. ceramic materials as follows:
  1. silicon carbide with a purity of 80% or more by weight;
  2. aluminum oxide (alumina) with a purity of 99.9% or more by weight;
  3. zirconium oxide (zirconia).

Technical note: The 'nominal size' is defined as the smaller of the inlet and outlet port diameters.

## 7. Multi-Walled Piping

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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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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

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Multiple-seal and seal-less pumps with manufacturer's specified maximum flow-rate greater than 0.6 m<sup>3</sup>/h, or vacuum pumps with manufacturer's specified maximum flow-rate greater than 5 m<sup>3</sup>/h (under standard temperature (273 K (0o

C)) and pressure (101.3 kPa) conditions), and casings (pump bodies), preformed casing liners, impellers, rotors or jet pump nozzles designed for such pumps, in which all surfaces that come into direct contact with the chemical(s) being processed are made from any of 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 (polymeric or elastomeric materials with more than 35% fluorine by weight);
- 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 (high silicon iron alloys); 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

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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.

Technical note: For the listed materials in the above entries, the term 'alloy' when not accompanied by a specific elemental concentration is understood as identifying those alloys where the identified metal is present in a higher percentage by weight than any other element.

## Statement of Understanding

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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 THEIR DEDICATED DETECTING COMPONENTS

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Toxic gas monitoring systems and their dedicated detecting components as follows: detectors; sensor devices; replaceable sensor cartridges; and dedicated software therefore

- 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<sup>3</sup>; or
- b. designed for the detection of cholinesterase-inhibiting activity

## III. RELATED TECHNOLOGY

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'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.

This includes:

- transfer of technology (technical data) by any means, including electronic media, fax or telephone
- transfer of technology in the form of technical assistance.

Controls on 'technology' 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.

#### IV. SOFTWARE

Controls on 'software' transfer only apply where specifically indicated in sections I and II above, and do not apply to '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:
    - i. Over-the-counter transactions;
    - ii. Mail order transactions;
    - iii. Electronic transactions; or
    - iv. Telephone call transactions; and
  - b. Designed for installation by the user without further substantial support by the supplier; or
2. 'In the public domain'.

#### 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 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

##### '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.

##### '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).

'Microprogramme'

A sequence of elementary instructions maintained in a special storage, the execution of which is initiated by the introduction of its reference instruction register.

'Production'

Production means all production phases such as:

- construction
- production engineering
- manufacture
- integration
- assembly (mounting)
- inspection
- testing
- quality assurance

'Programme'

A sequence of instructions to carry out a process in, or convertible into, a form executable by an electronic computer.

'Software'

A collection of one or more 'programmes' or 'microprogrammes' fixed in any tangible medium of expression.

'Technology'

Specific information necessary for the 'development', 'production' or 'use' of a product. The information takes the form of 'technical data' or 'technical assistance'.

'Technical assistance'

May take forms, such as: instruction, skills, training, working knowledge, consulting services. Technical assistance includes oral forms of assistance. 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.



## Group of Eight

### Declaration on Nonproliferation and Disarmament for 2012

This Declaration is issued in conjunction with the Camp David Summit.

1. Preventing the **proliferation** of weapons of mass destruction (WMDs) and their means of delivery is one of our top priorities, because such proliferation represents a major threat to international peace and security. The international community underlined these concerns in UN Security Council Resolutions (UNSCRs) 1540, 1673, 1810, 1887, and 1977. We are determined to strengthen the global non-proliferation regime, including by promoting the implementation and universalization of all relevant multilateral treaties and arrangements that help to prevent and combat proliferation. These treaties include the Nuclear Nonproliferation Treaty (NPT), the Biological and Toxin Weapons Convention (BTWC), and the Chemical Weapons Convention (CWC), which form indispensable elements of the international security architecture. We are convinced that the Proliferation Security Initiative (PSI) and the Global Initiative to Combat Nuclear Terrorism (GICNT) will continue to provide valuable platforms for cooperation in this regard.
2. We reaffirm our unconditional support for all three pillars of the NPT – disarmament, nonproliferation, and the peaceful uses of nuclear energy. The **NPT** remains the cornerstone of the nuclear non-proliferation regime and the essential foundation for the pursuit of disarmament and the peaceful uses of nuclear energy. We note that all NPT Parties have a responsibility in preserving and strengthening the international non-proliferation regime and are committed to take appropriate steps to implement its provisions.
3. We welcome the successful conclusion of the first **Preparatory Committee (PrepCom) meeting of the 2015 NPT review cycle** and express our appreciation to Ambassador Peter Woolcott of Australia for his exemplary

chairmanship and Chairman's Factual Summary. We look forward to continuing our cooperation on NPT matters, including at the 2013 PrepCom.

4. We are determined to meet the commitments we made in the Action Plan, agreed to by consensus, of the Final Document of the 2010 NPT Review Conference and call upon all States Parties to implement the provisions of this document. In this regard, we call attention to the meeting of P5 States that took place in Paris on June 30-July 1, 2011 on the follow-up to the NPT Review Conference. We welcome the steps taken by the States represented there to begin follow-up consultations on joint definitions for key nuclear terms and to hold an expert-level meeting on verification, which took place in London on April 4, 2012. We welcome their decisions to convene the next meeting in Washington, June 27-29, 2012.
5. While respecting the right of withdrawal contained in Article X of the NPT, we at the same time recognise that modalities and measures to address a withdrawal from that Treaty are needed. In that regard we stress that the United Nations Security Council must immediately address any State's notification of withdrawal from the NPT and that any State Party remains responsible under international law for violations of the NPT committed prior to its withdrawal. This important issue should remain on the agenda of the NPT review cycle for further discussion of modalities under which NPT States Parties could respond collectively and individually to a notification of withdrawal, including through arrangements regarding continued safeguarding or the disposition of equipment and materials acquired or developed under safeguards during NPT membership.
6. The States concerned also reaffirm their commitment to consult and cooperate to bring about the entry into force of the relevant legally binding protocols of **nuclear-weapon-free zone treaties**. In that context we welcome the successful conclusion of consultations between the P5 and the parties to the Treaty on the Southeast Asia Nuclear-Weapon-Free Zone and look forward to the early P5 signature of the Protocol. We also welcome the commitment of the P5 States to continue consultations with the States Parties to the Treaty on a Nuclear-Weapon-Free-Zone in Central Asia.

7. Recalling the decision at the 2010 NPT Review Conference to hold a Conference in 2012 on the **establishment in the Middle East of a zone free of nuclear weapons, as well as other weapons of mass destruction and their means of delivery**, we strongly support Ambassador Jaakko Laajava's work as facilitator of the Conference. We call upon all States concerned to make all efforts necessary to the preparation of that Conference. We express hope for a successful Conference to be attended by all the States of the Middle East.
8. We reiterate our strong concern about severe **proliferation challenges** and our commitment to working to resolve them through diplomatic means. Addressing compliance with the NPT is an essential part of efforts to achieve full implementation of the Treaty, including its universality and nuclear disarmament.
9. The **IAEA**, and in particular its safeguards system, remains an essential institution for the effective implementation of the nuclear nonproliferation regime. The IAEA must continue to have the necessary resources and legal authorities to be capable of fully exercising its verification mission, and, in accordance with its statutory mandate, to report cases of non-compliance to the United Nations Security Council.
10. We welcome the recent meeting of EU High Representative Catherine Ashton, together with the Political Directors of China, France, Germany, the Russian Federation, the United States and the United Kingdom, with the Iranian nuclear negotiator, Dr. Saed Jalili in Istanbul on April 14, 2012. As HR Ashton stated, the discussions on the **Iranian nuclear issue** were constructive and useful. We expect that subsequent meetings, including the next one to be held in Baghdad on May 23, will lead to concrete steps towards a comprehensive negotiated solution which restores international confidence in the exclusively peaceful nature of the Iranian nuclear programme. We support the agreement that the NPT forms a key basis for what must be serious engagement to ensure that Iran meets all its obligations under the NPT while fully respecting Iran's right to the peaceful use of nuclear energy as defined by the NPT. Iran's persistent failure

to comply with its obligations under the UN Security Council resolutions and to meet the requirements of the IAEA Board of Governors resolutions is the cause of urgent concern. We reaffirm that, based on the principles of a step-by-step approach and reciprocity, our overall objective is a comprehensive, negotiated solution to the nuclear issue leading to Iran's full compliance with UN Security Council resolutions and to the lifting of all sanctions once international confidence in the peaceful nature of Iran's nuclear programme is restored. It is essential for Iran, in its separate dialogue with the IAEA, to resolve fully and without delay all outstanding issues, including those related to possible military dimensions of its nuclear program.

11. We strongly condemn the April 13, 2012 launch by **the Democratic People's Republic of Korea (DPRK)**. As the UNSC made clear in its April 16 Presidential Statement (PRST), this launch and any launch that uses ballistic missile technology, even if characterized as a satellite launch or space launch vehicle, is a serious violation of UNSCRs 1718 and 1874. The DPRK's continued development of its ballistic missile and nuclear weapons capability, including its uranium enrichment activities, violates its international obligations and poses a danger to peace and stability in the region and beyond. We urge the DPRK to abide by its international obligations, to meet its own commitments under the 2005 Joint Statement on the Six-Party Talks, and to provide the IAEA with access as may be required and deemed necessary by the IAEA. We urge the DPRK to refrain from further provocative actions, including any nuclear tests, abandon all its nuclear weapons and existing nuclear programs, and cease all related activities immediately. We remain united in our resolve to implement existing UN sanctions fully and we express our determination to take action accordingly in the event of a further DPRK launch using ballistic missile technology, nuclear test or other actions in violation of UNSCRs.
  
12. **Syria's** full cooperation with the agency would allow clarification of all outstanding issues within the framework of the IAEA.

13. We express our concern at the continued **proliferation of means of delivery** capable of delivering weapons of mass destruction (WMD), which creates a threat to international peace and security, as recognized by UN Security Council Resolutions 1540, 1887, and 1977. We are committed to making the international community further aware of the missile proliferation threat. While considering cooperation in the field of missile technology, knowhow, and systems, States should pay particular attention to proliferation risks in this regard. We are concerned about the ongoing missile programmes in the Middle East, North-East Asia and South Asia including Iran and the DPRK. We recognise the need to step up our efforts to increase the effectiveness of multilateral arrangements, particularly the Missile Technology Control Regime (MTCR), whose twenty-fifth anniversary we are commemorating this year.
14. We also support the **Hague Code of Conduct Against Ballistic Missile Proliferation** (HCOC), whose tenth anniversary we are commemorating this year, and welcome the efforts made with regard to the universalization of the HCOC and express our willingness to make the Code more effective and to promote transparency on ballistic missiles.
15. We note that **outer space** activities play a significant role in the social, economic, scientific, and technological development of states, as well as in maintaining international peace and security. We strongly believe that all nations have the right to explore and use outer space for peaceful purposes, in accordance with international law, regardless of their level of economic, scientific, or technological development. We also reiterate our commitment to carry on activities in the exploration and use of outer space in accordance with applicable international law, including the Charter of the United Nations. We recognize that the world's growing dependence on outer space capabilities makes it necessary for the states and the international community as a whole to undertake constructive joint efforts with a view to advancing, through concerted, well thought-out and reasonable initiatives and steps, the consideration of factors and phenomena affecting outer space security in its entirety.

16. In this context particular attention should be given to promoting and fostering concepts and practices underlying the long term **stable and sustainable development of outer space activities** in all its aspects. In particular, we are concerned about the growth of orbital debris, which presents an increasing threat to space activities, including human space flight and satellite systems. We support efforts to mitigate orbital debris undertaken within the UN Committee on Peaceful Uses of Outer Space (COPUOS). We also declare our support for outer space-related transparency and confidence-building measures (TCBMs) and efforts to develop international guidelines for responsible behavior in outer space. We welcome the current efforts aimed at establishing a strong international consensus on an international Code of Conduct for Outer Space Activities. The draft Code proposed by the EU is a very useful contribution and constructive starting point for developing an international code. We also note with satisfaction the positive dynamics of the international discussions on space TCBMs and the stability of outer space activities, including the upcoming Group of Governmental Experts on TCBMs in Outer Space Activities. We are determined to enhance the level and quality of constructive interaction on these topics in discussions in the above mentioned fora.
17. We welcome the success of the Seventh Review Conference of the **Biological and Toxin Weapons Convention (BTWC)** and look forward to productive exchanges during the intersessional meetings on developments in national implementation, cooperation and assistance, science and technology, and confidence-building measures as agreed to at the Review Conference. We reaffirm our commitment to promote its universality and we are determined to work with all the State Parties to reinforce its regime.
18. We reaffirm our unconditional support for the **CWC** and the functions of the **OPCW**. Destruction of chemical weapons remains a key objective of the Convention. We welcome the recent decision by the OPCW Conference of the States Parties encouraging all possessor States to take every necessary measure to complete their destruction processes in a transparent fashion, and within the framework of the existing verification regime. We reiterate the need for an effective industry verification regime.

19. We fully support the key role played by the **United Nations Security Council** in addressing proliferation issues. We welcome the adoption by the Security Council of Resolution 1977, which renewed the mandate of the 1540 Committee and reaffirmed **Resolution 1540's** obligations which, among other things, aim to prevent non-State actors from acquiring WMDs, their means of delivery and related materials and required all member States to establish domestic controls to prevent the proliferation of weapons of mass destruction, their means of delivery and related materials. We invite all States to work toward full implementation of UNSCR 1540 and we reiterate our support to the 1540 Committee in the discharge of its mandate.
  
20. We remain determined to promote robust **counter-proliferation** tools. We acknowledge the adoption by the Financial Action Task Force (FATF) in February 2012 of new standards on financing of proliferation, and will give our full support to their effective implementation. We will promote broadening participation in the Proliferation Security Initiative (PSI) and continuing its focus on operational and legal issues. We will encourage States to identify as a specific offence in their national law the proliferation of WMD, their means of delivery and related materials. We will continue to strengthen our own export control policies to prevent the export of dual-use goods and technology when not in accordance with export control arrangements. We urge all States to take appropriate national measures in accordance with their national authorities and legislation and consistent with international law to prevent proliferation financing and shipments, to strengthen export controls, to secure WMD-related sensitive materials, and to control access to intangible transfers of technology and to information that could be used for weapons of mass destruction and their delivery means.
  
21. We welcome the consensus reached by the **Nuclear Suppliers Group (NSG)** on the control of the transfer of goods and technologies linked to the most sensitive aspects of the nuclear fuel cycle (enrichment and reprocessing).
  
22. We recall our commitment to seeking **a safer world** for all, and to creating the conditions for a world without nuclear weapons, in accordance with the goals of the NPT, in a way that promotes international stability, based on the principle of

equal and undiminished security for all, and underlining the vital importance of non-proliferation for achieving this goal.

23. In that context, we commend the entry into force on February 5, 2011, of the **New START Treaty** between the United States and the Russian Federation, as a reflection of the Parties' commitment to the goals of the Non-Proliferation Treaty and the Plan of Action of the 2010 Review Conference, and we welcome that the New START Treaty's implementation is moving forward in a positive way. We note that when the Treaty is fully implemented, the strategic nuclear forces of the United States and Russia will reach their lowest level since the 1950s. We also recall and welcome the disarmament-related efforts already made by France and the UK. Efforts by some nuclear weapon states in nuclear arms reductions disarmament, confidence-building and transparency, including increased transparency measures of some nuclear-weapon States, represent major steps in line with the Action Plan adopted by the NPT Review Conference in May 2010.
  
24. The entry into force of the **Comprehensive Nuclear Test Ban Treaty (CTBT)** would codify in international law the permanence of a nuclear explosive test ban, which, for the time being, depends on unilateral moratoria on nuclear weapon test explosions or other nuclear explosions. We welcome voluntary adherence to such moratoria, but note this does not have the same legally binding effect as the entry into force of the Treaty. The CTBT's entry into force would significantly strengthen the international non-proliferation regime and our disarmament efforts. We welcome recent ratifications of the Treaty, including that of Indonesia, an Annex 2 state, and call on all states that have not done so – particularly those states whose ratification is required for the entry into force of the Treaty – to sign and ratify the Treaty without further delay. We reaffirm our commitment to the Treaty's basic obligations and call on all states to refrain from acts which would defeat the object and purpose of the treaty pending its entry into force. We reiterate our support for the work achieved by the Preparatory Commission of the Comprehensive Nuclear Test Ban Treaty Organization (CTBTO), in building up all elements of the verification regime, particularly its International Monitoring System (IMS) and on-site inspections.

25. We note our profound regret and growing frustration in the international community over the persistent failure of the **Conference on Disarmament** to initiate negotiations building on the CD/1864 programme of work on a fissile material cut-off treaty (FMCT) banning the production of fissile material for nuclear weapons or other nuclear explosive devices, including verification provisions. We express our support for the moratorium on the production of such materials announced by the G8 nuclear-weapons States, and we call on the other States concerned to follow suit.
26. In anticipation of the **Arms Trade Treaty (ATT)** Conference to be held at the UN in July, we recognize the value of this UN process as part of international efforts on the matter and for its contribution to the prevention of illicit trafficking of conventional weapons. We welcome those negotiations and urge all states to agree to high standards for the international transfer of conventional arms.
27. We support the central role of the **IAEA** in upholding and strengthening the international nonproliferation regime and express our willingness to promote the IAEA Comprehensive Safeguards Agreement together with the Additional Protocol as a universally accepted international verification standard, which should be a consideration in decisions on the supply of nuclear fuel, equipment, or technology. We call on all States which have not yet done so to sign and ratify the Additional Protocol and apply its provisions as soon as possible.
28. Reaffirming the inalienable right of all States Parties to the NPT to use **nuclear energy for peaceful purposes**, in compliance with their international obligations, we reiterate our willingness to cooperate with States that meet their nuclear non-proliferation obligations and wish to develop a civil nuclear programme, in order to help them fulfil the essential requirements needed to ensure fair and responsible access to the benefits of the peaceful uses of nuclear energy. These requirements include safety, security, non-proliferation, and respect for the environment. Development and application of innovative technology in relevant frameworks has a growing role to play in supplying global demand for energy and also in building up robust and transparent atomic

energy infrastructure resistant to nuclear accidents. We underscore the responsibility of governments for timely and sufficient measures on accident prevention and management to minimize the consequences of accidents, should they occur. Efficiency and substance of notifications in case of nuclear accidents should be further improved as well.

29. We acknowledge the useful contribution that **multilateral approaches to the nuclear fuel cycle** provide in the field of nuclear energy, in particular the creation of the Uranium Enrichment Centre in Russia, and encourage the International Atomic Energy Agency's efforts to continue to address this issue. In this regard, we welcome the creation in accordance with the Russia-IAEA agreement of the Low Enriched Uranium (LEU) reserve in Angarsk, Russia; support the IAEA's decision to establish a bank of LEU for the IAEA member states and welcome Kazakhstan's readiness to provide a site; further welcome the establishment of the American Assured Fuel Supply, comprised of downblended uranium from weapons programs. We support the adoption of a Model Agreement between supplier and recipient States for the Nuclear Fuel Assurance initiative, while respecting the normal functioning of the existing market rules.

30. We welcome the results of the **Seoul Nuclear Security Summit** in March 2012 where 58 world leaders worked to reduce the threat of nuclear terrorism by securing vulnerable nuclear and other radioactive material around the globe. Seoul Summit participants agreed to a detailed Communiqué that outlines concrete steps on important nuclear security goals in the following areas: Global Nuclear Security Architecture, Role of the IAEA, Nuclear Materials, Radioactive Sources, Nuclear Security and Safety, Transportation Security, Combating Illicit Trafficking, Nuclear Forensics, Nuclear Security Culture, Information Security, and International Cooperation. Many countries agreed to other multilateral joint commitments intended to advance the goal of nuclear security. We also encourage nations to join existing relevant international initiatives that support Summit goals.

31. We call on all States to implement the IAEA's most current recommendations on **physical protection of nuclear material and nuclear facilities** (INFCIRC/225/Rev.5.).
32. The G8 commends the **Global Partnership Against the Spread of Weapons and Materials of Mass Destruction** as it remains committed to completing priority projects in Russia and takes forward work on the mandate agreed at the Deauville Summit, including in the priority areas of nuclear and radiological security, biological security, scientist engagement, and the implementation of United Nations Security Council Resolution 1540. Recognizing the significant international threats posed by the potential use of biological weapons or the deliberate misuse of biological agents, the Global Partnership supports efforts to develop comprehensive approaches to promote global biological security as an essential element for building secure and stable nations. Building on the commitments made at the 2010 and 2012 Nuclear Security Summits, the Global Partnership continues to assist nations with nuclear and radiological security, including through centers of excellence, promoting international cooperation and a strong nuclear security culture, and advancing information and transportation security. The Global Partnership also continues to pursue the expansion of its membership, as agreed by Leaders in 2011, and congratulates Kazakhstan on its new membership. The Global Partnership welcomes the ongoing participation of relevant international organizations in the global efforts to improve coordination of WMD counter-proliferation initiatives.

