

V – Other Documents and Declarations (in chronological order)

[Editorial Note: Earlier documents of relevance may be downloaded from <http://www.mcis.soton.ac.uk/>]

UN Security Council Declaration on Disarmament, Arms Control and Weapons of Mass Destruction

[Reproduced from S/PV.3046, 31 January 1992]

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 destabilizing 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.

International Court of Justice: *Legality of the Threat or Use by a State of Nuclear Weapons in Armed Conflict* (Request for Advisory Opinion by the General Assembly of the United Nations)

[Reproduced from Communiqué No. 96/23, 8 July 1996]

Advisory Opinion

The Hague, July 8 1996. The International Court of Justice today handed down its Advisory Opinion on the request made by the General Assembly of the United Nations in the above case. The final paragraph of the Opinion reads as follows:

'For these reasons,

THE COURT

- (1) By thirteen votes to one,
Decides to comply with the request for an advisory opinion:
IN FAVOUR: *President* Bedjaoui; *Vice-President* Schwebel; *Judges* Guillaume, Shahabuddeen, Weeramantry, Ranjeva, Herczegh, Shi, Fleischhauer, Koroma, Vereshchetin, Ferrari Bravo, Higgins;
AGAINST: *Judge* Oda.
- (2) *Replies* in the following manner to the question put by the General Assembly:
 - A. Unanimously,
There is in neither customary nor conventional international law any specific authorization of the threat or use of nuclear weapons;
 - B. By eleven votes to three,
There is in neither customary nor conventional international law any comprehensive and universal prohibition of the threat or use of nuclear weapons as such, IN FAVOUR: *President* Bedjaoui; *Vice-President* Schwebel; *Judges* Oda, Guillaume,

Ranjeva, Herczegh, Shi, Fleischhauer, Vereshchetin, Ferrari Bravo, Higgins;

AGAINST: *Judges* Shahabuddeen, Weeramantry, Koroma.

C. Unanimously,

A threat or use of force by means of nuclear weapons that is contrary to Article 2, paragraph 4, of the United Nations Charter and that fails to meet all the requirements of Article 51, is unlawful;

D. Unanimously,

A threat or use of nuclear weapons should also be compatible with the requirements of the international law applicable in armed conflict particularly those of the principles and rules of international humanitarian law, as well as with specific obligations under treaties and other undertakings which expressly deal with nuclear weapons;

E. By seven votes to seven [see corrigendum below – ed.], It follows from the above-mentioned requirements that the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law; However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake;

IN FAVOUR: *President* Bedjaoui; *Judges* Ranjeva, Herczegh, Shi, Fleischhauer, Vereshchetin, Ferrari Bravo; AGAINST: *Vice-President* Schwebel; *Judges* Oda, Guillaume, Shahabuddeen, Weeramantry, Koroma, Higgins.

F. Unanimously,

There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control'.

The Court was composed as follows: *President* Bedjaoui, *Vice-President* Schwebel; *Judges* Oda, Guillaume, Shahabuddeen, Weeramantry, Ranjeva, Herczegh, Shi, Fleischhauer, Koroma, Vereshchetin, Ferrari Bravo, Higgins; *Registrar* Valencia-Ospi na.

President Bedjaoui, *Judges* Herczegh, Shi, Vereshchetin and Ferrari Bravo appended declarations to the Advisory Opinion of the Court; *Judges* Guillaume, Ranjeva and Fleischhauer appended separate opinions; *Vice-President* Schwebel, *Judges* Oda, Shahabuddeen, Weeramantry, Koroma and Higgins appended dissenting opinions.

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Corrigendum to Press Communiqué No. 96/23

On page 2 of Press Communiqué No. 96/23, the first line of point (2) E. of the final paragraph of the Opinion should read as follows:

E. By seven votes to seven, by the President's casting vote,

Annex to Press Communiqué No. 96/23

Declaration of President Bedjaoui

After having pointed out that paragraph E. of the operative part was adopted by seven votes to seven, with his own casting vote, President Bedjaoui began by stressing that the Court had been extremely meticulous and had shown an acute sense of its responsibilities when proceeding to consider all the aspects of the complex question put to it by the General Assembly. He indicated that the Court had, however, had to find that in the current state of international law, the question was one to which it was unfortunately not in a position to give a clear answer. In his view, the Advisory Opinion thus rendered does at least have the merit of pointing to the imperfections of international law and inviting the States to correct them.

President Bedjaoui indicated that the fact that the Court was unable to go any further should not 'in any way be interpreted as leaving the way open to the recognition of the lawfulness of the threat or use of nuclear weapons'. According to him, the Court does no more than place on record the existence of a legal uncertainty. After having observed that the voting of the Members of the Court on paragraph E. of the operative part is not the reflection of any geographical dividing line, he gives the reasons that led him to approve the pronouncement of the Court.

To that end, he began by emphasizing the particularly exacting nature of international law and the way in which it is designed to be applied in all circumstances. More specifically, he concluded that *'the very nature of this blind weapon therefore has a destabilizing effect on humanitarian law which regulates discernment in the type of weapon used. Nuclear weapons, the ultimate evil, destabilize humanitarian law which is the law of the lesser evil. The existence of nuclear weapons is therefore a challenge to the very existence of humanitarian law, not to mention their long-term effects of damage to the human environment, in respect to which the right to life can be exercised'*.

President Bedjaoui considered that 'self-defence — if exercised under extreme circumstances in which the very survival of a State is in question — cannot engender a situation in which a State would exonerate itself from compliance with the 'intransgressible' norms of international humanitarian law'. According to him it would be very rash to accord, without any hesitation, a higher priority to the survival of a State than to the survival of humanity itself.

As the ultimate objective of any action in the field of nuclear weapons is nuclear disarmament, President Bedjaoui concludes by stressing the importance of the obligation to negotiate in good faith for nuclear disarmament — which the Court has moreover recognized. He considers for his part that it is possible to go beyond the conclusions of the Court in this regard and to assert 'that there in fact exists a twofold *general obligation*, opposable *erga omnes*, to negotiate in good faith and to achieve a specified result'; in other words, given the at least formally unanimous support for that object, that obligation has now — in his view — assumed customary force.

Towards a Nuclear-Weapons-Free World: The Need for a New Agenda

[Declaration by Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden,
9 June 1998]

1. We, the Ministers for Foreign Affairs of Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden have considered the continued threat to humanity represented by the perspective of the indefinite possession of nuclear weapons by the nuclear weapon states, as well as by those three nuclear-weapon-capable states that have not acceded to the Non-Proliferation Treaty, and the attendant possibility of use of threat of use of nuclear weapons. The seriousness of this predicament has been further underscored by the recent nuclear tests conducted by India and Pakistan.

2. We fully share the conclusion expressed by the commissioners of the Canberra Commission in their Statement that "the proposition that nuclear weapons can be retained in perpetuity and never used — accidentally or by decision — defies credibility. The only complete defence is the elimination of nuclear weapons and assurance that they will never be produced again."

3. We recall that the General Assembly of the United Nations already in January 1946 — in its very first resolution — unanimously called for a commission to make proposals for "the elimination from national armaments of atomic weapons and all other major weapons adaptable to mass destruction." While we can rejoice at the achievement of the international community in concluding total and global prohibitions on chemical and biological weapons by the Conventions of 1972 and 1993, we equally deplore the fact that the countless resolutions and initiatives which have been guided by similar objectives in respect of nuclear weapons in the past half century remain unfulfilled.

4. We can no longer remain complacent at the reluctance of the nuclear-weapon states and the three nuclear-weapons-capable states to take that fundamental and requisite step, namely a clear commitment to the speedy, final and total elimination of their nuclear weapons and nuclear weapons capability and we urge them to take that step now.

5. The vast majority of the membership of the United Nations has entered into legally-binding commitments not to receive, manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices. These undertakings have been made in the context of the corresponding legally binding commitments by

the nuclear-weapon states to the pursuit of nuclear disarmament. We are deeply concerned at the persistent reluctance of the nuclear-weapon states to approach their Treaty obligations as an urgent commitment to the total elimination of their nuclear weapons.

6. In this connection we recall the unanimous conclusion of the International Court of Justice in its 1996 Advisory Opinion that there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.

7. The international community must not enter the third millennium with the prospect that the maintenance of these weapons will be considered legitimate for the indefinite future, when the present juncture provides a unique opportunity to eradicate and prohibit them for all time. We therefore call on the governments of each of the nuclear-weapon states and the three nuclear-weapons-capable states to commit themselves unequivocally to the elimination of their respective nuclear weapons and nuclear weapons capability and to agree to start work immediately on the practical steps and negotiations required for its achievement.

8. We agree that the measures resulting from such undertakings leading to the total elimination of nuclear weapons will begin with those states that have the largest arsenals. But we also stress the importance that they be joined in a seamless process by those with lesser arsenals at the appropriate juncture. The nuclear-weapon states should immediately begin to consider steps to be taken to this effect.

9. In this connection we welcome both the achievements to date and the future promise of the START process as an appropriate bilateral, and subsequently plurilateral mechanism including all the nuclear-weapon states, for the practical dismantlement and destruction of nuclear armaments undertaken in pursuit of the elimination of nuclear weapons.

10. The actual elimination of nuclear arsenals, and the development of requisite verification regimes, will of necessity require time. But there are a number of practical steps that the nuclear-weapon states can, and should, take immediately. We call on them to abandon present hair-trigger postures by proceeding to de-alerting and de-activating their weapons. They should also remove non-strategic nuclear weapons from deployed sites. Such measures will create beneficial conditions for continued disarmament efforts and help prevent inadvertent, accidental or unauthorized launches.

11. In order for the nuclear disarmament process to proceed, the three nuclear-weapons-capable states must clearly and urgently reverse the pursuit of their respective nuclear weapons development or deployment and refrain from any actions which could undermine the efforts of the international community towards nuclear disarmament. We call upon them, and all other states that have not yet done so, to adhere to the Non-Proliferation Treaty and take the necessary measures which flow from adherence to this instrument. We likewise call upon them to sign and ratify the Comprehensive Nuclear Test-Ban Treaty without delay and without conditions.

12. An international ban on the production of fissile material for nuclear weapons or other nuclear explosive devices (Cut-Off) would further underpin the process towards the total elimination of nuclear weapons. As agreed in 1995 by the States Parties to the Non-Proliferation Treaty, negotiations on such a convention should commence immediately.

13. Disarmament measures alone will not bring about a world free from nuclear weapons. Effective international cooperation to prevent the proliferation of these weapons is vital and must be enhanced through, inter alia, the extension of controls over all fissile material and other relevant components of nuclear weapons. The emergence of any new nuclear-weapon state, as well as any non-state entity in a position to produce or otherwise acquire such weapons, seriously jeopardises the process of eliminating nuclear weapons.

14. Other measures must also be taken pending the total elimination of nuclear arsenals. Legally binding instruments should be developed with respect to a joint no-first-use undertaking

between the nuclear-weapon states and as regards non-use or threat of use of nuclear weapons against non-nuclear-weapon states, so called negative security assurances.

15. The conclusion of the Treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba, establishing nuclear-weapon-free zones as well as the Antarctic Treaty have steadily excluded nuclear weapons from entire regions of the world. The further pursuit, extension and establishment of such zones, especially in regions of tension, such as the Middle East and South Asia, represents a significant contribution to the goal of a nuclear-weapon-free world.

16. These measures all constitute essential elements which can and should be pursued in parallel: by the nuclear-weapon states among themselves; and by the nuclear-weapon states together with the non-nuclear-weapon states, thus providing a road map towards a nuclear-weapon-free world.

17. The maintenance of a world free of nuclear weapons will require the underpinnings of a universal and multilaterally negotiated legally binding instrument or a framework encompassing a mutually reinforcing set of instruments.

18. We, on our part, will spare no efforts to pursue the objectives outlined above. We are jointly resolved to achieve the goal of a world free from nuclear weapons. We firmly hold that the determined and rapid preparation for the post-nuclear era must start now.

The G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction

[Statement by the G8 Summit (Canada, Germany, Italy, Japan, Russia, UK, US), Kananaskis, Alberta, Canada, 26–27 June 2002]

I. Statement by G8 Leaders

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.

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

UN Security Council Resolution 1540

[Reproduced from S/RES/1540,
adopted on 28 April 2004]

The Security Council,

Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery,² 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* 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 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,² 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,

- 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;
- 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;
- 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 nonproliferation 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 nonproliferation 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.

* 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.

The G-8 Action Plan on Nonproliferation

[Adopted on 9 June 2004 at G-8 Summit
at Sea Island, Georgia, US]

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 authorities 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.

Executive Summary of 'Multilateral Approaches to the Nuclear Fuel Cycle': Expert Group Report Submitted to the Director General of the International Atomic Energy Agency

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[Editorial note: The Expert group Report is available in its entirety on the IAEA website

<http://www.iaea.org/Publications/Documents/infircs/2005/infirc640.pdf>]

Multilateral Nuclear Approaches (MNAs)

Executive Summary

1. The global nuclear non-proliferation regime has been successful in limiting, albeit not entirely preventing, the further spread of nuclear weapons. The vast majority of States have legally pledged to forego the manufacture and acquisition of nuclear weapons and have abided by that commitment. Nonetheless, the past few years have been a tumultuous and difficult period.

2. The decades long nuclear non-proliferation effort is under threat: from regional arms races; from actions by non-nuclear weapon States (NNWS) that have been found to be in fundamental breach of, or in non-compliance with their safeguards agreement, and which have not taken full corrective measures; from the incomplete manner in which export controls required by the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) have been applied; from burgeoning and alarmingly well-organised nuclear supply networks; and from the increasing risk of acquisition of nuclear or other radioactive materials by terrorist and other non-State entities.

3. A different significant factor is that the civilian nuclear industry appears to be poised for worldwide expansion. Rapidly growing global demand for electricity, the uncertainty of supply and price of natural gas, soaring prices for oil, concerns about air pollution and the immense challenge of lowering greenhouse gas emissions, are all forcing a fresh look at nuclear power. As the technical and organisational foundations of nuclear safety improve, there is increasing confidence in the safety of nuclear power plants. In light of existing, new and reawakened interest in many regions of the world, the prospect of new nuclear power stations on a large scale is therefore real. A greater number of States will consider developing their own fuel cycle facilities and nuclear know-how, and will seek assurances of supply in materials, services and technologies.

4. In response to the growing emphasis being placed on international cooperation to cope with non-proliferation and security concerns, the Director General of the International Atomic Energy Agency (IAEA), Mohamed ElBaradei, appointed in June 2004 an international group of experts (participating in their personal capacity) to consider possible multilateral approaches to the civilian nuclear fuel cycle.

5. The mandate of the Expert Group was three-fold:

- To identify and provide an analysis of issues and options relevant to multilateral approaches to the front and back ends of the nuclear fuel cycle;
- To provide an overview of the policy, legal, security, economic, institutional and technological incentives and disincentives for cooperation in multilateral arrangements for the front and back ends of the nuclear fuel cycle; and
- To provide a brief review of the historical and current experiences and analyses relating to multilateral fuel cycle arrangements relevant to the work of the expert group.

6. Two primary deciding factors dominate all assessments of multilateral nuclear approaches, namely "**Assurance of non-proliferation**" and "**Assurance of supply and services**". Both are recognised overall objectives for governments and for the NPT community. In practice, each of these two objectives can seldom be achieved fully on its own. History has shown that it is even more difficult to find an optimum arrangement that will satisfy both objectives at the same time. As a matter of fact, multilateral approaches could be a way to satisfy both objectives.

7. The non-proliferation value of a multilateral arrangement is measured by the various proliferation risks associated with a nuclear facility, whether national or multilateral. These risks include the diversion of materials from an MNA (reduced through the presence of a multinational team), the theft of fissile materials, the diffusion of proscribed or sensitive technologies from MNAs to unauthorised entities, the development of clandestine parallel programmes and the breakout scenario. The latter refers to the case of the host country "breaking out", for example, by expelling multinational staff, withdrawing from the NPT (and thereby terminating its safeguards agreement), and operating the multilateral facility without international control.

8. The "Assurance of supply" value of a multilateral arrangement is measured by the associated incentives, such as the guarantees provided by suppliers, governments and international organisations; the economic benefits that would be gained by countries participating in multilateral arrangements, and the better political and public acceptance for such nuclear projects. One of the most critical steps is to devise effective mechanisms for assurances of supply of material and services, which are commercially competitive, free of monopolies and free of political constraints. Effective assurances of supply would have to include back-up sources of supply in the event that an MNA supplier is unable to provide the required material or services.

Overview of options

9. Whether for uranium enrichment, spent fuel reprocessing, or spent fuel disposal and storage, **multilateral options** span the entire field between existing market mechanisms and a complete co-ownership of fuel cycle facilities. The following pattern reflects this diversity:

Type I: Assurances of services not involving ownership of facilities.

- (a) Suppliers provide additional assurances of supply;
- (b) International consortia of governments broaden the assurances;
- (c) IAEA-related arrangements provide even broader assurances.

Type II: Conversion of existing national facilities to multinational facilities.**Type III: Construction of new joint facilities.**

10. On the basis of this pattern, the Group has reviewed the pros and cons associated with each type and option. Pros and cons were defined relative to a “non-MNA choice”, namely that of a national facility under current safeguards.

Uranium enrichment

11. A healthy market exists at the front end of the fuel cycle. In the course of only two years, a nuclear power plant operating in Finland has bought uranium originating from mines in seven different countries. For example, conversion has been done in three different countries. Enrichment services have been bought from three different companies. Therefore, the legitimate objective of assurances of supply can be fulfilled to a large extent by the market. Nevertheless, this assessment may not be valid for all countries that have concerns about assurances of supply. Mechanisms or measures, under which existing suppliers or international consortia of governments or IAEA-related arrangements may be appropriate in such cases.

12. At first, *suppliers* could provide additional assurances of supply. This would correspond to enrichment plant operators, individually or collectively, guaranteeing to provide enrichment capacity to a State whose government had in turn agreed to forego building its own capacity, but which then found itself denied service by its intended enrichment provider for unspecified reasons. The pros include the avoidance of know-how dissemination, the reliance on a well-functioning market and the ease of implementation. The cons refer for example to the cost of maintaining idle capacity on reserve, and the lack of perceived diversity on the supplier side.

13. At a second level, *international consortia of governments* could step in, that is they would guarantee access to enrichment services, the suppliers being simply executive agents. The arrangement would be a kind of “intergovernmental fuel bank”, e.g. a contract under which a government would buy guaranteed capacity under specified circumstances. Different States might use different mechanisms. Most pros and cons are shared with the preceding case.

14. Then, there are *IAEA-related arrangements*, a variation of the preceding option, with the IAEA acting as the anchor of the arrangement. Essentially, the Agency would function as a kind of “guarantor” of supply to States in good standing and that were willing to accept the requisite conditionality (which would need to be defined, but would likely need to include foreswearing a parallel path to enrichment/reprocessing plus acceptance of the Additional Protocol for NNWS). The IAEA might either hold title to the material to be supplied or, more likely, act as facilitator, with back-up agreements between the IAEA and supplier countries to fulfil commitments made by the IAEA effectively on their behalf. In effect, the IAEA would be establishing a default mechanism, only to be activated in instances where a normal supply contract had broken down for reasons other than commercial reasons. The suggested pros and cons are therefore similar, with the added value of broad international assurances. Several questions can be raised with respect to the IAEA and its special status as an international organisation subject to the control of its Member-States. Any guarantee provided by the IAEA would in fact require approval by its Board of Governors.

15. Where an MNA would take the form of a joint facility, there are two ready-made precedents, the Anglo-Dutch-German company Urenco and the French EURODIF. The experience of Urenco, with its commercial/industrial management on the one hand and the governmental Joint Committee on the other hand, has shown that the multinational concept can be made to work successfully. Under this model, strong oversight of technology and staffing, as well as effective safeguards and proper international division of expertise

can reduce the risk of proliferation and even make a unilateral breakout extremely difficult. EURODIF on the other hand has a successful multinational record as well, by enriching uranium only in one country, while providing enriched uranium to its co-financing international partners, hence restricting all proliferation risks, diversion, clandestine parallel programme, breakout and the spread of technology.

Reprocessing of nuclear spent fuel

16. Taking into account present capacities to reprocess spent fuel for light water reactors and those under construction, there will be sufficient reprocessing capacity globally for all expected demands in plutonium-recycled fuel during some two decades. Therefore, objectives of assurances of supply can be fulfilled to a large extent without new reprocessing facilities involving ownerships (Types II and III).

17. Currently all reprocessing plants are essentially State-owned. By the very nature of the nuclear business worldwide, any guarantee from a supplier would have the implicit or explicit agreement of the corresponding government. As to *IAEA-brokered arrangements*, these could mean an IAEA participation in the supervision of an international consortium for reprocessing services.

18. *Converting a national facility* to international ownership and management would involve the creation of a new international entity that would operate as a new competitor in the reprocessing market. The pros reflect the advantages of bringing together international expertise, while the cons include non-proliferation disadvantages related to know-how dissemination and to the return of the separated plutonium. Other cons deal with the fact that, of the existing facilities, all except two Japanese facilities are in NWS or in non-NPT States. In many of those cases, appropriate safeguards will have to be introduced if they had not been applied before.

19. As noted above, the *construction of new joint facilities* will not be needed for a long time. Therefore, a prerequisite for the construction of new facilities is the demand for additional reprocessing and for recycled-plutonium fabrication. In the future such reprocessing and fabrication would be done on the same location.

Spent fuel disposal

20. At present there is no international market for spent fuel disposal services, as all undertakings are strictly national. The final disposal of spent fuel is thus a candidate for multilateral approaches. It offers major economic benefits and substantial non-proliferation benefits, although it presents legal, political and public acceptance challenges in many countries. The Agency should continue its efforts in that direction by working on all the underlying factors, and by assuming political leadership to encourage such undertakings.

21. The final disposal of spent fuel (and radioactive waste as well) in shared repositories must be looked at as only one element of a broader strategy of parallel options. National solutions will remain a first priority in many countries. This is the only approach for States with many nuclear power plants in operation or in past operation. For others with smaller civilian nuclear programmes, a dual-track approach is needed in which both national and international solutions are pursued. Small countries should keep options open (national, regional or international), be it only to maintain a minimum national technical competence necessary to act in an international context.

Spent fuel storage

22. Storage facilities for spent fuel are in operation and are being built in several countries. There is no international market for services in this area, except for the readiness of the Russian Federation to receive Russian-supplied fuel, and with a possible offer to do so for other spent fuel. The storage of spent fuel is also a candidate for multilateral approaches, primarily at the regional level. Storage of special nuclear materials in a few safe and secure facilities would enhance safeguards and physical protection. The IAEA should continue investigations in that field and encourage such undertakings. Various countries with state-of-the-art storage facilities in operation should step forward and accept spent fuel from others for interim storage.

Combined option: fuel-leasing/fuel take-back

23. In this model, the leasing State provides the fuel through an arrangement with its own nuclear fuel “vendors”. At the time the government of the leasing State issues an export license to its fuel “vendor” corporation to send fresh fuel to a client reactor, that government would also announce its plan for the management of that fuel once discharged. Without a specific spent fuel management scheme by the leasing State, the lease deal will of course not take place. The leased fuel once removed from the reactor and cooled down, could either be returned to its country of origin which owns title to it, or, through an IAEA-brokered deal could be sent to a third party State or to a multinational or a regional fuel cycle centre located elsewhere for storage and ultimate disposal.

24. The weak part in the arrangement outlined above is the willingness, indeed the political capability, of the leasing State to take-back the spent fuel it has provided under the lease contract. It could well be politically difficult for any State to accept spent fuel not coming from its own reactors (that is, reactors producing electricity for the direct benefit of its own citizens). Yet, to make any lease-take-back deal credible, an ironclad guarantee of spent fuel removal from the country where it was used must be provided, otherwise the entire arrangement is moot. In this respect, States with suitable disposal sites, and with grave concerns about proliferation risks, ought to be proactive in putting forward solutions. Of course, commitment of client States to forego enrichment and reprocessing would make such undertakings politically more tolerable.

25. As an alternative, the IAEA could broker the creation of multinational or regional spent fuel storage facilities, where spent fuel owned by leasing States and burned elsewhere could be sent. The IAEA could thus become an active participant in regional spent fuel storage facilities, or third party spent fuel disposal schemes, thereby making lease-take-back fuel supply arrangements more credible propositions.

Overarching issues

26. Apart from the cross-cutting factors related to the implementation of MNAs, such as the technical, legal and safeguards ones, there are a number of overarching issues, primarily of a broad political nature, which may have a bearing upon perceptions of the feasibility and desirability of MNAs. These issues may be decisive in any future endeavour to develop, assess and implement such approaches at the national and international level.

Relevant articles of the NPT

27. The NPT incorporates a political bargain with respect to peaceful uses and nuclear disarmament without which the Treaty would not have been adopted nor received the widespread adherence it obtained afterwards. The promise by all States parties to cooperate in the further development of nuclear energy and for the NWS to work towards disarmament provided the basis for NNWS to abstain from acquiring nuclear weapons.

28. Cooperation in the peaceful uses of nuclear energy, which had earlier provided the basis for the foundation of the IAEA, is embodied in Article IV, which stipulates that nothing shall be interpreted as affecting the *“inalienable right of all Parties to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II”* (that specify the non-proliferation objectives of the Treaty). Furthermore, that same article specifies that all Parties to the NPT shall 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”*; and moreover 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...”* Article IV was specifically crafted to preclude any attempt to reinterpret the NPT so as to inhibit a country's right to nuclear technologies - so long as the technology is used for peaceful purposes.

29. NNWS have expressed dissatisfaction about what they increasingly view as a growing imbalance in the NPT: that, through the imposition of restrictions on the supply of materials and

equipment of the nuclear fuel cycle by the NWS and the advanced industrial NNWS, those States have backed away from their original guarantee to facilitate the fullest possible exchange referred to in Article IV and to assist all NNWS in the development of the applications of nuclear energy. There are also concerns that additional constraints on Article IV might be imposed,

30. Article VI of the Treaty obliges NWS Parties “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.” Many NNWS deem the implementation of Article VI of the NPT by NWS as unsatisfactory, as are the non-entry into force of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and the stalemate in the negotiations on a verifiable Fissile Material (Cut-off) Treaty (FM(C)T). Such concerns have fostered a conviction among many NNWS that the NPT bargain is being corroded.

Safeguards and export controls

31. Some States have argued that, if the objective of MNAs is merely to strengthen the nuclear non-proliferation regime then, rather than focussing on MNAs, it may be better to concentrate instead on the existing elements of the regime itself, for example, by seeking the universality of the Additional Protocol (AP) to IAEA safeguards agreements and by the universalisation of safeguards agreements and multilateral export controls.

32. The risks involved in the spread of sensitive nuclear technologies should primarily be addressed by an efficient and cost-effective safeguards system. The IAEA and regional safeguards systems have done an outstanding job in these matters. Safeguards, rationally and well applied, have been the most efficient way to detect and deter further proliferation and to provide States Parties with an opportunity to assure others that they are in conformity with their safeguards commitments. Of course, advances in technologies require safeguards to be strengthened and updated, while protecting commercial, technological and industrial secrets. The adoption of the Additional Protocol, and its judicious implementation based on State-level analysis, are essential steps against further nuclear proliferation. The Additional Protocol has proven to provide additional, necessary and effective verification tools, while protecting legitimate national interests in security and confidentiality. Sustained application of the Additional Protocol in a State can provide credible assurance of the absence of undeclared materials and activities in that State. Together with a comprehensive safeguards agreement, the Additional Protocol should become the de facto safeguards standard.

33. The above notwithstanding, the IAEA should endeavour to further strengthen the implementation of safeguards. For example, it should revisit three facets of its verification system:

- a. The technical annexes of the Additional Protocol, which should be regularly updated to reflect the continuing development of nuclear techniques and technologies.
- b. The implementation of the AP, which requires adequate resources and a firm commitment to apply it decisively. It should be recalled that the Model Additional Protocol commits the IAEA not to apply the AP in a mechanistic or systematic way. Therefore the IAEA should allocate its resources on problematic areas rather than on States using the largest amounts of nuclear material.
- c. The enforcement mechanisms in case of fundamental breach of, or in case of non-compliance with, the safeguards agreement. Are these mechanisms progressive enough to act as an effective deterrent? Further consideration should be given by the IAEA to appropriate measures to handle various degrees of violations.

34. Export guidelines and their implementation are an important line of defence for preventing proliferation. Recent events have shown that criminal networks can find ways around existing controls to supply clandestine activities. Yet, one should remember that all States party to the NPT are obliged, pursuant to Article III.2 thereof, to implement export controls. This obligation was reinforced by United Nations Security Council Resolution 1540 (2004) that requires all States to enact and implement export controls to prevent the spread of weapons of mass destruction and related materials to non-State actors. The participation in the

development and implementation of export controls should be broadened, and multilaterally-agreed export controls should be developed in a transparent manner, engaging all States.

35. In fact, the primary technical barriers against proliferation remain the effective and universal implementation of IAEA safeguards under comprehensive safeguards agreements and additional protocols, and effective export controls. Both must be as strong as possible on their own merits. MNAs will be complementary mechanisms for strengthening the existing non-proliferation regime.

Voluntary participation in MNAs versus a binding norm

36. The present legal framework does not oblige countries to participate in MNAs, as the political environment makes it unlikely that such a norm can be established any time soon. Establishing MNAs resting on *voluntary* participation is thus the more promising way to proceed. In a voluntary arrangement covering assurances of supply, recipient countries would, at least for the duration of the respective supply contract, renounce the construction and operation of sensitive fuel cycle facilities and accept safeguards of the highest current standards including comprehensive safeguards and the Additional Protocol. Where the demarcation line between permitted R&D activities and renounced development and construction activities has to be drawn is a matter for further consideration. In voluntary MNAs involving facilities, the participating countries would presumably commit to carry out the related activities solely under the common MNA framework.

37. In reality, countries will enter into such multilateral arrangements according to the economic and political incentives and disincentives offered by these arrangements. A political environment of mutual trust and consensus among the partners - based on full compliance with the agreed nuclear non-proliferation obligations of the partners - will be necessary to the successful negotiation, creation and operation of an MNA.

38. Beyond this, a new *binding* international norm stipulating that sensitive fuel cycle activities are to be conducted exclusively in the context of MNAs and no longer as a national undertaking would amount to a change in the scope of Article IV of the NPT. The wording and negotiation history of this article emphasise the right of each party in good standing to choose its national fuel cycle on the basis of its sovereign consideration. This right is not independent of the faithful abiding by the undertakings under Articles I and II. But if this condition is met, no legal barrier stands in the way of each State party to pursue all fuel cycle activities on a national basis. Waiving this right would thus change the "bargain" of the NPT.

39. Such a fundamental change is not impossible if the parties were to agree on it in a broader negotiating frame. For NNWS, such a new bargain can probably only be realised through universal principles applying to all States and after additional steps by the NWS regarding nuclear disarmament. In addition, a verifiable FM(C)T might also be one of the preconditions for binding multilateral obligations; such a treaty would terminate the right of any participating nuclear weapon States and non-NPT parties to run reprocessing and enrichment facilities for nuclear explosive purposes and it would bring them to the same level - with regard to such activities - as non-nuclear weapon States. The new restrictions would apply to all States and facilities related to the technologies involved, without exception. At that time, multilateral arrangements could become a universal, binding principle. The question may also be raised as to what might be the conditions required by NWS and non-NPT States to commit to binding MNAs involving them.

Nuclear-weapon States and non-NPT States

40. Weapon-usable material (stocks and flows) and sensitive facilities that are capable of producing such material are located predominantly in the NWS and non-NPT States. The concerns raised previously for MNAs in NNWS do not all apply when an MNA would involve NWS or non-NPT States. Yet, one of the questions here relates to the possibility that the nuclear material produced in an MNA could contribute to such a State's nuclear non-peaceful programme. This shows again the relevance of a FM(C)T.

41. The feasibility of bringing NWS and non-NPT States into MNAs should indeed be considered at an early stage. As long as

MNAs remain voluntary, nothing would preclude such States from participating in an MNA. In fact, France (in connection with the EURODIFF arrangement) and the United Kingdom (in connection with Urenco) are examples of such participation. In transforming existing civilian facilities into MNAs subject to safeguards and security requirements, such States would demonstrate their support for non-proliferation and for peaceful international nuclear collaboration.

Enforcement

42. Eventually, the success of all efforts to improve the nuclear non-proliferation regime depends upon the effectiveness of compliance and enforcement mechanisms. Enforcement measures in case of non-compliance can be partially improved by MNAs' legal provisions, which will carefully specify a definition of what constitutes a violation, by whom such violations will be ruled on, and enforcement measures that could be directly applied by the partners in addition to broader political tools.

43. Nevertheless, enhanced safeguards, MNAs, or new undertakings by States will not serve their full purpose if the international community does not respond with determination to serious cases of non-compliance, be it diversion, clandestine activities or breakout. Responses are needed at four levels, depending upon the specific case: the MNA partners of the non-compliant State; the IAEA; the States Parties to the NPT; and the UN Security Council. Where these do not currently exist, appropriate procedures and measures must be available and must be made use of at all four levels to cope with breaches and non-compliance instances, in order to unequivocally make clear that States violating treaties and arrangements should not be permitted to do so unimpeded.

Multilateral nuclear approaches: the future

44. Past initiatives for multilateral nuclear cooperation did not result in any tangible results. Proliferation concerns were perceived as not serious enough. Economic incentives were seldom strong enough. Concerns about assurances of supply were paramount. National pride also played a role, alongside expectations about the technological and economic spin-offs to be derived from nuclear activities. Many of those considerations may still be pertinent. However, the result of balancing those considerations today, in the face of a latent multiplication of nuclear facilities over the next decades and the possible increase in proliferation dangers may well produce a political environment more conducive to MNAs in the 21st century.

45. The potential benefits of MNAs for the non-proliferation regime are both symbolic and practical. As a confidence-building measure, multilateral approaches can provide enhanced assurance to the partners and to the international community that the most sensitive parts of the civilian nuclear fuel cycle are less vulnerable to misuse for weapon purposes. Joint facilities with multinational staff put all MNA participants under a greater degree of scrutiny from peers and partners and may also constitute an obstacle against a breakout by the host partner. They also reduce the number of sites where sensitive facilities are operated, thereby curbing proliferation risks, and diminishing the number of locations subject to potential thefts of sensitive material. Moreover, these approaches can even help in creating a better acceptance for the continued use of nuclear power and for nuclear applications, and enhance the prospects for the safe and environmentally sound storage and disposal of spent nuclear fuel and radioactive waste.

46. As far as assurances of supply are concerned, multilateral approaches could also provide the benefits of cost-effectiveness and economies of scale for whole regions, for smaller countries or for those with limited resources. Similar benefits have been derived in the context of other technology sectors, such as aviation and aerospace. However, the case to be made in favour of MNAs is not entirely straightforward. States with differing levels of technology, different degrees of institutionalisation, economic development and resources and competing political considerations may not all reach the same conclusions as to the benefits, convenience and desirability of MNAs. Some might argue that multilateral approaches point to the loss or limitation of State sovereignty and independent ownership and control of a key technology sector, leaving unfairly the commercial benefits of these technologies to just a few countries. Others might argue that multilateral approaches could lead to further dissemination of, or loss of control

over, sensitive nuclear technologies, and result in higher proliferation risks.

47. In summary, the Expert Group on Multilateral Approaches for the Nuclear Fuel Cycle has reviewed the various aspects of the fuel cycle, identified a number of options for MNAs deserving further consideration, and noted a number of pros and cons for each of the options. It is hoped that the report of the Expert Group will serve as a building block, or as a milestone. It is not intended to mark the end of the road. MNAs offer a potentially useful contribution to meeting prevailing concerns about assurances of supply and non-proliferation.

48. The Group recommends that steps be taken to strengthen overall controls on the nuclear fuel cycle and the transfer of technology, including safeguards and export controls: the former by promoting universal adherence to Additional Protocols, the latter through a more stringent implementation of guidelines and a universal participation in their development.

49. In order to maintain momentum, the Group recommends that attention be given - by the IAEA Member States, by the IAEA itself, by the nuclear industry and by other nuclear organisations - to multilateral nuclear approaches in general and to the **five approaches** suggested below.

Five suggested approaches

The objective of increasing non-proliferation assurances associated with the civilian nuclear fuel cycle, while preserving assurances of supply and services around the world could be achieved through a set of gradually introduced multilateral nuclear approaches (MNA):

1. Reinforcing **existing commercial market mechanisms** on a case-by-case basis through long-term contracts and transparent suppliers' arrangements with government backing. Examples would be: fuel leasing and fuel take-back offers, commercial offers to store and dispose of spent fuel, as well as commercial fuel banks.
2. Developing and implementing **international supply guarantees** with IAEA participation. Different models should be investigated, notably with the **IAEA as guarantor** of service supplies, e.g. as administrator of a fuel bank.
3. Promoting voluntary conversion of **existing facilities to MNAs**, and pursuing them as **confidence-building measures**, with the participation of NPT non-nuclear-weapon States and nuclear-weapon States, and non-NPT States.
4. Creating, through voluntary agreements and contracts, **multinational, and in particular regional, MNAs for new facilities** based on joint ownership, drawing rights or co-management for front-end and back-end nuclear facilities, such as uranium enrichment; fuel reprocessing; disposal and storage of spent fuel (and combinations thereof). Integrated nuclear power parks would also serve this objective.
5. The scenario of a further expansion of nuclear energy around the world might call for the development of a **nuclear fuel cycle with stronger multilateral arrangements** – by region or by continent - **and for broader cooperation**, involving the IAEA and the international community.

UN Security Council Resolution 1673

[Reproduced from S/RES/1673 (2006),
adopted 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.

Proliferation Security Initiative, Chairman's Statement

[Warsaw, 23 June 2006]

Members of the international community from around the globe gathered on 23rd June, 2006 in Warsaw at the invitation of the Government of Poland to reaffirm publicly their strong commitment to the Proliferation Security Initiative (Cracow PSI), the PSI Statement of Interdiction Principles, and the goal of proactively combating WMD-related trafficking.

This gathering of nations is a resounding testament to the

combined will and cooperative spirit of the international community of nations to work together to prevent the proliferation of weapons of mass destruction, their delivery systems, and related materials to states and non-state actors of proliferation concern. This gathering further demonstrates the consensus of the international community that the nexus of the proliferation of weapons of mass destruction and terrorism constitutes one of the gravest dangers to the global community and demands constant vigilance. This gathering supports enhanced cooperation against proliferation networks and implementation of innovative measures, which will not only stop the transfer of these dangerous items but also act as a deterrent against those who would seek to facilitate such proliferation activities.

The Proliferation Security Initiative was announced on May 31st, 2003 in Cracow. Today, a few short weeks after only the third anniversary of the initiative, participants noted that much has been accomplished, and that PSI is globally recognized as making an important contribution to international efforts to address the security threats posed by WMD and missile proliferation.

First, the Proliferation Security Initiative and the Statement on Interdiction Principles have provided an effective platform, consistent with national legal authorities and relevant international law and frameworks, for impeding and stopping the trafficking in weapons of mass destruction and their means of delivery. The PSI Participating States note in this context that UN Security Council resolution 1540 (2004) 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.[KP1]

Second, the network of PSI participating states is constantly expanding across the globe. In just three years, the number of states that have expressed support for the PSI Principles and have committed to actively supporting interdiction efforts whenever necessary has increased to more than 75. PSI participating states now hail from every region of the world and, most importantly, from the regions of greatest concern for WMD-related trafficking. This is a vital accomplishment, because the national legal authorities and operational capabilities of PSI participating states serve as the basis for successful interdictions.

Third, PSI participating states have greatly improved their national capacities to interdict shipments of proliferation concern. Over the last three years, countries have undertaken robust efforts to:

- Proactively identify and use existing laws to conduct interdictions, and strengthen laws where necessary,
- Improve interdiction capabilities through multinational training efforts such as live exercises and gaming exercises,
- Improve their national organization for decision-making and operational execution in support of PSI interdictions,
- Establish relationships with key industries to facilitate their cooperation on PSI interdictions, and
- Continue to reach out to those states that have yet to endorse the PSI Statement of Interdiction Principles and to ensure that all PSI participating states can achieve the full benefits of involvement in the Initiative.

Finally, PSI is achieving results. Like-minded nations, working cooperatively, have utilized their national legal authorities and international legal frameworks to successfully stop shipments of WMD- and missile-related materials that, had they reached their destination and end-use, would have aided states and possibly non-state actors of proliferation concern in the development of weapons of mass destruction.

During this meeting, PSI participating states focused on deepening their on-going efforts in all these regards. They stressed the importance of maintaining the operational focus and nature of the PSI Operational Experts process and further developing its regional dimension. They also discussed the efforts of several PSI participating states to disrupt the financial mechanisms that support proliferators. They concluded that each participant should consider how their own national laws and authorities might be utilized or strengthened to identify, track or freeze the assets and transactions of WMD proliferators and their supporters. In addition, the PSI participating states undertook to explore how PSI states can work cooperatively to prevent and disrupt proliferation finance, in

furtherance of their obligations under UNSCR 1540 and 1673.

PSI partners will continue to work together toward the objective of stopping the trafficking in WMD, their delivery systems, and related materials. They will also continue to work with those nations that have yet to indicate their support for the PSI, to further broaden the reach of willing partners. PSI Participants recognized that their actions under the PSI in preventing the spread of WMD-related material are having a positive impact on the world in which we live.

**Report of the Chairman of the Special Event,
Mr Charles Curtis, at the 50th IAEA General
Conference: New Framework for the Utilization
of Nuclear Energy in the 21st Century:
Assurances of Supply and Non-Proliferation,
19-21 September 2006**

[Vienna, 22 September 2006]

Overview

At the outset of the 21st century, a discussion is taking place concerning the challenge of meeting increasing global energy demands through a possible expansion of the use of nuclear energy, while at the same time minimizing the proliferation risks created by the further spread of sensitive nuclear technology such as uranium enrichment and plutonium reprocessing. A number of useful suggestions have recently been put forward regarding new approaches to the nuclear fuel cycle, which aim to establish an assured supply of nuclear fuel, as a back-up measure to the commercial market, in certain situations. In general, these proposals are seen to be mutually compatible with, and supportive of, each other.

These recent proposals for assuring supplies of uranium-based nuclear fuel can be seen as one stage in a broader, longer-term development of a multilateral framework that could encompass assurance of supply mechanisms for both natural and low enriched uranium and nuclear fuel, as well as spent fuel management. Establishing a fully-developed, multilateral framework that is equitable and accessible to all users of nuclear energy, acting in accordance with agreed nuclear non-proliferation norms, will be a complex endeavour that would likely require a progressively phased approach. In general, it is the sense of the Event Chairman that the following could be a possible way forward:

1. a first – near term – phase focusing on establishing mechanisms for assurances of supply of nuclear fuel for nuclear power plants. Included for examination in the near term phase would be the proposal for an IAEA-owned low enriched uranium (LEU) fuel bank advanced by the Nuclear Threat Initiative (NTI), the proposal of the six major nuclear fuel supplier States (France, Germany, the Netherlands, the Russian Federation, the United Kingdom and the United States of America) and the proposal of the Russian Federation for international nuclear fuel cycle centres. This near term phase examination should also include the proposals of Japan and the United Kingdom, described as “complementary” to the six major fuel-supplier State initiative, and the proposal of the German Foreign Minister (still under development), as well as any other such proposals that might be elaborated in the near term.
2. a second – mid and long term – phase, focusing on the possibilities of evolving a truly comprehensive multilateral system, integrated with commercial market mechanisms and designed to assure supply adequacy and responsible management and disposition of waste. Included for examination in the mid and longer term phase would be proposals for assured access to power reactor components and technologies and the possibilities for developing future enrichment and reprocessing operations on a multilateral basis and ultimately converting existing enrichment and reprocessing facilities from exclusively national to multinational operations.

The evolution of a fuel assurance framework, in the first phase, would likely entail a step-by-step approach, requiring the IAEA Secretariat, in consultation with Member States, industry and other expert parties, to present proposals to the IAEA Board of Governors, through the Director General, as they mature and as policy, technical and legal issues are worked out.

IAEA Special Event

To facilitate IAEA Member State discussion of recent proposals on assurance of supply mechanisms, with a view to formulating well-structured recommendations regarding the establishment of assurance of supply mechanisms for the consideration of the Board of Governors in 2007, and focusing in the first phase on assurances of supply of nuclear fuel for nuclear power plants, the Director General organized a Special Event entitled “New Framework for the Utilization of Nuclear Energy: Assurances of Supply and Non-Proliferation” during the 50th regular session of the IAEA General Conference, from 19 to 21 September 2006 in Vienna. More than 300 participants from 61 Member States and various industry and other organizations took part in the discussions.

The discussions at the Special Event indicated that, in order to move forward, a number of policy, legal and technical issues remain to be addressed in greater detail. It was not the purpose of the Special Event to judge or rank the feasibility of the current proposals put forward by the Director General, States and nongovernmental organizations. Instead, the objective was to constructively identify the possible strengths, weaknesses and opportunities presented, taking advantage of the full range of perspectives represented by the Event attendees.

A Way Forward

May I say from the outset that through the discussions that took place during the Event, great care was taken by all participants to make clear that assurance of supply mechanisms are not intended to alter the right of any State to take its own decision regarding fuel cycle choices. I should also note that a number of participants expressed concerns about implied or intended conditions as may be applied to fuel assurance mechanisms. Finally, I should also add here that the ideas that were generated by those discussions constitute the views of the Event participants. From the discussions during the event, I believe the following issues would benefit from further elaboration.

Why is an assurance of supply mechanism needed?

Proponents of the establishment of an international back-up mechanism for assured supply of nuclear power reactor fuel assert that it would have a dual-objective, i.e. to address: (a) the possible consequences of interruptions of supply of nuclear fuel due to political considerations that might dissuade countries from initiating or expanding nuclear power programmes; and (b) the vulnerabilities that create incentives for building new national enrichment and reprocessing capabilities. Thus, an assurance of supply mechanism would be envisaged solely as a back-up measure to the operation of the commercial market, for those States that want to make use of it, in order to assure supply in instances of interruption for political reasons. It would neither be a substitute for the existing commercial market in nuclear fuels, nor would it deal with disruption of supply due to commercial, technical or other non-political reasons. While an assurance of supply mechanism would be designed to give supply assurance to States that voluntarily choose to rely on international fuel supply, rather than build their own indigenous fuel cycle capabilities, a State availing itself of such a mechanism would not be required to forfeit, or in any way abridge, its rights under Article IV of the NPT, in connection with peaceful uses of nuclear energy.

The path forward would benefit from a clear consensus judgment of the proliferation risks associated with increased diversification of enrichment and other fuel cycle capacities. Correspondingly, Board of Governors consideration would benefit from clarification, by each of the proposal sponsors, concerning any explicit or implicit conditionality applicable to eligible beneficiaries of the supply assurance mechanism.

What is to be assured?

From the discussions, it was clear that existing proposals dealt with assurances of supply in different but complementary ways. Some of the proposals focused on assuring supplies of natural uranium and low enriched uranium stocks, and still others focused on assurances of the supply of nuclear fuel itself, through the establishment of a series of interlocking arrangements among major suppliers. Furthermore, it was asserted that there was also a complementary need for greater transparency in uranium markets,

and that assured access to a broader range of nuclear reactor technology would be important to operators and countries seeking to reduce the risk of interruptions on political grounds.

It was clear that a fully developed assurance of supply mechanism would comprise several of the ideas advanced which, taken as a whole, are considered mutually supportive and consistent. It is equally clear that this evaluation would need to be phased in over time.

What are the modalities of assurance mechanisms?

The discussions showed that the modalities of possible fuel assurance mechanisms would also need to be assessed. The possible modalities could include: 1) a virtual reserve¹ of natural and low enriched uranium, based on binding contractual agreements for the supply of such material, plus parallel binding commitments/assurances of fuel fabrication services. It was recognized that while an actual (physical) bank of natural or low enriched uranium could be established, it would be impractical for technical and economic reasons to have an actual bank of nuclear fuel assemblies, given the different types of reactor designs and the many variants of nuclear fuel required for them – in this case, the physical bank of nuclear material would need to be supplemented by parallel binding commitments/assurances of fuel fabrication services. It was recognized that the complexity and details of such modalities requires further consideration.

What objective criteria would be required?

The discussions also touched upon the issue of objective criteria, i.e. the conditions governing eligibility for benefiting from assurance mechanisms. Different eligibility criteria have been included in the proposals discussed. Further discussion is required regarding the nature of the non-proliferation undertaking to be considered as the qualifying criterion. It was recognized that in accordance with the IAEA Statute, an Agency-administered assurance mechanism would have to be available to all Member States in a non-discriminatory manner. For any mechanism, whether or not it involves a role for the Agency, certain release criteria would need to be defined and agreed upon, either by the IAEA Board of Governors or the supply consortium. Another aspect requiring further assessment is how best to assure that the application of the release mechanism is demonstrably non-political and based on objective criteria.

Possible role(s) of the Agency?

Existing proposals envisage different roles for the Agency, and yet others can be considered. The suggested roles ranged from Agency administration or ownership of natural or low enriched uranium stocks, to administration of virtual stocks and associated parallel fuel fabrication commitments. It was noted that the IAEA Statute was sufficiently broad to allow the Agency to establish its own stocks of nuclear fuel, purchased from, or donated by, Member States for supply to another Member State against charges determined by the Board; to facilitate the supply of nuclear fuel from one Member State to another; and also to facilitate, inter alia, the provision of enrichment and fuel fabrication services by one Member State to another or to the IAEA. It was noted further that a number of legal arrangements were needed, with variations, depending on whether title to the material concerned passes through the Agency or whether it passes directly from the Supplier State to the Recipient State. These were: (1) an arrangement between the Supplier State and the Agency; to include inter alia consent rights by the Supplier State to export the fuel, licensing and transport requirements as well as the corresponding privileges and immunities; (2) an arrangement between the Recipient State and the Agency to include inter alia the issues listed in Article XI.F of the Statute; (3) the underlying contractual arrangements with nuclear fuel providers, transporters, storage providers, etc.; and, (4) in case the IAEA were to establish an actual bank of nuclear fuel, agreements covering safeguards, security, safety and liability for nuclear damage with the State where the fuel is located as well as transit agreements with neighbouring States. While models of certain legal arrangements already exist, the details would need to be worked out.

Possible role(s) of the nuclear industry?

The discussions involved the participation of representatives of the nuclear industry and showed that different roles for the nuclear

industry can be envisaged or have been proposed and that there are many technical and other issues pertaining to nuclear fuel that need further discussion and consideration. It was recognised that for a well-functioning assurance of supply mechanism, whether for nuclear fuel or for reactors, the nuclear industry would be an essential partner. In this regard, further consultations would be useful with the nuclear industry, particularly on a framework under which the nuclear industry would provide the required goods and services in support of an assurance of supply mechanism, without negative effects on the diversity and stability of the existing commercial market in nuclear fuels.

Other key issues

The discussions also showed that several other important issues concerning assurance mechanisms require further consideration. These include, for instance, issues related to sustainable financing. Other unresolved key issues are how to structure assurance mechanisms in a manner that does not result in a real or perceived division between nuclear fuel/reactor technology haves and have-nots, and does not undermine existing multilateral, treaty-based nuclear non-proliferation norms or State sovereignty/rights.

Next Steps

Based on the discussions at the Special Event, it is the sense of the Event Chairman that the issues noted above require further detailed expert examination with a view to formulating well-structured recommendations regarding the establishment of assurance of supply mechanisms.

It is also the sense of the Event Chairman that such recommendations could usefully be structured in terms of policy, legal and technical issues, and that proposals could be formulated by the IAEA Secretariat working in parallel with and drawing upon Member States, nuclear industry and other appropriate expertise. This work would naturally take into account current as well as future proposals and other relevant ideas and studies, and this work can and should be undertaken to allow consideration of these matters by the Board of Governors in 2007. It is likely that these undertakings will evolve into an agenda for near- and mid term actions. But it is important to begin.

I trust that these observations will be conveyed, along with any recommendations in this connection by the Director General, to the Agency's Board of Governors.

¹ A virtual reserve does not involve a separate physical storage of natural or low enriched uranium, but relies on its availability from suppliers that have agreed to be a part of the fuel assurance mechanism

'Toward A Nuclear-Free World' by George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn

[The Wall Street Journal, 15 January 2008]

The accelerating spread of nuclear weapons, nuclear know-how and nuclear material has brought us to a nuclear tipping point. We face a very real possibility that the deadliest weapons ever invented could fall into dangerous hands.

The steps we are taking now to address these threats are not adequate to the danger. With nuclear weapons more widely available, deterrence is decreasingly effective and increasingly hazardous.

One year ago, in an essay in this paper, we called for a global effort to reduce reliance on nuclear weapons, to prevent their spread into potentially dangerous hands, and ultimately to end them as a threat to the world. The interest, momentum and growing political space that has been created to address these issues over the past year has been extraordinary, with strong positive responses from people all over the world.

Mikhail Gorbachev wrote in January 2007 that, as someone who signed the first treaties on real reductions in nuclear weapons, he thought it his duty to support our call for urgent action: "It is becoming clearer that nuclear weapons are no longer a means of achieving security; in fact, with every passing year they make our security more precarious."

In June, the United Kingdom's foreign secretary, Margaret Beckett, signaled her government's support, stating: "What we need is both a vision – a scenario for a world free of nuclear weapons – and action – progressive steps to reduce warhead numbers and to limit the role of nuclear weapons in security policy. These two strands are separate but they are mutually reinforcing. Both are necessary, but at the moment too weak."

We have also been encouraged by additional indications of general support for this project from other former U.S. officials with extensive experience as secretaries of state and defense and national security advisors. These include: Madeleine Albright, Richard V. Allen, James A. Baker III, Samuel R. Berger, Zbigniew Brzezinski, Frank Carlucci, Warren Christopher, William Cohen, Lawrence Eagleburger, Melvin Laird, Anthony Lake, Robert McFarlane, Robert McNamara and Colin Powell.

Inspired by this reaction, in October 2007, we convened veterans of the past six administrations, along with a number of other experts on nuclear issues, for a conference at Stanford University's Hoover Institution. There was general agreement about the importance of the vision of a world free of nuclear weapons as a guide to our thinking about nuclear policies, and about the importance of a series of steps that will pull us back from the nuclear precipice.

The U.S. and Russia, which possess close to 95% of the world's nuclear warheads, have a special responsibility, obligation and experience to demonstrate leadership, but other nations must join.

Some steps are already in progress, such as the ongoing reductions in the number of nuclear warheads deployed on long-range, or strategic, bombers and missiles. Other nearterm steps that the U.S. and Russia could take, beginning in 2008, can in and of themselves dramatically reduce nuclear dangers. They include:

- *Extend key provisions of the Strategic Arms Reduction Treaty of 1991.* Much has been learned about the vital task of verification from the application of these provisions. The treaty is scheduled to expire on Dec. 5, 2009. The key provisions of this treaty, including their essential monitoring and verification requirements, should be extended, and the further reductions agreed upon in the 2002 Moscow Treaty on Strategic Offensive Reductions should be completed as soon as possible.
- *Take steps to increase the warning and decision times for the launch of all nucleararmed ballistic missiles, thereby reducing risks of accidental or unauthorized attacks.* Reliance on launch procedures that deny command authorities sufficient time to make careful and prudent decisions is unnecessary and dangerous in today's environment. Furthermore, developments in cyber-warfare pose new threats that could have disastrous consequences if the command-and-control systems of any nuclear-weapons state were compromised by mischievous or hostile hackers. Further steps could be implemented in time, as trust grows in the U.S.-Russian relationship, by introducing mutually agreed and verified physical barriers in the command-and-control sequence.
- *Discard any existing operational plans for massive attacks that still remain from the Cold War days.* Interpreting deterrence as requiring mutual assured destruction (MAD) is an obsolete policy in today's world, with the U.S. and Russia formally having declared that they are allied against terrorism and no longer perceive each other as enemies.
- *Undertake negotiations toward developing cooperative multilateral ballistic-missile defense and early warning systems, as proposed by Presidents Bush and Putin at their 2002 Moscow summit meeting.* This should include agreement on plans for countering missile threats to Europe, Russia and the U.S. from the Middle East, along with completion of work to establish the Joint Data Exchange Center in Moscow. Reducing tensions over missile defense will enhance the possibility of progress on the broader range of nuclear issues so essential to our security. Failure to do so will make broader nuclear cooperation much more difficult.
- *Dramatically accelerate work to provide the highest possible standards of security for nuclear weapons, as well as for nuclear materials everywhere in the world, to prevent terrorists from acquiring a nuclear bomb.* There are nuclear weapons materials in more than 40 countries around the world, and

there are recent reports of alleged attempts to smuggle nuclear material in Eastern Europe and the Caucasus. The U.S., Russia and other nations that have worked with the Nunn-Lugar programs, in cooperation with the International Atomic Energy Agency (IAEA), should play a key role in helping to implement United Nations Security Council Resolution 1540 relating to improving nuclear security – by offering teams to assist jointly any nation in meeting its obligations under this resolution to provide for appropriate, effective security of these materials.

As Gov. Arnold Schwarzenegger put it in his address at our October conference, "Mistakes are made in every other human endeavor. Why should nuclear weapons be exempt?" To underline the governor's point, on Aug. 29-30, 2007, six cruise missiles armed with nuclear warheads were loaded on a U.S. Air Force plane, flown across the country and unloaded. For 36 hours, no one knew where the warheads were, or even that they were missing.

- *Start a dialogue, including within NATO and with Russia, on consolidating the nuclear weapons designed for forward deployment to enhance their security, and as a first step toward careful accounting for them and their eventual elimination.* These smaller and more portable nuclear weapons are, given their characteristics, inviting acquisition targets for terrorist groups.
- *Strengthen the means of monitoring compliance with the nuclear Non-Proliferation Treaty (NPT) as a counter to the global spread of advanced technologies.* More progress in this direction is urgent, and could be achieved through requiring the application of monitoring provisions (Additional Protocols) designed by the IAEA to all signatories of the NPT.
- *Adopt a process for bringing the Comprehensive Test Ban Treaty (CTBT) into effect, which would strengthen the NPT and aid international monitoring of nuclear activities.* This calls for a bipartisan review, first, to examine improvements over the past decade of the international monitoring system to identify and locate explosive underground nuclear tests in violation of the CTBT; and, second, to assess the technical progress made over the past decade in maintaining high confidence in the reliability, safety and effectiveness of the nation's nuclear arsenal under a test ban. The Comprehensive Test Ban Treaty Organization is putting in place new monitoring stations to detect nuclear tests – an effort the U.S. should urgently support even prior to ratification.

In parallel with these steps by the U.S. and Russia, the dialogue must broaden on an international scale, including non-nuclear as well as nuclear nations.

Key subjects include turning the goal of a world without nuclear weapons into a practical enterprise among nations, by applying the necessary political will to build an international consensus on priorities. The government of Norway will sponsor a conference in February that will contribute to this process.

Another subject: Developing an international system to manage the risks of the nuclear fuel cycle. With the growing global interest in developing nuclear energy and the potential proliferation of nuclear enrichment capabilities, an international program should be created by advanced nuclear countries and a strengthened IAEA. The purpose should be to provide for reliable supplies of nuclear fuel, reserves of enriched uranium, infrastructure assistance, financing, and spent fuel management – to ensure that the means to make nuclear weapons materials isn't spread around the globe.

There should also be an agreement to undertake further substantial reductions in U.S. and Russian nuclear forces beyond those recorded in the U.S.-Russia Strategic Offensive Reductions Treaty. As the reductions proceed, other nuclear nations would become involved.

President Reagan's maxim of "trust but verify" should be reaffirmed. Completing a verifiable treaty to prevent nations from producing nuclear materials for weapons would contribute to a more rigorous system of accounting and security for nuclear materials.

We should also build an international consensus on ways to deter or, when required, to respond to, secret attempts by countries to break out of agreements.

Progress must be facilitated by a clear statement of our ultimate goal. Indeed, this is the only way to build the kind of international trust and broad cooperation that will be required to effectively address today's threats. Without the vision of moving toward zero, we will not find the essential cooperation required to stop our downward spiral.

In some respects, the goal of a world free of nuclear weapons is like the top of a very tall mountain. From the vantage point of our troubled world today, we can't even see the top of the mountain, and it is tempting and easy to say we can't get there from here. But the risks from continuing to go down the mountain or standing pat are too real to ignore. We must chart a course to higher ground where the mountaintop becomes more visible.

Mr. Shultz was secretary of state from 1982 to 1989. Mr. Perry was secretary of defense from 1994 to 1997. Mr. Kissinger was secretary of state from 1973 to 1977. Mr. Nunn is former chairman of the Senate Armed Services Committee.

The following participants in the Hoover-NTI conference also endorse the view in this statement: General John Abizaid, Graham Allison, Brooke Anderson, Martin Anderson, Steve Andreasen, Mike Armacost, Bruce Blair, Matt Bunn, Ashton Carter, Sidney Drell, General Vladimir Dvorkin, Bob Einhorn, Mark Fitzpatrick, James Goodby, Rose Gottemoeller, Tom Graham, David Hamburg, Siegfried Hecker, Tom Henriksen, David Holloway, Raymond Jeanloz, Ray Juzaitis, Max Kampelman, Jack Matlock, Michael McFaul, John McLaughlin, Don Oberdorfer, Pavel Podvig, William Potter, Richard Rhodes, Joan Rohlfing, Harry Rowen, Scott Sagan, Roald Sagdeev, Abe Sofaer, Richard Solomon, and Philip Zelikow.

Transcript of Remarks by Russian Minister of Foreign Affairs Sergey Lavrov at the Plenary Session of the Conference on Disarmament

[Geneva, 12 February 2008]

[Eds...]

The Treaty on the Non-Proliferation of Nuclear Weapons is a pivotal element of the modern international security system. Here, in Geneva, a second session of the Preparatory Committee for a regular review of the NPT will be held in a few months' time. We are interested in as constructive and efficient as possible work of this forum, which is called upon to create favourable conditions for a successful 2010 Review Conference. The important thing is to ensure further effectiveness of the Treaty proceeding from the unity of its three fundamental elements: non-proliferation, peaceful uses of atomic energy and disarmament.

Russian-American relations in the area of limitation and reduction of strategic offensive arms are of key importance to real disarmament. Unfortunately, there is no certainty about the future of this process. The SALT I Treaty expires in December 2009. Long in advance, as far back as three years ago, we offered the idea of developing and concluding a new full-fledged agreement on further and verifiable reduction and limitation of strategic offensive arms.

Our goal is to preserve stability and predictability in strategic relations between Russia and the United States. Therefore, we suggest that all the best elements of the existing Treaty be borrowed and placed in the foundation of a new agreement. Such a document, which should, of course, be legally binding, could provide for new, lower ceilings subject to verification on both strategic delivery vehicles (intercontinental ballistic missiles, sea launched ballistic missiles and heavy bombers), and their warheads. However, it has so far been impossible to arrive at acceptable solutions.

[Eds...]

I wish to note specifically that we cannot but feel concerned over the situation where, with the looming prospect of expiration of the treaty limitations on strategic offensive arms, there are increasing efforts by the United States to deploy its global ABM system. It is well known that there is inseparable relationship between strategic offensive and defensive armaments, and it is impossible not to take that fact in account in future military planning. The desire to acquire an anti-missile "shield" while dismantling the "sheath", where the

nuclear "sword" is kept is extremely dangerous. And if one also places on the balance pan the "global lightning strike" concept providing for striking with nuclear and conventional strategic means targets in any point of the Globe in a matter of an hour after a relevant decision has been made, the risks for strategic stability and predictability become more than obvious.

We think that strategic stability can no longer remain an exclusive domain of Russian-US relations. This residual bipolarity needs to be overcome through opening up this sphere to all interested states prepared to actively cooperate with a view to strengthening common security. It is our strong belief that such cooperation should be based on equality, mutual respect, a constructive dialogue, joint analysis and due account of the interests of all the sides in working out and making decisions.

It is these principles that Russia will continue to uphold in its foreign policy. The same principles traditionally underlie the work of the Conference on Disarmament which is a unique and indispensable international negotiating forum possessing a solid intellectual and professional potential. The Conference has made a substantial contribution to strengthening peace and security, as well as promoting disarmament and non-proliferation of weapons of mass destruction and their means of delivery through developing most important international legal instruments in this area.

[Eds...]

Speaking last year in Munich, President Vladimir V. Putin, warned against the emergence of new high-tech destabilizing types of weapons and new areas of confrontation, particularly in outer space. He emphasized that militarization of outer space could trigger unpredictable consequences for the international community - no less serious than the onset of the nuclear era. The President also noted that a draft special treaty was being prepared aimed at preventing such a development. The document was developed by us jointly with the People's Republic of China and circulated unofficially among interested delegations at the Conference last June. The overwhelming majority of our partners reacted positively to the document. Many states are looking forward to substantive work on this issue.

Today, the Russian Federation together with the People's Republic of China, are officially submitting a draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force Against Outer Space Objects (PPWT) to the Conference on Disarmament for consideration. Given its mandate, agenda and high expert potential on military space issues, we believe that the Conference is the most appropriate forum for multilateral work on the draft treaty.

The draft takes into account the proposals made by Member States of the Conference in the course of their joint work on the Treaty elements that were submitted earlier to the CD by Russia and China together with a group of co-sponsors and fruitfully discussed here over more than five years.

We are submitting the draft Treaty with a research mandate. It has been supported by the majority of Member States of the Conference and does not add any complications to achieving a compromise on the programme of work of the Conference. We hope that subsequently, when appropriate conditions are there, our work can be channeled into a negotiating format with establishment of a relevant ad hoc committee of the Conference.

Modern international space law does not prohibit deployment in space of weapons which do not belong to WMD. However, such weapons, if deployed in space, would have a global reach, high employment readiness and a capability for hidden engagement of space objects and rendering them inoperative. In contrast to WMD, such weapons would be fit for real use, generate suspicion and tensions among states and frustrate the climate of mutual trust and cooperation in space exploration, rather than being a means of containment.

Apart from this, weapons deployment in space by one state will inevitably result in a chain reaction. And this, in turn, is fraught with a new spiral in the arms race both in space and on the earth.

The draft PPWT prohibits the deployment of weapons of any kind in space, and the use or threat of force against space objects. The Treaty is to eliminate existing lacunas in international space law, create conditions for further exploration and use of space, preserve

costly space property, and strengthen general security and arms control.

The task of preventing an arms race in space is on the Conference's agenda. It's time, by way of preempting, to start serious practical work in this field. Otherwise, we can miss the opportunity. Indeed, to prevent a threat is always easier than to remove it.

Let us not forget that the nuclear arms race was started with a view to preserving the monopoly to this type of weapons, but this monopoly was to last only four years. However, that spell was sufficient to channel the world politics along the "Cold War lines", which lasted for over four decades and resulted in a gigantic waste of material and other resources at the expense of finding solutions to the problem of development. Is it worthwhile "to repeat the history"?

All states have an equal and inalienable right to accessing space, its exploration and uses. It is logical that the problem of ensuring security in space is a common one for all of us, and we should find jointly such a solution to it as would work for strengthening international security and stability. We have no doubts that the PPWT is an effective and, at the same time, a realistic way to achieve that goal. We are prepared to closely cooperate with all Member States of the Conference.

There is another pressing issue that affects considerably strategic stability and international security and is linked to missile proliferation. In October 2007, President Vladimir V. Putin launched an initiative for rendering global the obligations set forth in the Treaty between the USSR and the USA on the elimination of their intermediate-range and shorter-range missiles (INF Treaty).

The initiative was supported by our American partners. Our common position on the matter was reflected in the Joint Statement on the INF Treaty circulated as an official paper at the 62nd session of the UN General Assembly and the Conference on Disarmament. The majority of the international community members welcomed it. However, there are States that were not prepared to support the initiative for various reasons. We take note of their approaches and would like to continue searching jointly for a mutually acceptable solution to the problem.

To this end, we propose that a new multilateral agreement based on the relevant provisions of the existing INF Treaty be elaborated and concluded. Such an international legal arrangement could comprise the following basic elements.

Firstly, the obligation of the parties not to conduct flight testing and not to manufacture medium- and shorter-range missiles or their stages and launchers.

Secondly, the undertaking by states parties to eliminate, by an agreed deadline, all their medium- and shorter-range missiles, launchers thereof and associated supporting facilities and equipment.

Thirdly, the arrangement should set rules for counting and defining the types of medium- and shorter-range missiles, their deployment and movement, in the process of getting them ready for elimination, procedures for their elimination and compliance verification.

We will circulate unofficially the elements of the proposed Agreement for study by Member States of the Conference on Disarmament. We are open for a constructive dialogue and invite our partners to join us in this work.

[Eds...]

“Basic elements of an international legally-binding arrangement on the elimination of intermediate-range and shorter-range (ground-launched) missiles, open for broad international accession”

Preamble

The States Parties to this Arrangement,

Guided by the objective of strengthening strategic stability both globally and regionally,

Convinced that the measures set forth in this Arrangement will help to reduce the risk of outbreak of war and strengthen international

peace and security,

Determined to act with a view to achieving effective progress towards general and complete disarmament under strict international control,

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

Have agreed as follows:

Article I

General Obligations

1. Each State Party to this Arrangement upon entry into force of this Arrangement and thereafter shall not produce or flight-test any intermediate-range and shorter-range missiles or produce any stages of such missiles or any launchers of such missiles.

2. Each State Party to this Arrangement shall eliminate all its intermediate-range and shorter-range missiles and launchers of such missiles, as well as all support structures and equipment associated with such missiles and launchers, being in its possession or ownership, or being located in any site under its jurisdiction or control, under categories subject to an agreement, so that no later than the agreed date after entry into force of this Arrangement and thereafter no such missiles, launchers or support structures and equipment shall be possessed by each State Party.

Article II

Rules of Accounting and Definitions of Types of Intermediate-Range and Shorter-Range Missiles

Provisions for rules of accounting and definitions of types of intermediate-range and shorter-range missiles are subject to an agreement.

Article III

Limitations on Stationing and Transit of Intermediate-Range and Shorter-Range Missiles

Provisions for stationing and transit of intermediate-range and shorter-range missiles are subject to an agreement.

Article IV

Exchange of Information Related to the Obligations

Provisions for exchange of an information under categories of data, related to the obligations provided for by this Arrangement, are subject to an agreement.

Article V

Elimination Procedures

Each State Party to this Arrangement shall eliminate all its intermediate-range and shorter-range missiles and launchers of such missiles, and all support structures and support equipment associated with such missiles and launchers in accordance with the procedures which are subject to an agreement.

Article VI

Rules of Compliance Verification

Provisions for rules of compliance verification are subject to an agreement.

Article VII

Definitions

Definitions of the terms "ballistic missile and ground-launched ballistic missile (GLBM)", "cruise missile and ground-launched cruise missile (GLCM)", "GLBM launcher", "GLCM launcher", "intermediate-range missile", "shorter-range missile" and others may be based on the definitions set forth in Article II of the Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of their Intermediate-Range and Shorter-Range Missiles, and are subject to an agreement.

Article VIII

The Organization for Implementation of the Arrangement

The States Parties to this Arrangement shall come to an

agreement about mechanism of implementation of the subject and the objective of this Arrangement.

Article IX

Duration of the Arrangement

This Arrangement shall be of unlimited duration.

Article X

Amendments, Signature, Accession, Ratification, Entry into Force, Reservations, Depositary, Authentic Texts

Provisions for amendments, signature, accession, ratification, entry into force, reservations, depositary, authentic texts are subject to an agreement.

Press Release on the Statement of Russian Foreign Minister Sergey Lavrov at the Conference on Disarmament in Geneva

[13 February 2008]

On February 12 the Minister of Foreign Affairs of the Russian Federation, Sergey Lavrov, in his statement at the Conference on Disarmament (CD) in Geneva, set out the principled approaches of Russia on the topical problems of disarmament, arms control and the nonproliferation of weapons of mass destruction. Furthermore, the draft prepared by Russia and China of a treaty on the prevention of the placement of weapons in outer space, the threat or use of force against outer space objects (PPWT) was formally submitted. The idea of developing that document had been suggested by President of the Russian Federation Vladimir Putin in Munich in February 2007.

The draft's submission was the result of the long-running work begun by Russia and China back in 2002, when the two countries came up with a working CD document containing basic elements of that treaty. In subsequent years military space problems became the subject of multilateral discussion in Geneva and in the UN General Assembly in New York.

The draft sets forth the following obligations of states parties: not to place in orbit around the Earth any objects carrying any kinds of weapons, not to install such weapons on celestial bodies and not to station such weapons in outer space in any other manner; not to resort to the threat or use of force against outer space objects. Such a legally binding international instrument could become a reliable guarantee that outer space will never be turned into a sphere of military confrontation. It would create a firm basis for ensuring the security of space vehicles and the safety of the expensive orbital property of states.

The idea of joint preparation of a PPWT has found broad support in the international community and the submission of the draft is a significant step on the road towards its realization.

The Russian Foreign Minister in his statement also dwelt upon the proposal advanced by President Putin in October 2007 to impart a global character to the obligations set forth in the Treaty between the USSR and the USA on the Elimination of their Intermediate-Range and Shorter-Range Missiles. Russia's proposal stems from the danger of the proliferation of missile weapons of these two classes and from the desire to put up a barrier to such a development of events. At the 62nd UNGA session, this proposal was backed up by the United States of America and an overwhelming majority of states. Sergey Lavrov called for continuation of the work in this direction.

The statement of the Minister of Foreign Affairs of the Russian Federation at the Conference on Disarmament summed up a number of Russian foreign policy initiatives that have become major events of international life.

The full text of the statement of Foreign Minister Sergey Lavrov is published on the Russian MFA's website.

Draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force Against Outer Space Objects

[13 February 2008]

The States Parties to this Treaty,

Reaffirming that outer space plays an ever-increasing role in the future development of humankind,

Emphasizing the rights to explore and use outer space freely for peaceful purposes,

Interested in keeping outer space from turning into an arena for military confrontation, in assuring security in outer space and safe functioning of space objects,

Recognizing that prevention of the placement of weapons and of an arms race in outer space would avert a grave danger for international peace and security,

Desiring to keep outer space as a sphere where no weapon of any kind is placed,

Noting that the existing agreements on arms control and disarmament relevant to outer space, including the bilateral ones, and the existing legal regimes concerning the use of outer space play a positive role in exploration of outer space and in regulating outer space activities, and should be strictly complied with; although they are unable to effectively prevent the placement of weapons and an arms race in outer space,

Recalling the resolution of the General Assembly of the United Nations "Prevention of an arms race in outer space", where, inter alia, a conviction was expressed in the need for examination of further measures in the search for effective and verifiable bilateral and multilateral agreements in order to prevent an arms race in outer space,

Have agreed on the following:

Article I

For the purpose of this Treaty:

- a) the term "outer space" means space beyond the elevation of approximately 100 km above ocean level of the Earth;
- b) the term "outer space object" means any device, designed for functioning in outer space, being launched into an orbit around any celestial body, or being in the orbit around any celestial body, or on any celestial body except the Earth, or leaving the orbit around any celestial body towards this celestial body, or moving from any celestial body towards another celestial body, or placed in outer space by any other means;
- c) the term "weapons in outer space" means any device placed in outer space, based on any physical principle, specially produced or converted to eliminate, damage or disrupt normal function of objects in outer space, on the Earth or in its air, as well as to eliminate population, components of biosphere critical to human existence or inflict damage to them;
- d) a weapon will be considered as "placed" in outer space if it orbits the Earth at least once, or follows a section of such an orbit before leaving this orbit, or is stationed on a permanent basis somewhere in outer space;
- e) the "use of force" or "threat of force" mean any hostile actions against outer space objects including, inter alia, those aimed at their destruction, damage, temporarily or permanently injuring normal functioning, deliberate alteration of the parameters of their orbit, or the threat of these actions.

Article II

States Parties undertake not to place in orbit around the Earth any objects carrying any kind of weapons, not to install such weapons on celestial bodies, and not to station such weapons in outer space in any other manner; not to resort to the threat or use of force against outer space objects; not to assist or encourage other states, groups of states or international organizations to participate in activities prohibited by the Treaty.

Article III

Each State Party shall take all necessary measures to prevent any activity prohibited by the Treaty on its territory or in any other place under its jurisdiction or control.

Article IV

Nothing in this Treaty can be interpreted as impeding the rights of the States Parties to explore and use outer space for peaceful purposes in accordance with international law, which include but are not limited to the Charter of the United Nations and the Outer Space Treaty.

Article V

Nothing in this Treaty can be construed as impeding the realization by the States Parties of the sovereign right for self-defense in accordance with Article 51 of the Charter of the United Nations.

Article VI

With a view to facilitate assurance of compliance with the Treaty provisions and to promote transparency and confidence-building in outer space activities the States Parties shall practice on a voluntary basis, unless agreed otherwise, agreed confidence-building measures.

Measures of verification of compliance with the Treaty may be the subject of an additional protocol.

Article VII

When a dispute arises between States Parties concerning the application or the interpretation of the provisions of this Treaty, the parties concerned shall first consult together with a view to settling the dispute by negotiation and cooperation.

When the parties concerned do not come to an agreement after consultation, the disputed situation that has arisen may be referred to the Executive organization of the Treaty along with provision of the relevant argumentation.

Each State Party shall undertake to cooperate in the settlement of the disputed situation that has arisen with the Executive organization of the Treaty.

Article VIII

To promote the implementation of the objectives and the provisions of the Treaty, States Parties shall establish the Executive organization of the Treaty which shall:

- a) receive for consideration inquiries by any State Party or a group of States Parties related to the grounds that have arisen to believe that the violation of the Treaty by any State Party is taking place;
- b) consider matters concerning the compliance with the obligations taken by States Parties;
- c) organize and conduct consultations with the State Parties with the view to settle down the situation that has arisen in connection with the violation of a State Party of the Treaty;
- d) take measures to put an end to the violation of the Treaty by any State Party.

The title, status, specific functions and forms of work of the Executive organization of the Treaty shall be the subject of an additional protocol to the Treaty.

Article IX

International intergovernmental organizations may take part in the Treaty. Provisions defining variants and modalities of their participation in the Treaty shall be the subject of an additional protocol to the Treaty.

Article X

Any State Party may propose amendments to the Treaty. The text of any proposed amendment shall be submitted to the Depository who shall promptly circulate it to all States Parties. Upon the request of at least one third of the States Parties, the Depository Governments shall convene a conference to which all States Parties shall be invited to consider the proposed amendment.

Any amendment to the Treaty shall be approved by a majority of the votes of the States Parties. The amendment shall enter into

force for all the States Parties in accordance with the procedures of the entry into force of the Treaty.

Article XI

The Treaty shall be of unlimited duration.

Each State 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 notify the Depository in written form of the decision taken six months in advance of the withdrawal from the Treaty.

Article XII

The Treaty shall be opened for signature by all States at the United Nations headquarters in New York. Any State which did not sign the Treaty before its entry into force may accede to it at any time.

The Treaty shall be subject to ratification by signatory States in accordance with their constitutional norms. Instruments of ratification or accession shall be deposited with the Secretary-General of the United Nations, who is hereby designated the Depository of the Treaty.

Article XIII

The Treaty shall enter into force upon the deposit of instruments of ratification by twenty States, including all Permanent Member States of the United Nations Security Council.

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

Article XIV

The 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, who shall send duly certified copies thereof to all signatory and acceding States.

Speech by Nicolas Sarkozy, President of the French Republic

[Cherbourg, 21 March 2008]

[Eds...]

I am very proud to be here with you in Cherbourg to salute all those who built *Le Terrible*, the fourth and latest addition to our strategic fleet. Right here, in 1967, General de Gaulle came to pay tribute to those who had built *Le Redoutable*. Like your predecessors, you may take pride in this submarine—a symbol of France's high technology and resolve to remain master of its destiny. Very few countries in the world have the ability to realize such an industrial and technological achievement. It took decades of effort to master such know-how, which some of our partners have neglected and thus have difficulty replicating.

[Eds...]

Today we must all be mindful of the fact that the nuclear missiles of even distant powers can reach Europe in less than half an hour. Currently only the great powers have such means. But other countries, in Asia and the Middle East, are vigorously developing ballistic capabilities.

I am thinking in particular of Iran. Iran is increasing the range of its missiles, while grave suspicions surround its nuclear program. It is indeed Europe's security that is at stake.

In the face of proliferation, the international community must remain united and resolute. Because we want peace, we must show no weakness to those who violate international norms. But all those who respect them are entitled to fair access to nuclear energy for peaceful purposes.

But we must also be prepared to confront other risks beside proliferation. The imagination of our potential aggressors is boundless when it comes to exploiting the vulnerabilities of Western societies. And tomorrow, technological breakthroughs may create new threats.

That is why we are so attached to our nuclear deterrent. It is strictly defensive. The use of nuclear weapons would clearly be conceivable only in extreme circumstances of legitimate defense, a right enshrined in the UN Charter.

Our nuclear deterrence protects us from any aggression against our vital interests emanating from a state—wherever it may come from and whatever form it may take. Our vital interests, of course, include the elements that constitute our identity and our existence as a nation-state, as well as the free exercise of our sovereignty. My responsibility, as Head of State, is to assess their limit at all times, for in a changing world, they cannot remain static.

All those who would threaten our vital interests would expose themselves to severe retaliation by France resulting in damages unacceptable to them, out of proportion with their objectives. Their centers of political, economic and military power would be targeted on a priority basis.

It cannot be ruled out that an adversary might miscalculate the delimitation of our vital interests or our determination to safeguard them. In the framework of nuclear deterrence, it would be possible, in that event, to send a nuclear warning that would underscore our resolve. That would be aimed at re-establishing deterrence.

In order for deterrence to be credible, the Head of State must have a wide range of options to face threats. Our nuclear forces have been, and will continue to be, adapted in consequence. The M51 intercontinental missile, which *Le Terrible* will carry as soon as it is commissioned in 2010, and the ASMPA missile, which *Rafale* will carry starting this year, fit with our risk assessment during the period covered by the White Paper.

I am also strongly convinced that it is essential to maintain two nuclear components, one sea-based and the other air-based. Indeed, their respective characteristics, notably in terms of range and precision, make them complementary. The Head of State must be able to count on them at all times in order to respond to any surprise.

In order to preserve our freedom of action, missile defense capabilities against a limited strike could be a useful complement to nuclear deterrence, without being a substitute for it. Let us not lose sight of the fact that missile defense will never be efficient enough to protect our vital interests. On this issue, France has chosen a pragmatic approach. It is in this spirit that we are taking part in the collective work of the Atlantic Alliance—dear Hervé Morin. We have solid technical know-how in this area that could be taken advantage of when the time comes.

Guaranteeing national security is expensive. Each year, their nuclear deterrent costs the French half the budget for justice or transportation. This cost must of course be controlled as much as possible, in the financial context I just mentioned. But I am determined to assume it. It is neither a matter of prestige nor a question of rank, it is quite simply the nation's life insurance policy.

Our deterrence also takes into account changes in the world, in our alliances and in European construction.

Together with the United Kingdom, we have taken a major decision: It is our assessment that there can be no situation in which the vital interests of either of our two nations could be threatened without the vital interests of the other also being threatened.

As for the Atlantic Alliance, its security is also based on nuclear deterrence. British and French nuclear forces contribute to it. This has been part of NATO's Strategic Concept since 1974 and it remains relevant today. I say to our allies: France is and will remain true to its commitments under Article V of the North Atlantic Treaty.

As for Europe, it is a fact: By their very existence, French nuclear forces are a key element in Europe's security. Any aggressor who might consider challenging it must be mindful of this.

Let us, together, draw every logical consequence of this situation. I propose to engage those European partners who would so wish in an open dialogue on the role of deterrence and its contribution to our common security.

Our commitment to the security of our European partners is the natural expression of our ever-closer union. The Lisbon Treaty marks a historic step forward in this regard.

I would now like to address disarmament. It is a subject I would like to discuss with realism and clear-sightedness. When international security improves, France draws the consequences. It did so with the end of the Cold War.

Rather than making speeches and promises that are not translated into deeds, France acts. We respect our international commitments, and notably the Nuclear Non-Proliferation Treaty. France has an exemplary record, unique in the world, with respect to nuclear disarmament. France was the first State, with the United Kingdom, to sign and ratify the Comprehensive Test Ban Treaty; the first State to decide to shut down and dismantle its facilities for the production of fissile materials for explosive purposes; the only State to have transparently dismantled its nuclear testing facility in the Pacific; the only State to have dismantled its ground-launched nuclear missiles; the only State to have voluntarily reduced the number of its nuclear-powered ballistic missile submarines by a third.

France has never engaged in the arms race. France never manufactured all the types of weapons that it was technologically capable of designing. France applies a principle of strict sufficiency: It maintains its arsenal at the lowest possible level compatible with the strategic context. I am dedicated to this principle. As soon as I assumed my duties, I asked for this strict sufficiency to be reassessed.

This has led me to decide on a new measure of disarmament. With respect to the airborne component, the number of nuclear weapons, missiles and aircraft will be reduced by one-third.

I have also decided that France could and should be more transparent with respect to its nuclear arsenal than anyone ever has been.

After this reduction, I can tell you that our arsenal will include fewer than 300 nuclear warheads. That is half of the maximum number of warheads we had during the Cold War.

In giving this information, France is completely transparent because it has no other weapons beside those in its operational stockpile.

Furthermore, I can confirm that none of our weapons are targeted against anyone.

Finally, I have decided to invite international experts to observe the dismantlement of our Pierrelatte and Marcoule military fissile material production facilities.

But let us not be naïve; the very basis of collective security and disarmament is reciprocity.

Today, eight nations in the world have declared they have conducted nuclear tests. I am proposing to the international community an action plan to which I call on the nuclear powers to resolutely commit by the 2010 NPT Conference.

Thus I invite all countries to ratify the Comprehensive Test Ban Treaty, beginning with China and the United States, who signed it in 1996. It is time for it to be ratified.

I urge the nuclear powers to dismantle all their nuclear testing sites in a manner that is transparent and open to the international community;

I call for the immediate launching of negotiations on a treaty to ban the production of fissile materials for nuclear weapons purposes, and to establish without delay a moratorium on the production of such materials;

I invite the five nuclear weapon States recognized by the NPT to agree on transparency measures;

I propose opening negotiations on a treaty banning short- and intermediate-range surface-to-surface missiles;

I ask all nations to accede to and implement the Hague Code of Conduct Against Ballistic Missile Proliferation, as France has done.

At the same time, the entire international community must mobilize in all other fields of disarmament. Here too, France will make its contribution.

Ladies and Gentlemen,

I have come to address a simple message to the Nation: Its

security will be assured against the threats in the world, and France will play its full role to defend peace and its values. France's ambition must be worthy of its history.

This requires being clear-minded about strategic realities and choices.

It requires having the courage to take the necessary decisions. You can count on me to do so.

Above all, it requires being clear and firm on the essentials. And the essential is safeguarding the vital interests of France.

Here in Cherbourg, I guarantee you: France will not lower its guard.

Thank you.

**Statement by the Delegations of China, France,
the Russian Federation, the United Kingdom of
Great Britain and Northern Ireland and the
United States of America.
Delivered by UK Ambassador John Duncan to
the 2008 NPT PrepCom**

[Geneva, 9 May 2008]

1. The delegations of China, France, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland and the United States of America reaffirm the strong and continuing support of our countries for the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) on the occasion of the second Preparatory Committee of the eighth NPT review cycle.

2. The proliferation of nuclear weapons constitutes a threat to international peace and security. The NPT has served the global community well over the last four decades. It remains a key instrument for collective security and the bedrock on which the international architecture to prevent proliferation of nuclear weapons is built. We wish to see the NPT thrive and therefore affirm our unequivocal commitment to strengthening the Treaty and to a successful outcome to the 2010 Review Conference. We welcome the constructive and substantive discussion that has taken place at this year's Preparatory Committee meeting and will work to reinforce the positive dynamic that has been established.

3. We wish to address the proliferation challenges through Treaty-based multilateralism and through partnerships and relevant initiatives in which we all participate. The NPT's central role in promoting security for all depends on concerted action by all States Party to ensure compliance and respond quickly and effectively to non-compliance. We attach great importance to achieving the universality of the NPT and call on those countries remaining outside to accede to the Treaty as non-nuclear weapon States.

4. We stress the importance of the IAEA Safeguards system, which should be adequately funded. We seek universal adherence to IAEA comprehensive safeguards, as provided for in Article III, and to the Additional Protocol and urge the ratification and implementation of these agreements. We are actively engaged in efforts toward this goal, and are ready to offer necessary support.

5. We reaffirm that all States Party must ensure strict compliance with their non-proliferation obligations under the NPT. The proliferation of nuclear weapons undermines the security of all nations, imperils prospects for progress on other important NPT goals such as nuclear disarmament, and hurts prospects for expanding international nuclear co-operation. The proliferation risks presented by the Iranian nuclear programme continue to be a matter of ongoing serious concern to us. We recall that the United Nations Security Council recently sent for the third time a strong message of international resolve to Iran by adopting sanctions resolution 1803 on Iran's nuclear programme under Article 41 of Chapter VII of the United Nations Charter as part of a dual-track strategy. We call for Iran to respond to the concerns of the international community through prompt and full implementation of the relevant United Nations Security Council Resolutions and the requirements of the IAEA. We are fully behind the E3+3 process to resolve this issue innovatively through negotiations on the basis of the offer agreed in London on 2 May 2008. We also restate our support for the Six-Party Talks process moving towards the verifiable denuclearization of the Korean Peninsula, urge the implementation of relevant United Nations Security Council

Resolutions and call on the relevant Six-Party members to continue their cooperation through the full implementation of the Joint Statement of 19 September 2005. We confirm our determination to achieve satisfactory resolution of these dossiers through dialogue and negotiation.

6. We reiterate our enduring commitment to the fulfilment of our obligations under Article VI of the NPT and note that these obligations apply to all NPT States Party. We note the unprecedented progress made by Nuclear Weapon States since the end of the Cold War in the field of nuclear disarmament, which has enhanced global security and advanced the goals of the NPT. Our individual contributions to systematic and progressive efforts in nuclear disarmament, including the reduction of the number of nuclear weapons in the world, have been and will be highlighted by each of us nationally.

7. We restate our support for the 1995 NPT resolution on the Middle East, which, inter alia, advocates a Middle East zone free of nuclear weapons as well as other weapons of mass destruction. We welcome efforts to support the principles and objectives of the Middle East peace process, which contribute toward this end. We note that significant security challenges remain in the region.

8. We reaffirm our determination to abide by our respective moratoria on nuclear test explosions. We recognise that one element in the effective implementation of Article VI and in the prevention of nuclear proliferation is a treaty banning the production of fissile material for use in nuclear weapons or other explosive devices. We urge all members of the Conference on Disarmament to show the necessary flexibility to get the Conference back to work.

9. We reaffirm the inalienable right of all States Party to the NPT under Article IV 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. We note that a growing number of States Party is showing interest in developing nuclear programmes aimed at addressing their long-term energy requirements and other peaceful purposes. We are ready to cooperate with States Party in the development of nuclear energy for peaceful uses and we emphasise the requirement for compliance with non-proliferation obligations and for development of research, use and production of nuclear energy to be solely for peaceful purposes. We believe such international co-operation should contribute to the full implementation of the NPT and enhance the authority and effectiveness of the global non-proliferation regime.

10. We welcome the work of the International Atomic Energy Agency on multilateral approaches to the nuclear fuel cycle and encourage efforts towards a multilateral mechanism to assure access for all countries to nuclear fuel services as a viable alternative to the indigenous development of enrichment and reprocessing. We note the various proposals that have been put forward. Such an approach would support implementation of the right to peaceful uses of nuclear energy in a safe and secure fashion, preserve the existing competitive open market, respond to the real needs of recipient countries and simultaneously strengthen the non-proliferation regime. We hope States Party will contribute to discussion and development of this agenda in an open-minded and constructive manner. We stress the necessity for the 2010 Review Conference to address this issue.

11. We support, and will work to uphold and strengthen, the framework for the safe and secure uses of nuclear and radioactive materials for peaceful purposes. We reaffirm our commitment to safe and secure regulatory infrastructures, and our determination to develop innovative nuclear energy systems via our respective joint and national initiatives, which will underpin clean and affordable nuclear development, increase energy security, minimise the impact on the environment and the production of radioactive waste, and provide greater protection against proliferation through the provision of reliable fuel services, proliferation-resistant reactor technologies and strengthened international safeguards.

Joint U.S.-Russian Statement: One Year of Progress Following the Joint Declaration on Nuclear Energy and Nonproliferation

[3 July 2008]

As President Bush and former Russian President Putin jointly declared on July 3, 2007, "we share a common vision of growth in the use of nuclear energy, including in developing countries, to increase the supply of electricity, promote economic growth and development, and reduce reliance on fossil fuels, resulting in decreased pollution and greenhouse gases."

The July 3, 2007 Joint Declaration on Nuclear Energy and Nonproliferation proposed to initiate a new format for enhancing civil nuclear energy cooperation in order to extend the benefits of nuclear power while promoting the highest standards of safety, security and nonproliferation.

The Declaration presented a number of ways – including the development of human resources and other infrastructure, the facilitation of nuclear plant financing, and the management of spent fuel – through which the U.S. and Russia are prepared to cooperate, together with others, in making the benefits of peaceful uses of nuclear energy available to a wide range of interested states, and developing countries in particular. The U.S. and Russia are currently developing new ways of providing assistance to states considering nuclear energy or considering expansion of existing nuclear energy programs. The entry into force of a formal U.S.-Russian civil nuclear cooperation agreement will improve in particular our ability to operate together in furtherance of the Joint Declaration's objectives.

By promoting best practices of nuclear safety and security, and by offering states a viable alternative to the development of sensitive nuclear fuel cycle technologies, the United States and Russia believe that this approach will allow greater access to peaceful nuclear energy, while at the same time strengthening the global nuclear nonproliferation regime embodied in the Treaty on the Non-Proliferation of Nuclear Weapons.

U.S. Special Envoy for Nuclear Nonproliferation, Ambassador Jackie Wolcott, and Russian Ambassador Grigory Berdennikov are working in tandem, and in partnership with others, to advance the objectives of the Joint Declaration.

Our countries are determined to reach out to developing states in need of clean and reliable energy supplies with the promise of enhanced cooperation. Within this context, a number of States have made public statements of intent to rely on the international fuel market in lieu of developing indigenous enrichment and reprocessing technologies. Our countries are also promoting full implementation of NPT safeguards obligations, and adoption of international conventions on safety, security and liability.

On this occasion, the United States and the Russian Federation reaffirm our commitment to the responsible expansion of nuclear energy, and reiterate that this expansion must proceed in a manner that maximizes nuclear safety and security and minimizes proliferation risk.

Letter from M. Nicolas Sarkozy, President of the Republic to Mr Ban Ki-moon, United Nations Secretary-General

[5 December 2008]

The United Nations has an important role to play in the debate on disarmament. Europe wishes to play a fully-fledged role in that discussion. That is why I wanted to draw your attention to the proposals that the European Union has just presented this year at the United Nations.

On 23 September, I told the United Nations General Assembly that Europe wants to promote peace. This is true with respect to the fight against terrorism, the fight against the proliferation of weapons of mass destruction and their delivery systems, and crisis management.

It is also true with respect to disarmament, and notably nuclear disarmament. Europe, two of whose members have nuclear

weapons, is particularly concerned. Europe has already done much for disarmament. Keenly aware of the fact that its own security encourages the pursuit of global disarmament efforts, Europe is prepared to do more. Our ambition extends to every aspect of disarmament, for we are convinced of the need to strive for general disarmament. In this area as in others, Europe wants to act in accordance with a comprehensive political and strategic vision.

The Non-Proliferation Treaty Review Conference in 2010 represents a landmark date for the international non-proliferation regime. We must seize this opportunity to move towards a more secure world, one in which it is possible to meet all the objectives established by the NPT, whether they be non-proliferation, disarmament, or access to nuclear energy for peaceful uses. As for disarmament, Europe wished to propose a clear direction as of this year by presenting the United Nations General Assembly with concrete and realistic disarmament initiatives:

- the universal ratification of the Comprehensive Nuclear Test Ban Treaty and the completion of its verification regime, and the dismantling as soon as possible of all nuclear testing facilities in a manner that is transparent and open to the international community;
- the opening without delay and without preconditions of negotiations for a treaty banning the production of fissile material for nuclear weapons, and the introduction of an immediate moratorium on the production of such material;
- the establishment of confidence and transparency measures by the nuclear powers;
- further progress in the current discussions between the United States and Russia on the development of a legally-binding post-START arrangement, and an overall reduction in the global stockpile of nuclear weapons in accordance with Article VI of the NPT, in particular by the States which possess the largest arsenals;
- the inclusion of tactical nuclear weapons, by those States which have them, in their general arms control and disarmament processes, with a view to their reduction and elimination;
- the start of consultations on a treaty banning short and intermediate-range ground-to-ground missiles;
- the adherence to and implementation by all of the Hague Code of Conduct;
- mobilization in all other areas of disarmament.

Moving forward on the path of disarmament implies that the will to progress is shared unanimously. Non-proliferation, disarmament and arms control, like confidence, transparency and reciprocity, are key elements of collective security.

I hope that the international community will join the European Union in supporting and carrying out this plan of action; it is an ambitious programme that is truly capable of achieving concrete progress on the path of disarmament.

Europe is counting on your support. I hope you will convey to the international community, particularly within the United Nations, this initiative in support of a more secure world.

China's National Defense in 2008

[Information Office of the State Council of the People's Republic of China January 2009, Beijing]

[Eds...]

VII. The Second Artillery Force

The Second Artillery Force is a strategic force under the direct command and control of the CMC, and the core force of China for strategic deterrence. It is mainly responsible for deterring other countries from using nuclear weapons against China, and for conducting nuclear counterattacks and precision strikes with conventional missiles.

The Second Artillery Force sticks to China's policy of no first use of nuclear weapons, implements a self-defensive nuclear strategy, strictly follows the orders of the CMC, and takes it as its

fundamental mission the protection of China from any nuclear attack. In peacetime the nuclear missile weapons of the Second Artillery Force are not aimed at any country. But if China comes under a nuclear threat, the nuclear missile force of the Second Artillery Force will go into a state of alert, and get ready for a nuclear counterattack to deter the enemy from using nuclear weapons against China. If China comes under a nuclear attack, the nuclear missile force of the Second Artillery Force will use nuclear missiles to launch a resolute counter attack against the enemy either independently or together with the nuclear forces of other services. The conventional missile force of the Second Artillery Force is charged mainly with the task of conducting medium- and long-range precision strikes against key strategic and operational targets of the enemy.

History of Development

The founding of the Second Artillery Force was a historical choice the People's Republic of China was forced to make to deal with nuclear threats, break nuclear monopoly and maintain national security. China began to develop strategic missile weapons in 1956, established research, training and educational institutions for strategic missiles in 1957, created its first ground-to-ground missile unit in 1959 and formally founded the Second Artillery Force on July 1, 1966. In the latter half of the 1970s, the Second Artillery Force set itself the objective of building a lean and effective strategic missile force with Chinese characteristics. In the 1990s it established its conventional missile force, entering a new stage marked by the coordinated development of its nuclear and conventional missile forces. With the advent of the 21st century it began to promote leapfrogging development of informationization. Through more than 40 years of development, the Second Artillery Force has grown into a lean and effective strategic force with both nuclear and conventional missiles, capable of both land-based strategic nuclear counterattacks and precision strikes with conventional missiles.

Structure and Organization

The operational command authority of the Second Artillery Force is highly centralized. The chain of command runs from the CMC, the Second Artillery Force and missile bases to missile brigades. The operations of the Second Artillery Force must follow the orders of the CMC in the strictest and most precise manner.

The Second Artillery Force is mainly composed of the nuclear missile force, the conventional missile force, the support force, educational institutions, research institutes and the headquarter organizations. The missile force is organized into missile bases, missile brigades and launch battalions. The support force is organized into technical and specialized support units such as reconnaissance, intelligence, signal, ECM, engineering, logistics and equipment units. The educational institutions include a command college, an engineering college and a school for NCOs. The research institutes include equipment and engineering institutes.

Force Building

Following the principle of building a lean and effective force and going with the tide of the development of military science and technology, the Second Artillery Force strives to raise the informationization level of its weaponry and equipment, ensure their safety and reliability, and enhance its capabilities in protection, rapid reaction, penetration, damage and precision strike. After several decades of development, it has created a weaponry and equipment system with both nuclear and conventional missiles, both solid-fuelled and liquid-fuelled missiles, different launching ranges and different types of warheads.

The Second Artillery Force is endeavoring to form a complete system for war preparations, optimize its combat force structure, and build a missile operational system suited to informationized warfare. Its nuclear and conventional missile forces are kept at an appropriate level of readiness. The Second Artillery Force is making steady head-way in the construction of its battlefield system, and makes extensive use of modern mechanical equipment and construction methods. Each completed project is up to standard. The Second Artillery Force is also dedicated to logistical reforms and innovations. It has created integrated data bases for field support and informationized management platforms for logistic materials, and improved support systems for the survival

of combatants in operational positions. As a result, its integrated logistical support capabilities in case of actual combat have been markedly enhanced. To ensure the absolute safety of nuclear weapons, the Second Artillery Force strictly implements rules and regulations for nuclear safety control and accreditation of personnel dealing with nuclear weapons, has adopted reliable technical means and methods, strengthens the safe management of nuclear weapons in the process of storage, transportation and training, improves mechanisms and methods for emergency response to nuclear accidents, and has put in place special safety measures to avoid unauthorized and accidental launches.

In terms of training, the Second Artillery Force takes specialized skills as the foundation, focuses on officers and core personnel, centers its attention on systems integration and aims at improving overall operational capabilities. It actively conducts specialized training, integrated training and operational training exercises. Specialized training mainly involves the study of basic and specialized missile theories, and the training in operating skills of weapons and equipment. Integrated training mainly consists of whole-process coordinated training of all elements within a combat formation. Operational training exercises refer to comprehensive training and exercises by missile brigades and support units in conditions similar to actual combat. The Second Artillery Force has adopted a rating system for unit training and an accreditation system for personnel at critical posts. It enhances onbase, simulated, web-based and realistic training, explores the characteristics and laws of training in complex electromagnetic environments and integrated training of missile bases, and is conducting R&D of a new generation of web-based simulated training systems. Significant progress has been made in building the "Informationized Blue Force" and battle laboratories.

The Second Artillery Force places personnel training in a strategic position, and gives it high priority. It is working to implement the Shenjian Project for Personnel Training, and create a three-tiered team of first-rate technical personnel. As a result, a contingent of talented people has taken shape, whose main body is composed of academicians of the Chinese Academy of Engineering, missile specialists, commanding officers, and skilled operators and technicians.

[Eds...]

XIV. Arms Control and Disarmament

The Chinese government has always attached importance to and been supportive of international efforts in the field of arms control, disarmament and non-proliferation. China has taken concrete measures to faithfully fulfill its relevant international obligations. China is committed to, along with the international community, consolidating and strengthening the existing international arms control, disarmament and non-proliferation mechanisms pursuant to the purposes and principles of the Charter of the United Nations and other universally recognized norms governing international relations, and to the preservation of international strategic stability and promotion of the common security of all countries.

Nuclear Disarmament

China holds that all nuclear-weapon states should make an unequivocal commitment to the thorough destruction of nuclear weapons, undertake to stop research into and development of new types of nuclear weapons, and reduce the role of nuclear weapons in their national security policy. The two countries possessing the largest nuclear arsenals bear special and primary responsibility for nuclear disarmament. They should earnestly comply with the relevant agreements already concluded, and further drastically reduce their nuclear arsenals in a verifiable and irreversible manner, so as to create the necessary conditions for the participation of other nuclear-weapon states in the process of nuclear disarmament.

China supports the early entry into force of the Comprehensive Nuclear Test-Ban Treaty, and will continue to honor its moratorium commitment on nuclear testing. China supports the preparatory work for the entry into force of the Treaty by the Preparatory Commission of the Comprehensive Nuclear Test-Ban Treaty Organization, and has contributed to the establishment of the International Monitoring System (IMS).

China has always stayed true to its commitments that it will not be

the first to use nuclear weapons at any time and in any circumstances, and will unconditionally not use or threaten to use nuclear weapons against non-nuclear-weapon states or in nuclear-weapon-free zones. China calls upon other nuclear-weapon states to make the same commitments and conclude an international legal instrument in this regard. China has already signed all relevant protocols which have been opened for signature of various nuclear-weapon-free zone treaties, and has reached agreement with the ASEAN on relevant issues of the Protocol of the Treaty on the Southeast Asia Nuclear-Weapon-Free Zone. China welcomes the Treaty on a Nuclear-Weapon-Free Zone in Central Asia signed by the five Central Asian countries.

China values the role of the Conference on Disarmament (CD) in Geneva, and supports efforts in the CD to reach a comprehensive and balanced program of work, so as to enable the CD to start substantial work on such issues as the Fissile Material Cut-off Treaty (FMCT), prevention of an arms race in outer space, nuclear disarmament and security assurance to non-nuclear-weapon states.

China maintains that the global missile defense program will be detrimental to strategic balance and stability, undermine international and regional security, and have a negative impact on the process of nuclear disarmament. China pays close attention to this issue.

[Eds...]

NonProliferation

China firmly opposes the proliferation of weapons of mass destruction (WMD) and their means of delivery, and actively takes part in international non-proliferation efforts. China holds that an integrated approach should be adopted to address both the symptoms and root causes of proliferation. The international community should devote itself to building a global and regional security environment featuring stability, cooperation and mutual trust, and earnestly maintaining and strengthening the authority and effectiveness of the international non-proliferation regime. In this regard, double standards must be abandoned. All states should resort to dialogue and negotiation to resolve differences in the field of non-proliferation. The relations between non-proliferation and the peaceful use of science and technology should be properly addressed, with the aim of preserving the right of peaceful use of each state while effectively preventing WMD proliferation.

China has joined all international treaties and international organizations in the field of non-proliferation. It attaches great importance to the role of the Treaty on the Non-proliferation of Nuclear Weapons (NPT), the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC) in preventing the proliferation of WMD. China supports the role played by the UN in the field of nonproliferation, and has conscientiously implemented the relevant resolutions of the UN Security Council.

China is dedicated to the denuclearization of the Korean Peninsula, and firmly promotes the Six-Party Talks process on that issue. China facilitated the adoption of "Initial Actions for the Implementation of the Joint Statement" and the "Second-Phase Actions for the Implementation of the Joint Statement" respectively in February and October 2007.

China maintains that the Iranian nuclear issue should be resolved peacefully by political and diplomatic means. China has participated in the meetings of foreign ministers or political directors of the ministries of foreign affairs, and hosted a meeting of political directors of the ministries of foreign affairs of those six countries in Shanghai in April 2008. China has also actively taken part in the deliberation on the Iranian nuclear issue at the International Atomic Energy Agency (IAEA) and the UN Security Council, playing a constructive role.

China attaches great importance to non-proliferation export control, and has established a comprehensive legal system for export control of nuclear, biological, chemical and missile and related dual-use items and technologies. China has also constantly updated these laws and regulations in light of its international obligations and the need for export control. China amended the

Regulations of the PRC on the Control of Nuclear Exports in November 2006, the Regulations of the PRC on the Control of Dual-Use Nuclear Items and Related Technologies Exports in January 2007 and its Control List in July of the same year. China has spared no effort in strengthening law enforcement in the field of non-proliferation export control.

China values and actively carries out international exchanges and cooperation in the field of non-proliferation and export control. China has held regular arms control and non-proliferation consultations with a dozen countries and the EU, and non-proliferation dialogues with NATO. China also maintains dialogues and exchanges with multinational export control regimes such as the Australia Group and the Wassenaar Arrangement.

China supports the objectives and principles of the Global Initiative to Combat Nuclear Terrorism. As one of the original partners of the Initiative, China has taken part in all meetings of the partners. In December 2007 China and the United States jointly held a workshop in Beijing on radiation emergency response within the framework of the Initiative.

Prevention of the Introduction of Weapons and an Arms Race in Outer Space

The Chinese government has all along advocated the peaceful use of outer space, and opposed the introduction of weapons and an arms race in outer space. The existing international legal instruments concerning outer space are not sufficient to effectively prevent the spread of weapons to outer space. The international community should negotiate and conclude a new international legal instrument to close the loopholes in the existing legal system concerning outer space.

In February 2008 China and Russia jointly submitted to the CD a draft Treaty on the Prevention of the Placement of Weapons in Outer Space and the Threat or Use of Force against Outer Space Objects. China hopes that the CD will start substantial discussions on the draft as soon as possible, and negotiate and conclude the Treaty at an early date.

[Eds...]

EU Statement

[Conference on Disarmament, 1st Part Geneva,
20 January 2009]

Mr President,

[Eds...]

6. I would like to recall that the European Union has proposed a clear direction by presenting the United Nations General Assembly at its current session with concrete and realistic disarmament initiatives:

- the universal ratification of the Comprehensive Nuclear Test Ban Treaty and the completion of its verification regime, and the dismantling as soon as possible of all nuclear testing facilities in a manner that is transparent and open to the international community;
- the opening without delay and without preconditions of negotiations for a Treaty banning the production of fissile material for nuclear weapons, and the introduction of an immediate moratorium on the production of such material;
- the establishment of transparency and confidence-building measures by the nuclear powers;
- further progress in the current discussions between the United States and Russia on the development of a legally-binding postSTART arrangement, and an overall reduction in the global stockpile of nuclear weapons in accordance with article VI of the NPT, in particular by the states which possess the largest arsenals;
- the inclusion of tactical nuclear weapons, by those states which have them, in their general arms control and disarmament processes, with a view to their reduction and elimination;
- the start of consultations on a Treaty banning short and intermediate range ground-to-ground missiles;
- the adherence to and implementation by all of the Hague Code of Conduct;
- mobilisation in all other areas of disarmament.

7. Several of these initiatives are relevant to the Conference on Disarmament. The European Union attaches a clear priority to the negotiation, without preconditions, in the Conference on Disarmament, of a Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (FMCT), as a means to strengthen disarmament and nonproliferation. It constitutes a priority ripe for negotiation. The European Union is also ready to engage in substantial discussion on the other items included in CD/1840: on nuclear disarmament and the prevention of nuclear war, dealing with issues related to the prevention of an arms race in outer space and dealing with appropriate international arrangements to assure nonnuclear weapon states against the use or threat of use of nuclear weapons, as well as on other issues related to the Conference on Disarmament agenda.

[Eds...]

Thank you Mr President

U.S EU Statement on "Nuclear Disarmament".

[Conference on Disarmament, 1st Part, Geneva,
12 February 2009]

[Editorial note – Footnotes not included]

Mr President,

[Eds...]

2. Today I will, on behalf of the European Union, address the issue of Nuclear Disarmament.

3. At the outset let me underline that the European Union attaches a clear priority to the negotiations at the CD of an FMCT. An effective FMCT would constitute a significant step in the process of nuclear disarmament, as well as strengthen nuclear non-proliferation. The EU will address the issue of an FMCT in a separate statement at a later date.

4. One of the key elements in the current proposal for a Programme of Work for the Conference on Disarmament, CD/1840, is that the CD should engage in "substantive discussions on nuclear disarmament and the prevention of nuclear war". The EU is ready to engage further on these issues as soon as a Programme of Work has been

5. In the meantime, the European Union and its Member States will continue to constructively participate in the informal debates on the issues led by Coordinators, including on nuclear disarmament.

6. The last time the European Union made a formal statement at this Conference specifically dedicated to the issue of nuclear disarmament was on 6 February 2007. The EU stands by this statement.

7. Since then, the EU has continued to stress that global security, as well as European security, would benefit from continued global disarmament efforts. The European Union intends to play a full-fledged role in this.

8. In that regard, we call on the international community to work to promote the concrete and realistic disarmament initiatives which the EU submitted to the United Nations General Assembly at its current session. All these initiatives which were endorsed by our 27 Heads of State and Government in December last year in the *Statement on Strengthening International Security*, which was submitted as an official document of the CD, were outlined in our statement in the CD plenary on 20 January 2009. Several of those initiatives are relevant *inter alia* to the Conference on Disarmament and its work on the specific issue of nuclear disarmament.

9. Besides the negotiation of an FMCT, which the EU will address in a separate statement, the European Union calls for the universal ratification of the CTBT, a treaty that was the latest, and hopefully not the last, concrete result- from this negotiating body. In addition, the EU also calls for the completion of its verification regime and the dismantling of all nuclear test facilities in a manner that is transparent and open to the international community. The European Union is encouraged by recent signs of political momentum towards the entry into force of the CTBT. Statements made by the new US administration give rise to some optimism for progress towards this goal. We therefore repeat our urgent call to all states which have not yet ratified this crucial disarmament treaty,

and in particular the nine remaining Annex II states, to sign and ratify the Treaty unconditionally and without delay:

10. The European Union calls for further progress in the current discussions between the United States and Russia on the development of a legally binding post-START arrangement, and an overall reduction in the global stockpile of nuclear weapons in accordance with Article VI of the NPT, in particular by the states which possess the largest arsenals. We take note of some encouraging signals in this regard: with statements made by the new US Administration.

11. The European Union also calls for the inclusion of tactical nuclear weapons by those states which possess them, in their general arms control and disarmament processes, with a view to the reduction and elimination of these weapons.

12. The European Union also favours the establishment of transparency and confidence-building measures by the nuclear powers. The EU welcomes the increased transparency shown by some nuclear-weapon states on the nuclear weapons that they possess and calls on other concerned states to do likewise.

13. The European Union proposes the start of consultations on a treaty banning short and intermediate range ground-to-ground missiles.

14. In these areas related to the issue of nuclear disarmament, the European Union is convinced that concrete progress is realistic. We note that these areas were also mentioned in the report of the Coordinator on Nuclear Disarmament during last year's CD session.

15. The European Union will continue its efforts on the issue of nuclear disarmament also in the context of the NPT review process. The NPT, based on its three mutually reinforcing pillars, represents a unique and irreplaceable framework for maintaining and strengthening international peace, security, and stability. The authority and integrity of the NPT must be preserved and strengthened, and to that end the EU will continue to promote all the objectives contained in the Treaty. The upcoming third session of the NPT Preparatory Committee, in May this year, will be an important occasion to continue to lay the groundwork for a successful NPT Review Conference in 2010. The EU intends to work actively towards this end.

Thank you, Mr President.

**Unclassified Report to Congress on the
Acquisition of Technology Relating to Weapons
of Mass Destruction and Advanced
Conventional Munitions, Covering 1 January to
31 December 2007**

[26 February 2009]

[Eds...]

Iran

Nuclear

During the reporting period, Iran continued to expand its nuclear infrastructure and continue uranium enrichment and activities related to its heavy water research reactor, despite United Nations Security Council Resolution 1737 adopted in late 2006, which calls for the suspension of those activities.

- In April 2007, Iran announced it had started "industrial enrichment" at the beginning of the year.
- Iran announced plans to hold international tenders to build two new nuclear power plants in April 2007.
- In November 2007, The International Atomic Energy Agency (IAEA) reported that Iran had installed and begun operating with uranium hexafluoride gas the first 3,000 centrifuges at the underground cascade halls at Natanz. Between February and November 2007, Iran fed about 1,240 kilograms of uranium feed gas into its cascades, and produced some low enriched uranium at an enrichment level appropriate for reactor fuel. The President of Iran declared that the 3,000 centrifuges were "enriching" uranium. Iran announced the manufacturing of

nuclear fuel pellets for the Arak heavy water research reactor.

- By year's end, Iran was receiving uranium fuel purchased from Russia to operate the nuclear reactor at Bushehr. The final delivery of fuel was scheduled for February 2008, to attempt to begin operations at the Bushehr nuclear reactor about six months later (mid-to-late 2008).

Over the past year, the Intelligence Community has gained important new insights into Iran's activities related to nuclear weapons and published a December 2007 National Intelligence Estimate on Iranian intent and capabilities.

Analysis of events and activities associated with the Iranian nuclear program during the reporting period has yielded the following conclusions: We assess that Iran had been working to develop nuclear weapons through at least fall 2003, but that in fall 2003 Iran halted its nuclear weapons design and weaponization activities, and the military's covert uranium conversion- and enrichment-related activities. We judge that the halt lasted at least several years, and that Tehran had not resumed these activities as of mid-2007. We do not know whether Iran currently intends to develop nuclear weapons, although we assess Tehran at a minimum is keeping open the option to develop nuclear weapons. We also assess that convincing the Iranian leadership to forgo the eventual development of nuclear weapons will be difficult, and that Iranian entities are continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons, if a decision is made to do so. For example, Iran's civilian uranium enrichment program is continuing. We judge Iran probably would be technically capable of producing enough HEU for a weapon sometime during the 2010-2015 time frame. INR judges Iran is unlikely to achieve this capability before 2013.

[Eds...]

North Korea

Nuclear

In February 2007, North Korea agreed as part of the Six-Party Talks to "shut down and seal for the purposes of eventual abandonment the Yongbyon nuclear facility, including the reprocessing facility" as part of the Initial Actions for the Implementation of the Joint Statement of September 2005. In mid-July 2007, North Korean officials shut down and sealed, under IAEA monitoring and verification, the 5-megawatt electric (MWe) nuclear reactor, a spent-fuel reprocessing facility, a nuclear fuel fabrication plant and an unfinished 50 MWe nuclear reactor at the Yongbyon complex. North Korea also sealed an unfinished 200 MWe reactor in Taechon. In return, the other five Parties agreed to cooperate in economic, energy and humanitarian assistance to the DPRK, including the provision of assistance up to the equivalent of 1 million tons of heavy fuel oil during the period of Initial Actions and the next phase.

In the Second-Phase Actions Agreement, signed October 3, 2007, Pyongyang committed to disable the 5MWe reactor, the reprocessing facility, and the fuel fabrication plant by December 31, 2007 in exchange for a U.S. commitment to begin the process of removing the designation of the DPRK as a state sponsor of terrorism and to advance the processing of terminating the application of the Trading with the Enemy Act, in parallel with the DPRK's Second Phase actions. In November 2007, a team of Department of Energy officials began overseeing disablement activities at Yongbyon, and unloading of reactor fuel rods continues into 2008. North Korean officials missed a December 31, 2007 deadline for a complete and correct declaration of all its nuclear programs.

Although North Korea has halted and disabled portions of its plutonium production program, we assess with high confidence it has in the past pursued a uranium enrichment capability that we judge is for nuclear weapons and assess with at least moderate confidence that it continues to pursue such a capability.

[Eds...]

Syria

Nuclear

Syria—despite being a Nuclear Non-Proliferation Treaty signatory

with full-scope IAEA safeguards—has been engaged for more than a decade in a covert nuclear program with North Korean assistance. The program involved construction of a nuclear reactor we assess would have been capable of producing plutonium for nuclear weapons, without informing the IAEA and while taking measures to preserve the site's secrecy. The reactor was destroyed in September 2007, before it became operational. and Syria has gone to great lengths to try to eradicate evidence of its existence. The covert nature of the program, the characteristics of the reactor, and Syria's extreme efforts to deny and destroy evidence of the reactor after its destruction are inconsistent with peaceful nuclear applications.

[Eds...]

Transcript of Remarks and Response to Media Questions by Russian Minister of Foreign Affairs Sergey Lavrov at Press Conference Following Talks with US Secretary of State Hilary Clinton

[6 March 2009]

Esteemed colleagues,

[Eds...]

As Secretary Clinton said, we very thoroughly examined practically all of the issues on our agenda, starting with bilateral relations and, of course, including our cooperation in the international arena. And all this was done, first of all, in the context of the preparations for the first encounter between the Russian and US Presidents, which is planned to take place on the sidelines of the G20 summit in London at the very beginning of April. We exchanged views regarding our visions of the near-term priorities in our relations.

I am convinced that the Secretary of State will share my opinion that these priorities coincide for the most part. Of course, each side highlighted its emphases and nuances and it would be an exaggeration to say that we agreed on everything, but we agreed that on all questions, including those on which we have differences, we will work in the spirit of partnership, honestly and openly. What matters most is that we found just this readiness in work. We have a common understanding that today our bilateral relations are acquiring an additional chance which cannot be lost. Herein lie the interests of our peoples, the interests of the United States, the interests of the Russian Federation and we are fully aware of the responsibility of our two countries for the state of affairs in the world.

As I've said, we devoted much attention to the preparation of the meeting between our presidents in London. We substantively discussed so called sore points in our relations and looked at how work could be organized to clear the logjams left over from previous years and how to make certain a constructive component, goal-oriented partner-like collaboration, dominates our relations.

We paid special attention to the problem of the nonproliferation of nuclear weapons and weapons of mass destruction in general, of strategic offensive arms and strategic defensive arms. I am certain that it is within our power to reach a common denominator and maybe even come out with a plus for our strategic relationship on both START and missile defense. I note the readiness of our US partners for dialogue on the basis of mutual consideration of interests.

We looked at the situation with nuclear weapons nonproliferation, including as it applies to Iran and to the issue of the Korean peninsula. I am certain that in the near future we will try to come to some kind of agreement, some results that would enable us to bring a political-diplomatic resolution of these issues closer, within the framework of the existing negotiation formats.

We noted the special significance of the Treaty on the Nonproliferation of Nuclear Weapons, and agreed to cooperate in the framework of the process of the preparations for the next review conference to be held in 2010. We also recalled that some time ago at the initiative of Russia and the United States the UN Security Council had adopted an important resolution aimed at preventing nuclear weapons or materials that can be used for their production from falling into non-state actor hands. And we agreed that our joint initiative would remain a subject of our special attention and that we might propose additional steps to reinforce

the regime created by the Security Council in this area. We have many common initiatives which remain valid on the fight against the threat of nuclear terrorism. And here too there are concrete accords on how jointly to seek greater consolidation of the international community.

[Eds...]

Question: Do you think it's possible to reach new SOA accords before December 5, 2009?

Foreign Minister Lavrov: I fully subscribe to this statement. We will do everything to ensure that the accord is reached. The present Treaty is outdated; at least, the limits there have long since been fulfilled, and to stay within this Treaty would mean that both Russia and the United States can, essentially, increase, not reduce their strategic offensive arms. This will be a very bad signal to all others, especially ahead of the next Review Conference of the States Parties to the Treaty on the Nonproliferation of Nuclear Weapons.

[Eds...]

Statement by H.E. Mr. Sergey Lavrov, Minister of Foreign Affairs of the Russian Federation at the Plenary Meeting of The Conference on Disarmament

[Geneva, 7 March 2009]

Dear Mr. President,

Dear Mr. Secretary-General,

Dear colleagues, ladies and gentlemen,

It was slightly over a year ago that I last spoke at this forum. Since that time, much efforts have been taken to improve the international situation. However, we did not manage to achieve any drastic positive change. Moreover, we have witnessed further increase of global conflict potential, which distracts us from the solution of urgent problems related to the need to enhance international stability and to establish an environment conducive to consistent steps in the field of disarmament and nonproliferation.

Today, we have to acknowledge our inability to overcome a stalemate in the field of multilateral disarmament. A stalemate situation in the Conference's activities that has continued for over ten years clearly reflects an unfavorable state of affairs in the field of international security. Efforts taken by groups of "like-minded" states are capable of partially solving disarmament problems; however, in a long-term perspective, such efforts will face serious restraints, which, in fact, could result in an erosion of the existing mechanisms, including this Conference. Of course, additional problems emerge due to the current global financial and economic crisis, which constrict the resource base for disarmament and conversion programs.

At the same time, it is quite obvious that under globalization the crisis cannot be overcome through military preparations or war as happened in 1930-s. Regretfully, the Cold War has "institutionalized" militarization in the field of international relations. We need to get rid of this holdover.

Russia is aware of its special responsibility as a nuclear state and permanent member of the UN Security Council for nuclear disarmament and strengthening of the WMD non-proliferation regime. My country has fully met its obligations under the START I. Implementation of the Moscow Treaty (SORT) is well underway. It's now time to take new steps in this area aimed at making our world more secure.

We welcome the statements made by the new US Administration in favor of multilateral approaches to the maintenance of international security and disarmament. We are prepared, as was suggested by our American partners, to "reset" our relations. Conclusion of a new legally binding Russian-American treaty on strategic offensive arms could become a priority step in that direction.

Let me now read out the statement by Dmitry A. Medvedev, President of the Russian Federation, on this issue.

"On December 5 this year, the Treaty on the Reduction and Limitation of Strategic Offensive Arms (START 1) expires. The

importance of this instrument for ensuring international peace and stability can hardly be overestimated. It played a historic role in ensuring strategic stability and security as well as reducing strategic offensive arms arsenals. Its implementation has made the world safer.

Today, we are facing a pressing need to move further along the road of nuclear disarmament. In accordance with its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons Russia is fully committed to reaching the goal of a world free from these most deadly weapon.

As far back as in 2005 we invited the United States to conclude a new agreement to succeed START 1. It could be based on all the best elements of the Treaty which has been effectively operating, while reflecting present-day strategic realities.

In arriving at that decision, we have taken into consideration, among other things, the fact that the limits established by START 1 were met as far back as in 2001. At present, the numbers of strategic delivery vehicles and their warheads are considerably lower. Thus, START 1 is far from limiting Russia and the United States in the missile and nuclear sphere it, in fact, permits to increase the arsenals of strategic offensive arms.

Our approach to such an agreement is as follows. A future agreement should be legally binding. It is of no less importance that the instrument should be forward-looking and should limit not only warheads, but also strategic delivery vehicles, i.e. intercontinental ballistic missiles, submarine launched ballistic missiles and heavy bombers.

We also deem it necessary to exclude possible deployment of strategic offensive arms outside national territories.

I wish to emphasize that Russia is open to dialogue and is prepared for negotiations with the new US Administration. I fully share the commitment of the US President Barack H. Obama to the noble goal of saving the world from the nuclear threat and see here a fertile ground for a joint work.

I believe that constructive interaction in this field will contribute to general improvement of the Russian-US relations.

Dmitry A. Medvedev.”

Ladies and gentlemen,

Today we witness a growing number of international initiatives on nuclear disarmament such as Hoover Initiative, Global Zero Initiative, Evans-Kawaguchi Commission, Luxemburg Forum, as well as the plan put forward by Mr. Gordon Brown, Prime Minister of Great Britain. Russia appreciates the focus of these initiatives on solving global security issues on a multilateral basis and is willing to positively contribute to their consideration.

However, progress towards “global zero” can only be achieved through strengthened strategic stability and strict adherence to the principle of equal security for all. In its turn this suggests the need to carry out a set of measures required for a sustainable and consistent disarmament process. Among those measures are:

- further advancement of nuclear disarmament by all nuclear-weapon States, with their “gradual” engagement in efforts already being undertaken by Russia and U.S.;
- to prevent weaponization of outer space;
- to prevent operational deployment of strategic offensive weapons equipped with conventional warheads, i.e. the building of the so-called “compensatory” potential;
- to ensure that States do not possess a “nuclear upload potential”;
- to prevent attempts aimed at using NPT membership to implement military nuclear programs;
- to ensure verifiable cessation of conventional capabilities’ development coupled with efforts to resolve other international issues, including settlement of regional conflicts.

I would like to draw particular attention to the relationship between offensive and defensive weapons. Real progress in nuclear

disarmament cannot be achieved in a situation when unilateral efforts to develop strategic ABM systems undermine this relationship. This is fraught with erosion of strategic stability and disbalancing of the system of checks and balances that ensures global parity.

Acting in the spirit of strategic openness, we propose a constructive alternative to unilateral plans in this crucial area, i.e. to unite efforts of all States interested in counteracting potential missile threats. Our package proposal with regard to developing cooperation remains on the negotiation table. We will develop and elaborate it. We are ready for a joint work based on equitable partnership.

Ensuring an effective and sustainable implementation of the Treaty on the Non-Proliferation of Nuclear Weapons, which is of pivotal importance for global security, and enhancement of its universality remains a priority. We deem it necessary to prepare for the forthcoming NPT Review Conference in 2010 agreed recommendations that would provide continued efficiency of the Treaty as a crucially important instrument to prevent nuclear proliferation. We need to achieve unconditional fulfillment by its Parties of their obligations embodied in the indivisibility of three fundamental pillars - non-proliferation, peaceful uses of atomic energy and disarmament. The Third session of the Preparatory Committee of the Review Conference provides a great opportunity to reach an agreement on possible ways to intensify negotiations in all those areas.

Strengthening of the international nuclear non-proliferation and nuclear arms limitation regime is inextricably linked to the Comprehensive Nuclear Test-Ban-Treaty (CTBT). Russia ratified the Treaty in 2000. We have consistently advocated its early entry into force. The moratorium on nuclear tests, with all its importance, cannot serve as a substitute for legal obligations. Therefore we call upon all States whose accession is necessary for the Treaty’s entry into force, to sign and ratify it as soon as possible. We have noted, naturally, some positive signals from Washington regarding possible changes in the US position on CTBT and expect that those signals are embodied in specific decisions of President Obama’s Administration.

Nuclear-weapon-free zones contribute to strengthening nuclear nonproliferation regime, achieving peace and security regionally and globally. We welcome the completion of the ratification process by all Parties to the Treaty on a Nuclear-Weapon-Free Zone in Central Asia, which resulted in its entry into force.

The task to strengthen the nuclear non-proliferation regime in the Middle East remains urgent. We consistently advocate this region to become a nuclear-weapon-free zone and, eventually, a zone free from all other types of weapons of mass destruction. In 1995 and 2000, the NPT Parties already took decisions on the Middle East. Mutually acceptable solutions for their implementation need to be sought within the forthcoming preparatory activities for the NPT Review Conference. We stand ready for a joint work to fulfill that task as well.

IAEA verification activities need to be made more effective. The Additional Protocol to the Safeguards Agreement, ratified by Russia in 2007, is an efficient tool of enhancing IAEA capacities in this field. We call on all countries to become parties to it. Eventually, the Additional Protocol is to become a universally accepted standard to verify the compliance of States with their NPT non-proliferation obligations and a new major standard in the field of nuclear exports.

Growing interest in peaceful nuclear energy is a trend of current economic development. Energy security and climate are necessarily linked to peaceful nuclear applications, which should be used more widely in full accordance with the NPT States parties’ inalienable right to develop research, production and use of nuclear energy for peaceful purposes. This opens up new opportunities for international cooperation, primarily to ensure stable and secure supplies of nuclear fuel for countries developing their nuclear energy sector, subject to due compliance with the requirements of the nuclear non-proliferation regime. We note the increasing importance of multilateral approaches that could serve as an economically sound and feasible alternative to the development of all elements of the nuclear fuel cycle nationally.

In recent years we have witnessed quite a few interesting initiatives in this field as well. Russia suggested that joint work should be

carried out to develop global nuclear energy infrastructure through the establishment of multilateral centers for the provision of nuclear fuel cycle services. The International Uranium Enrichment Center has been already established in partnership with Kazakhstan at the Angarsk enrichment plant. We welcome the decision of Armenia and Ukraine to join this Center, as well as the interest in joining it shown by some other countries. The Angarsk Center plans to create a buffer stock of low-enriched uranium under the IAEA supervision to ensure guaranteed supplies of fuel in case of a market failure.

Our ability to adequately and timely respond to the threat of nuclear terrorism is a prerequisite for ensuring security of every State and of the entire world community. The Russian-American Global Initiative to Combat Acts of Nuclear Terrorism put forward in 2006 is a major contribution to this cause. It is already being implemented and is growing in scale. 75 States have joined it to date. We are convinced that it will enjoy even broader support in the future. This is a good example of a possible cooperation modality in the modern world to find responses to new challenges and threats.

We support revitalization of multilateral diplomacy, primarily within the UN and the Conference on Disarmament. We note a considerable contribution of the Conference to the strengthening of international security. We express our gratitude to all delegations and to Mr. Sergei Ordzhonikidze, Secretary-General of the Conference, for their efforts to enhance relevance of this forum, including their persistent efforts to build consensus with regard to its programme of work.

Preventing weaponization of outer space is of particular importance among disarmament issues. When Russia and China introduced a draft international Treaty on the Prevention of the Placement of Weapons in Outer Space (PPWT) at this Conference last February, they felt that it was easier to prevent weaponization of outer space than to get rid of new stockpiles of weapons afterwards. Prevention of an arms race in outer space will also contribute to making the strategic situation predictable and preserving integrity of orbital assets. This should serve the interests of all States using outer space for peaceful purposes.

Russia and China will soon introduce a document summing up the outcome of the Conference debate and outlining our response to the comments received regarding the draft PPWT. We hope that it will serve as useful input to future negotiations.

A year ago at this forum Russia also introduced draft basic elements of an international legal agreement on the elimination of intermediate-range and shorter-range (ground-launched) missiles. We reiterate our call for a detailed discussion of this initiative that has gained a great deal of support. Our idea is echoed by the EU-backed proposals of French President Nicolas Sarkozy to start negotiations on banning intermediate-range and shorter-range ground-to-ground missiles. We are prepared for a constructive dialogue with both the EU and all other partners on possible ways of dealing with these issues with a view to establishing a universal regime for banning these types of missiles.

We are also prepared to start negotiation on a treaty banning the production of fissile material for nuclear weapons purposes (FMCT), which would become an important milestone in the processes of nuclear disarmament and strengthening the nuclear non-proliferation regime.

In conclusion, I would like to state the following. In our view, the efforts made to harmonize the priority items on the Conference agenda in order to resume its substantive work are inextricably linked with general search for ways to overcome the present-day crisis phenomena: be it in financial and economic, military and political, environmental or other areas. We can only solve the problems we are facing now through joint action, by restoring trust in global politics and making collective efforts meeting the interests of all States and the world community as a whole.

Russia is open to a constructive dialogue and stands ready to work jointly with its partners. The right moment has come today, for the first time after the end of the Cold War, for making real progress in resuming the global disarmament process on a broad agenda. I am convinced that we should not miss this opportunity.

Text of President Barack Obama's Remarks in Prague

[Prague, 5 April 2009]

To Mr. President, Mr. Prime Minister, to all the dignitaries who are here, thank you for your extraordinary hospitality. And to the people of the Czech Republic, thank you for your friendship to the United States.

[Eds...]

Now, one of those issues that I'll focus on today is fundamental to the security of our nations and to the peace of the world — that's the future of nuclear weapons in the 21st century.

The existence of thousands of nuclear weapons is the most dangerous legacy of the Cold War. No nuclear war was fought between the United States and the Soviet Union, but generations lived with the knowledge that their world could be erased in a single flash of light. Cities like Prague that existed for centuries, that embodied the beauty and the talent of so much of humanity, would have ceased to exist.

Today, the Cold War has disappeared but thousands of those weapons have not. In a strange turn of history, the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up. More nations have acquired these weapons. Testing has continued. Black market trade in nuclear secrets and nuclear materials abound. The technology to build a bomb has spread. Terrorists are determined to buy, build or steal one. Our efforts to contain these dangers are centered on a global non-proliferation regime, but as more people and nations break the rules, we could reach the point where the center cannot hold.

Now, understand, this matters to people everywhere. One nuclear weapon exploded in one city — be it New York or Moscow, Islamabad or Mumbai, Tokyo or Tel Aviv, Paris or Prague — could kill hundreds of thousands of people. And no matter where it happens, there is no end to what the consequences might be — for our global safety, our security, our society, our economy, to our ultimate survival.

Some argue that the spread of these weapons cannot be stopped, cannot be checked — that we are destined to live in a world where more nations and more people possess the ultimate tools of destruction. Such fatalism is a deadly adversary, for if we believe that the spread of nuclear weapons is inevitable, then in some way we are admitting to ourselves that the use of nuclear weapons is inevitable.

Just as we stood for freedom in the 20th century, we must stand together for the right of people everywhere to live free from fear in the 21st century. And as nuclear power — as a nuclear power, as the only nuclear power to have used a nuclear weapon, the United States has a moral responsibility to act. We cannot succeed in this endeavor alone, but we can lead it, we can start it.

So today, I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons. I'm not naive. This goal will not be reached quickly — perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, "Yes, we can."

Now, let me describe to you the trajectory we need to be on. First, the United States will take concrete steps towards a world without nuclear weapons. To put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy, and urge others to do the same. Make no mistake: As long as these weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies — including the Czech Republic. But we will begin the work of reducing our arsenal.

To reduce our warheads and stockpiles, we will negotiate a new Strategic Arms Reduction Treaty with the Russians this year. President Medvedev and I began this process in London, and will seek a new agreement by the end of this year that is legally binding and sufficiently bold. And this will set the stage for further cuts, and we will seek to include all nuclear weapons states in this endeavor.

To achieve a global ban on nuclear testing, my administration will

immediately and aggressively pursue U.S. ratification of the Comprehensive Test Ban Treaty. After more than five decades of talks, it is time for the testing of nuclear weapons to finally be banned.

And to cut off the building blocks needed for a bomb, the United States will seek a new treaty that verifiably ends the production of fissile materials intended for use in state nuclear weapons. If we are serious about stopping the spread of these weapons, then we should put an end to the dedicated production of weapons-grade materials that create them. That's the first step.

Second, together we will strengthen the Nuclear Non-Proliferation Treaty as a basis for cooperation. The basic bargain is sound: Countries with nuclear weapons will move towards disarmament, countries without nuclear weapons will not acquire them, and all countries can access peaceful nuclear energy. To strengthen the treaty, we should embrace several principles. We need more resources and authority to strengthen international inspections. We need real and immediate consequences for countries caught breaking the rules or trying to leave the treaty without cause.

And we should build a new framework for civil nuclear cooperation, including an international fuel bank, so that countries can access peaceful power without increasing the risks of proliferation. That must be the right of every nation that renounces nuclear weapons, especially developing countries embarking on peaceful programs. And no approach will succeed if it's based on the denial of rights to nations that play by the rules. We must harness the power of nuclear energy on behalf of our efforts to combat climate change, and to advance peace opportunity for all people.

But we go forward with no illusions. Some countries will break the rules. That's why we need a structure in place that ensures when any nation does, they will face consequences.

Just this morning, we were reminded again of why we need a new and more rigorous approach to address this threat. North Korea broke the rules once again by testing a rocket that could be used for long range missiles. This provocation underscores the need for action — not just this afternoon at the U.N. Security Council, but in our determination to prevent the spread of these weapons.

Rules must be binding. Violations must be punished. Words must mean something. The world must stand together to prevent the spread of these weapons. Now is the time for a strong international response -- now is the time for a strong international response, and North Korea must know that the path to security and respect will never come through threats and illegal weapons. All nations must come together to build a stronger, global regime. And that's why we must stand shoulder to shoulder to pressure the North Koreans to change course.

Iran has yet to build a nuclear weapon. My administration will seek engagement with Iran based on mutual interests and mutual respect. We believe in dialogue. But in that dialogue we will present a clear choice. We want Iran to take its rightful place in the community of nations, politically and economically. We will support Iran's right to peaceful nuclear energy with rigorous inspections. That's a path that the Islamic Republic can take. Or the government can choose increased isolation, international pressure, and a potential nuclear arms race in the region that will increase insecurity for all.

So let me be clear: Iran's nuclear and ballistic missile activity poses a real threat, not just to the United States, but to Iran's neighbors and our allies. The Czech Republic and Poland have been courageous in agreeing to host a defense against these missiles. As long as the threat from Iran persists, we will go forward with a missile defense system that is cost-effective and proven. If the Iranian threat is eliminated, we will have a stronger basis for security, and the driving force for missile defense construction in Europe will be removed.

So, finally, we must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security. One terrorist with one nuclear weapon could unleash massive destruction. Al Qaeda has said it seeks a bomb and that it would have no problem with using it. And we know that there is unsecured nuclear material across the globe. To protect our people, we must act with a sense of purpose without delay.

So today I am announcing a new international effort to secure all

vulnerable nuclear material around the world within four years. We will set new standards, expand our cooperation with Russia, pursue new partnerships to lock down these sensitive materials.

We must also build on our efforts to break up black markets, detect and intercept materials in transit, and use financial tools to disrupt this dangerous trade. Because this threat will be lasting, we should come together to turn efforts such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism into durable international institutions. And we should start by having a Global Summit on Nuclear Security that the United States will host within the next year.

Now, I know that there are some who will question whether we can act on such a broad agenda. There are those who doubt whether true international cooperation is possible, given inevitable differences among nations. And there are those who hear talk of a world without nuclear weapons and doubt whether it's worth setting a goal that seems impossible to achieve.

But make no mistake: We know where that road leads. When nations and peoples allow themselves to be defined by their differences, the gulf between them widens. When we fail to pursue peace, then it stays forever beyond our grasp. We know the path when we choose fear over hope. To denounce or shrug off a call for cooperation is an easy but also a cowardly thing to do. That's how wars begin. That's where human progress ends.

There is violence and injustice in our world that must be confronted. We must confront it not by splitting apart but by standing together as free nations, as free people. I know that a call to arms can stir the souls of men and women more than a call to lay them down. But that is why the voices for peace and progress must be raised together.

[Eds...]

Presidential Statement from Barack Obama to the 2009 Carnegie International Nonproliferation Conference

[6 April 2009]

It is a pleasure to send my greetings to the 2009 Carnegie International Nonproliferation Conference.

As I said in Prague, the future of nuclear weapons in the 21st century is fundamental to the peace and security of the world. The spread of nuclear weapons -- and the prospect of nuclear terrorism -- has increased the danger to our people and to the global nonproliferation regime. We have a security and moral responsibility to act. That is why this is a top priority for my Administration and why your work at this conference is so important to our collective effort.

The United States is ready to lead an effort to secure our people and strengthen the global nonproliferation regime. I have stated clearly our commitment to a world without nuclear weapons. Now we are prepared to take several steps to pursue it.

The United States and Russia have agreed to work together to negotiate a follow-on agreement to the START nuclear reduction treaty by the end of this year.

We will pursue ratification of the Comprehensive Test Ban Treaty as soon as possible while maintaining a safe, secure, and reliable nuclear capability to deter our adversaries and reassure our allies.

We will seek a new treaty that verifiably ends the production of fissile materials intended for use in nuclear weapons.

We must also reinvigorate global efforts to prevent proliferation by enhancing the international inspection system, strengthening export controls, and putting in place real and immediate consequences for countries caught breaking the rules or trying to leave the Treaty without cause.

We need a new paradigm for civil nuclear cooperation that allows all countries to enjoy the benefits of nuclear power while avoiding the spread of nuclear weapons and technologies. To that end, we support the international fuel bank and other constructive international initiatives.

We must address the most immediate and extreme threat to our

security by ensuring that terrorists never acquire a weapon. To that end, we will pursue a new effort to secure all vulnerable materials around the world within 4 years.

In short, we will use all of America's political, diplomatic, intellectual, and moral capacity to seek a new chapter in our nonproliferation efforts. This work will not be easy. It will take the cooperation of nations, and the support of groups like those who are gathered at this Conference. There is no higher calling than leaving the world a safer and more peaceful place for our children. That is the work that we have begun.

I look forward to hearing the results of your important deliberations, and I thank you for your continued efforts to promote global peace and security.

**Unclassified Report to Congress on the
Acquisition of Technology Relating to Weapons
of Mass Destruction and Advanced
Conventional Munitions, Covering 1 January to
31 December 2008**

[7 May 2009]

[Eds...]

Iran

Nuclear

We assess that Iran had been working to develop nuclear weapons through at least fall 2003, but that in fall 2003 Iran halted its nuclear weapons design and weaponization activities, and its covert uranium conversion- and enrichment-related activities. We judge that the halt lasted at least several years, and that Tehran had not resumed these activities as of at least mid-2007. We do not know whether Iran currently intends to develop nuclear weapons, although we assess Tehran at a minimum is keeping open the option to develop nuclear weapons by continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons, if a decision is made to do so.

During the reporting period, Iran continued to expand its nuclear infrastructure and continued uranium enrichment and activities related to its heavy water research reactor, despite multiple United Nations Security Council Resolutions since late 2006 calling for the suspension of those activities.

- In 2008, Iran continued to make progress enriching uranium at the underground cascade halls at Natanz with first-generation centrifuges, and in testing and operating second-generation centrifuges at the pilot plant there.
- In November 2008, Iran announced it had about 5,000 centrifuges operating at Natanz. The International Atomic Energy Agency (IAEA) reported that between mid-December 2007 and November 2008, Iran fed about 8,080 kilograms of uranium feed gas into its cascades, and produced about 555 kilograms of low enriched uranium (LEU) gas (uranium hexafluoride) at an enrichment level appropriate for reactor fuel, a significant improvement from the 75 kilograms of LEU gas it had produced in 2007.
- Iran has also fed small amounts of uranium feed gas to its second generation centrifuges—the IR-2, since January 2008, and the IR-3, since April 2008.
- Iran in January 2008 received the final delivery of the initial batch of uranium fuel purchased from Russia required to operate the nuclear reactor at Bushehr. Delays in the project pushed the reactor's startup time into 2009.
- Iran in 2008 continued construction of the reactor buildings at the IR-40 Heavy Water Research Reactor, including installing a dome on the reactor containment building by mid-November.
- The IAEA in 2008 continued to investigate the "alleged studies" documentation—information indicating Iran conducted military-led, covert uranium conversion and nuclear weaponization work prior to 2003. According to the November 2008 Director General's Report to the Board of Governors, the "alleged studies" issue remains unresolved and the IAEA continues to call on Iran to provide further clarification.

[Eds...]

North Korea

Nuclear

In February 2007, North Korea agreed as part of the Six-Party Talks to "shut down and seal for the purposes of eventual abandonment the Yongbyon nuclear facility, including the reprocessing facility" as part of the Initial Actions for the Implementation of the Joint Statement of September 2005. In mid-July 2007, North Korean officials shut down the Yongbyon 5-megawatt electric (MWe) nuclear reactor, and placed the Yongbyon spent-fuel reprocessing facility, the Yongbyon nuclear fuel fabrication plant, and two unfinished nuclear reactors under IAEA seals, monitoring, and verification. In return, the other five Parties agreed to cooperate in economic, energy, and humanitarian assistance to the DPRK, including the provision of assistance up to the equivalent of 1 million tons of heavy fuel oil during the period of Initial Actions and the next phase.

In the Second-Phase Actions Agreement, signed October 3, 2007, Pyongyang committed to disable the 5MWe reactor, the reprocessing facility, and the fuel fabrication plant by December 31, 2007 in exchange for a U.S. commitment to begin the process of removing the designation of the DPRK as a state sponsor of terrorism and to advance the processing of terminating the application of the Trading with the Enemy Act, in parallel with the DPRK's Second Phase actions. In November 2007, a team of US Department of Energy officials began overseeing disablement activities at Yongbyon, and unloading of reactor fuel rods continued through 2008.

North Korea provided China, the chair of the Six-Party Talks, with a nuclear declaration in June 2008, six months after the December 31, 2007 deadline. The North also demolished the cooling tower for its 5-MWe reactor at Yongbyon in June.

In late August 2008, however, North Korea announced that it had halted disablement activities at Yongbyon and threatened to restore its facilities there in response to what it maintained was a US delay in removing Pyongyang from the State Sponsors of Terrorism List. The US removed North Korea from the List in October 2008, and the North subsequently resumed disablement.

Although North Korea has halted and disabled portions of its plutonium production program, we continue to assess North Korea has pursued a uranium enrichment capability at least in the past. Some in the IC have increasing concerns that North Korea has an ongoing covert uranium enrichment program.

Syria

Nuclear

Syria—despite being a Nuclear Non-Proliferation Treaty Party with full-scope IAEA safeguards—was engaged for more than a decade in a covert nuclear program with North Korean assistance. The program involved construction of a nuclear reactor at Al Kibar without informing the IAEA and while taking measures to preserve the site's secrecy. We assess the reactor would have been capable of producing plutonium for nuclear weapons. The reactor was destroyed in September 2007, before it became operational, and Syria went to great lengths to try to eradicate evidence of its existence. The covert nature of the program, the characteristics of the reactor, and Syria's extreme efforts to deny and destroy evidence of the reactor after its destruction are inconsistent with peaceful nuclear applications.

[Eds...]

IAEA inspectors visited Syria between 22 and 24 June 2008 and took environmental samples at the Al Kibar site. The IAEA reported to the November 2008 Board of Governors that analysis of the Al Kibar environmental samples revealed a significant number of chemically processed natural uranium particles. The report also noted the Agency's assessment that the features of the Al Kibar building were similar to what may be found in connection with a reactor site, but stated that the IAEA could not exclude the possibility that the building was intended for non-nuclear use. The IAEA is continuing its investigation of Syria's nuclear file.

[Eds...]

L'Aquila Statement on Non-Proliferation

[8 July 2009]

1. We recognize, as we did at Hokkaido Toyako and at previous Summits, that the proliferation of WMDs and their means of delivery continues to represent a global challenge and a major threat to international security. We are determined to seize current opportunities and the new momentum to strengthen our common non-proliferation and disarmament goals through effective multilateralism and determined national efforts. All States must meet in full their arms control, disarmament, and non-proliferation commitments under relevant international treaties and multilateral arrangements. The universalization and reinforcement of the non-proliferation regime remains an urgent priority. We call upon all States still not party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Chemical Weapons Convention (CWC) and the Biological and Toxin Weapons Convention (BTWC) to accede without delay.

2. We underscore that the NPT remains the cornerstone of the nuclear non-proliferation regime and the essential foundation for the pursuit of nuclear disarmament, and reiterate our full commitment to the objectives and obligations of its three pillars: non-proliferation, the peaceful uses of nuclear energy and disarmament. We will work together so that the 2010 NPT Review Conference can successfully strengthen the Treaty's regime and set realistic and achievable goals in all the Treaty's three pillars. We call upon all States Parties to the NPT to contribute to the review process with a constructive and balanced approach.

3. Safeguards are an essential tool for the effective implementation of the NPT and its non-proliferation objectives. We confirm our full support for

the IAEA and are committed to continuing our efforts towards the universal acceptance of the IAEA Comprehensive Safeguards Agreement and the Additional Protocol as the verification standard. We will also work to establish the Additional Protocol as an essential standard in the field of nuclear supply arrangements. We call upon all States that have not yet adopted an Additional Protocol to do so without delay while implementing its provisions pending ratification. We seek to ensure that the IAEA continues to have the technology, expertise, authority and resources needed to fulfil its vital, statutory responsibilities. We also agree that measures are needed to address non-compliance, to include real and immediate consequences for States that withdraw from the NPT while in violation of it, including appropriate action by the UN Security Council, and full use of IAEA inspection authorities that provide for access to all relevant locations, information and people.

4. We welcome the announcement made by the President of the United States of America that he has decided to seek ratification of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) and we will intensify our efforts towards the early entry into force and universalisation of the CTBT as one of the principal instruments of the international security architecture and a key measure of non-proliferation and disarmament. Meanwhile, we urge all States concerned to observe a moratorium on nuclear weapon test explosions or any other nuclear explosions.

5. We welcome the adoption by the Conference on Disarmament of a program of work for its 2009 session. We strongly support the early commencement of international negotiations on a Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (FMCT) including verification provisions, and call upon all States concerned to declare and uphold a moratorium on the production of such material. We welcome the fact that the nuclear-weapon States among the G8 members have already decreed such a moratorium. We will take action to resume substantive work in the CD as soon as possible.

6. We are all committed 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. We welcome the nuclear disarmament measures implemented thus far by the nuclear-weapon States among G8 members.

We welcome the Joint Statement by the President of the Russian Federation and the President of the United States of America of 1 April 2009, their Joint Understanding signed on 6 July 2009, and

their intention to conclude a legally binding agreement to replace the START Treaty before it expires in December 2009. We call upon all States to undertake further steps in nuclear disarmament and to greater transparency.

7. We reaffirm the inalienable right of all NPT Parties to the peaceful uses of nuclear energy, in conformity with all their Treaty obligations; compliance and effective verification will not hinder the use of nuclear energy, but rather facilitate its safe and secure development and deployment as energy source. We are committed to promoting nuclear non-proliferation, safeguards, safety and security in cooperation with the IAEA and welcome new initiatives in emerging nuclear energy countries on nuclear education and training as well as institutional capacity building in these fields. We encourage the work of the IAEA on multilateral approaches to the nuclear fuel cycle, including assurances of nuclear fuel supply, as effective means of addressing the expanded need for nuclear fuel services, while taking into account the global interest in minimizing the risk of proliferation.

In this regard, we appreciate the ongoing work at the Russian-led International Uranium Enrichment Centre at Angarsk and welcome progress made towards establishing a Nuclear Fuel Bank administered by the IAEA, Russia's proposal to guarantee supply of low enriched uranium and the further development of Germany's Multilateral Enrichment Sanctuary Project. We also take note of other initiatives, including Japan's proposal for an IAEA Standby Arrangement System for the Assurance of Nuclear Fuel Supply, the UK's proposal for a political assurance of non-interference in the delivery of commercial nuclear contracts and the U.S. nuclear fuel reserve generated from material from its national security stocks.

8. To reduce the proliferation risks associated with the spread of enrichment and reprocessing facilities, equipment and technology, we welcome the progress that continues to be made by the Nuclear Suppliers Group (NSG) on mechanisms to strengthen controls on transfers of such enrichment and reprocessing items and technology. While noting that the NSG has not yet reached consensus on this issue, we agree that the NSG discussions have yielded useful and constructive proposals contained in the NSG's "clean text" developed at the 20 November 2008 Consultative Group meeting.

Pending completion of work in the NSG, we agree to implement this text on a national basis in the next year. We urge the NSG to accelerate its work and swiftly reach consensus this year to allow for global implementation of a strengthened mechanism on transfers of enrichment and reprocessing facilities, equipment, and technology.

9. We acknowledge the UN Security Council's key role in addressing the challenges of proliferation and the consequences of non compliance. We call upon all States to fully implement UNSC Resolution 1540 on preventing non-State actors from obtaining WMDs, their means of delivery and related materials. We support the 1540 Committee's fulfilment of its renewed mandate. We encourage all States to participate actively in the comprehensive review of the status of implementation of the Resolution and contribute to its success.

10. We welcome the ongoing progress under the CWC and BTWC and highlight the vital importance of the full and effective implementation of both Conventions.

11. We reiterate our unanimous commitment to working for a comprehensive, peaceful and diplomatic solution to the Iranian nuclear issue and strongly support ongoing efforts to resolve it through negotiations. We urge Iran to use the present window of opportunity for engagement with the international community in a spirit of mutual respect and to respond positively to the offers advanced, in order to find a negotiated solution which will address Iran's interest as well as the international community concerns. While recognizing once again that Iran has the right to a civilian nuclear program under the NPT, we stress that Iran has the responsibility, as reiterated by UNSC Resolutions, to restore confidence in the exclusively peaceful nature of its nuclear activities, allowing for the establishment of a fruitful and wide-ranging cooperation with the G8 and other countries.

The proliferation risks posed by Iran's nuclear program continue to

be a matter of serious concern. We urge Iran to comply with the relevant UNSC Resolutions and to fully cooperate with the IAEA by providing the Agency such access and information that it requests to resolve the issues raised in the IAEA Director General's Reports.

12. We condemn in the strongest terms the nuclear test conducted by the Democratic People's Republic of Korea (DPRK) on 25 May 2009 which

constitutes a flagrant violation of the relevant UN Security Council Resolutions. Such a test undermines peace and stability in the region and beyond. In this regard, we welcome the UN Security Council Resolution 1874 of 12 June 2009 which represents the clear and strong will of the international community. We also condemn the April 2009 ballistic launch conducted by the DPRK which is in contravention of UNSCR 1718. We continue to urge the DPRK to abide by UNSCRs 1695, 1718 and 1874, not to conduct any further nuclear test or any launch using ballistic missile technology and to abandon all nuclear weapons and existing nuclear programs, as well as ballistic missile programs, in a complete, verifiable and irreversible manner. We demand the DPRK to return to full compliance with the NPT and IAEA safeguards obligations. We call upon the DPRK to return immediately and without preconditions to the Six-Party Talks and reiterate our strong support for the early resumption of the Talks and the full implementation of the 19 September 2005 Joint Statement, including the resolution of all the outstanding issues of concern.

13. The threat of terrorist acquiring WMDs continues to be cause for deep concern. We are determined to continue working together to ensure that terrorists never have access to those weapons and related materials. We look forward to the development of the initiative announced by the President of the United States of America regarding a new international effort to secure all vulnerable nuclear material around the world. We will further promote the Global Initiative to Combat Nuclear Terrorism (GICNT), which plays an important role in developing its participants' capacity to confront this global threat on a determined and systematic basis, consistent with national legal authorities and obligations under relevant international legal frameworks.

14. We maintain our support for the Proliferation Security Initiative (PSI), which plays an important part in preventing and countering proliferation of WMD, their delivery systems and related materials. We recognize the progress in combating the financing of proliferation activities, and the role of the Financial Action Task Force (FATF).

15. We will continue to uphold the importance of the Hague Code of Conduct against Ballistic Missile Proliferation (HCoC), by promoting its universalization and full implementation. In this respect, we are encouraged by the positive developments announced at the 2009 HCoC annual meeting, and are confident that all subscribing States will soon fully implement their commitments. We call upon all States that have not subscribed to the Code to do so without delay.

16. The Global Partnership against the Spread of Weapons and Materials of Mass Destruction launched in 2002 at Kananaskis has become a successful large-scale initiative for the enhancement of international security. In parallel with the implementation of ongoing priority projects in Russia and Ukraine, to which we fully reconfirm our commitments, we are discussing the options for the Partnership's further expansion by engaging potential new participants, including CIS countries, committed to the Kananaskis Principles and Guidelines.

The G8 is also ready to include new fields of cooperation in areas where the risks of terrorism and proliferation are greatest. To prevent global WMD knowledge proliferation, particularly through collaboration with scientists, we welcome the Recommendations for a coordinated approach in this field.

17. Regarding nuclear safety, we acknowledge the progress made since the last Summit meeting in ongoing projects at the Chernobyl site and, while noting that additional financial resources will be needed for their completion, we reassert our commitment to undertake joint efforts with Ukraine to convert the site into a stable and environmentally safe condition..

The Road to 2010: Addressing the Nuclear Question in the 21st Century

[UK Cabinet Office Cm7675 July 2009]

[Editorial note: Footnotes not included]

Executive Summary

The Strategic Context

1.1 Nuclear power is a proven technology which generates low carbon electricity. It is affordable, dependable, safe, and capable of increasing diversity of energy supply.

1.2 Nuclear power is therefore an essential part of any global solution to the related and serious challenges of climate change and energy security. Combating climate change, the single greatest threat to humanity this century, requires a much greater role for low carbon fuels in the global energy supply than before. Rising global energy demand, which is forecast to increase by more than 40 per cent by 2030, means that secure, sustainable energy supplies will be key to global security and prosperity in the century ahead. Nuclear energy is therefore vital to the challenges of sustaining global growth, and tackling poverty.

1.3 That is why the United Kingdom Government believes not only that there is a recognised right for all sovereign states to the peaceful use of nuclear power, but that it is necessary to expand access to civil nuclear energy.

1.4 The issue of nuclear power cannot, however, be looked at in isolation from the hostile use of nuclear technology: nuclear weapons. In expanding the use of nuclear power in the twenty first century we must not enhance the risk of further proliferation of nuclear weapons. We must not allow the spectre of nuclear war, the greatest security threat for much of the second half of the twentieth century, to re-emerge.

1.5 Therefore we must ensure that the first pillar of the Nuclear Non-Proliferation Treaty (NPT) framework – preventing further proliferation, is strengthened. We must also ensure that terrorists groups, some of whom have the intent to acquire and use nuclear devices, do not acquire that capability. This requires a much stronger emphasis not just on preventing further proliferation of weapons and nuclear weapons technology, but also on securing existing stocks of fissile material and denying access to relevant expertise.

1.6 But the challenge of our age is not just about preventing further proliferation, either to other countries or non-state terrorist organisations. The issue of nuclear disarmament must be addressed. Nuclear weapon states, including the UK, have a duty to work to create the conditions where further reductions in levels of nuclear weapons can take place.

1.7 The UK has taken significant steps towards disarmament by reducing the explosive power of its nuclear arsenal by three quarters since the end of the Cold War and maintaining a minimum strategic deterrent based on no more than 160 operationally available warheads. The UK Government remains committed to the principle of irreversibility in these reductions.

1.8 The UK's policy on its nuclear deterrent was set out in the 2006 White Paper 'The Future of the UK's Nuclear Deterrent'. Given the certainty that a number of countries will retain substantial nuclear arsenals for the foreseeable future and the continuing risk of further nuclear proliferation, it is premature to judge that a nuclear threat to UK national security will not arise in the future, and the Government therefore judges that our minimum deterrent remains a necessary element of our national security, as well as forming part of NATO's collective security.

1.9 Ultimately, we need to work to create the conditions for a world free of nuclear weapons. This means we must together renew and re-invigorate the global 'grand bargain' at the heart of the NPT. For non-weapon states, it is about continuing to forego nuclear weapons, whilst realising, if they wish, access to nuclear power. For nuclear weapon states, it involves tough responsibilities to show leadership on the question of disarmament, and to assist in framing a global solution that allows wider access to nuclear power.

1.10 The nuclear question we must address is how we ensure expanded access to nuclear power without risking further proliferation of nuclear weapons. Linked to this is how we move forward on global disarmament in respect of existing nuclear weapons.

The May 2010 Non-Proliferation Treaty Review Conference.

1.11 The run up to the 2010 NPT Review Conference represents a historic window of opportunity to recognise the global commitment to deliver on the three pillars of that treaty:

- preventing further proliferation of nuclear weapons;
- nuclear disarmament; and
- ensuring access to nuclear power.

1.12 The NPT, which has 189 signature states, including the UK, was last reviewed in 2005. That review conference was not as productive as we had hoped. It is essential that the next conference delivers renewed movement across this critical agenda. This paper sets out the UK's approach to this vital conference, and beyond, and describes a vision of how we can create the world envisaged by those who drafted the NPT in 1968.

1.13 The UK has shown global leadership across the three pillars of the NPT and has generated significant momentum leading up to the NPT Review Conference, notably through the Prime Minister's speech in March 2009. A successful Review Conference will build on this momentum and agree a clear way forward for each of the three pillars. But the process leading up to the conference, the conference itself, and concerted effort beyond it can also address fundamental questions such as how the UK can make international oversight and enforcement of the grand global bargain most effective, and how we can make nuclear security a fourth 'pillar' of the international framework.

The United Kingdom's approach

1.14 The UK believes these complex, long-term and fundamental issues require a comprehensive and multilateral approach across four key areas:

- **civil nuclear power:** to build confidence in the safe expansion of civil nuclear power, the UK itself needs to demonstrate that, as a long established nuclear energy producer and consumer, we can act as an exemplar in managing our nuclear fuel cycle. The UK and others can also take the lead in promoting proliferation resistant nuclear technology to enable the safe expansion of civil nuclear power globally;
- **security of nuclear material:** the UK believes that greater assurance is required to secure fissile material against the risks from nuclear terrorism. We believe more work, coordinated globally, is required to address these challenges and secure international consensus for making nuclear security the fourth pillar of the multilateral nuclear framework;
- **non-proliferation and disarmament:** the UK sees the threat from the proliferation of nuclear weapons as a potentially major driver of global instability. Whilst some proliferation has taken place since the NPT was signed, this has not been as great as some feared. We need to take urgent action to address current nuclear proliferation concerns and establish a global framework to prevent further proliferation. The UK is striving for a safer world free of nuclear weapons. This is a long path, requiring us to create the conditions that will allow countries to feel secure without nuclear weapons and establish mechanisms to prevent their re-emergence. But that is all the more reason for pushing ahead. All states have a responsibility established in the NPT to work together for this aim. Much has been achieved, but more effort is required to map out and deliver a route map to that objective; and
- **international governance:** if a revitalised framework covering these pillars is to be effective, it will require new rules, and, in particular, a strengthened International Atomic Energy Agency to monitor and help enforce their implementation.

1.15 The Road to 2010 Plan sets out the UK's vision for progress in each area, what has been achieved to date, what more can be done, and the key next steps.

Civil nuclear power in the United Kingdom and worldwide

1.16 The Government's 2008 White Paper on nuclear power set

out the extensive action the Government is taking to facilitate investment in civil nuclear power in the UK, and plans have now been announced to build over 12 Gigawatts (GW) of new nuclear capacity. To address the legacy of half a century of nuclear power, the UK Government has also set up the Nuclear Decommissioning Authority. In the Road to 2010 the Government also lays out its approach to handling the relatively small amount of waste generated by the UK's defence nuclear programmes.

1.17 Alongside the Road to 2010, the Government is publishing a discussion document setting out the relevant factors when judging the options for long-term management of stocks of separated plutonium, such as long-term geological disposal, or reuse. A second discussion document later this summer will set out the process for final decisions.

1.18 The Government will also strongly support work to further develop **proliferation resistant nuclear technology** that will improve international access to the peaceful use of nuclear energy. To this end, the Government will **establish a Nuclear Centre of Excellence** to enable the UK to be at the forefront of international efforts to prevent nuclear proliferation and reduce the costs, environmental-impact and carbon-footprint of civil nuclear power. This centre will have initial funding of £20 million over the first five years, with the development of the best structure and model for the centre to be discussed in detail with academic, industry and potential international partners. The UK will seek the widest possible international collaboration to take forward this work.

Nuclear security

1.19 The global spread of nuclear power and advances in nuclear technology mean that nuclear security is a vital fourth pillar of any strengthened nuclear regime. We need to act now to prevent terrorist groups gaining access to nuclear devices. If we do not act now these threats will grow as the use of nuclear power expands globally.

1.20 This requires concerted international action, in which the UK will play a leading role. To this end we have agreed with France to strengthen our joint work on reducing the threat of nuclear terrorism. We strongly support the initiative of the United States Government in proposing an international conference on nuclear security.

1.21 In advance of this, as part of the Road to 2010 process:

- the UK is extending an offer of assistance to any country that wants it to help secure stocks of vulnerable nuclear material, building on our long experience as a nuclear nation;
- the Government has also laid before Parliament the necessary motion for UK ratification of the Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) and will work over the coming months with countries that have not yet ratified to persuade them to do so; and,
- the Government has also allocated an additional £3 million next year in support of the UK Atomic Weapons Establishment's world leading nuclear forensics work.

Non-proliferation and Disarmament

1.22 Since the NPT was signed in 1968, progress has been mixed across the non-proliferation and disarmament pillars. There has been some proliferation of nuclear weapons: India and Pakistan have both tested and developed significant nuclear weapons capabilities; Israel is widely assumed to possess nuclear weapons; North Korea has announced two nuclear tests; and other states, most notably Iran, continue to seek nuclear weapons capabilities. However, today the number of countries with nuclear weapons is in single digits and global holdings of nuclear weapons are at their lowest since the 1950s. South Africa and Libya have ended weapons programmes; Belarus, Kazakhstan and Ukraine returned nuclear weapons inherited from the former Soviet Union; and the US, Russia, France and the UK have all made significant reductions in their capabilities. That said, with the NPT under unprecedented pressure, we need to respond purposefully and with determination to the challenges of the new century.

1.23 The international community must unite to take strong steps to prevent nuclear proliferation. We must work purposefully towards the universality of the NPT and take robust action against those

states, like Iran and North Korea, which seek to develop nuclear weapons.

1.24 The Government is committed to working with international partners to create the conditions that would give all countries that possess nuclear weapons the confidence to take further, bolder steps consistent with their commitments under Article VI of the NPT and, ultimately, achieving a world free of nuclear weapons. The Road to 2010 sets out a three stage process to enable further progress. This involves:

- **transparency and control:** those steps that must be taken to reduce and prevent any further expansion of global nuclear weapon capabilities and to enhance transparency of existing and future capabilities;
- **arms reductions:** highlighting and addressing the challenges and mechanisms through which further verifiable multilateral disarmament can occur; and,
- **steps to zero:** establishing the security conditions and overcoming the technical challenges associated with taking the final steps to a world free of nuclear weapons, including how they can be safely withdrawn and dismantled.

1.25 Each of these strands involves complex challenges. This paper addresses the key difficulties and the progress required. Some of the main elements include:

- **dealing with states of concern:** working with the international community to ensure that Iran and North Korea comply with their obligations;
- **the challenges of verifiable disarmament:** these apply not just to the five nuclear weapon states recognised in the NPT (US, Russia, China, France and the UK), but also countries that have developed nuclear capabilities and remain outside the NPT regime. This involves significant scientific and technical challenges;
- **continued strengthening of multilateral agreements:** this includes how, working with the US and others, we plan to increase momentum for ensuring entry into force of the Comprehensive Test Ban Treaty, making further progress on a Fissile Material Cut-Off Treaty, and tackling proliferation through financial sanctions and export controls; and,
- **building shared security confidence:** working with international partners to remove underlying causes of insecurity in key regions, notably the Middle East and South Asia, to allow those nuclear armed states outside the NPT to gain, over the long term, the confidence to disarm.

International Governance

1.26 Renewing the grand global bargain requires renewed and strengthened international governance, to ensure the most effective global nuclear framework. The International Atomic Energy Agency (IAEA), the main international institution charged with delivering a safe, secure and proliferation free nuclear future, itself acknowledges that it needs to reform if it is to be in a position to carry out its remit more effectively and to tackle credibly challenges in the vital area of nuclear security.

1.27 The UK has long been a committed member of the IAEA. We are the fourth largest contributor to its budget and make significant voluntary contributions to its Technical Cooperation Fund and Nuclear Security Fund.

1.28 To take this further in the short term, the UK will:

- work with the incoming Director General and international partners to develop robust plans for organisational reform of the Agency; and
- host a meeting of the main financial donors to the IAEA (the so-called 'Geneva Group') to discuss future funding and staffing issues.

1.29 In the medium and longer term, the Road to 2010 plan presents specific points for agreement at the NPT Review Conference which will help develop more fully the key role the IAEA needs to play in fissile material security, and how nuclear energy can assist in delivering sustainable energy development as part of the internationally agreed Millennium Development Goals

for international poverty.

The Road to 2010 and beyond

1.30 The Road to 2010 plan offers a realistic and achievable programme across the entire nuclear agenda. Next year's NPT Review Conference is a major opportunity, and so between now and then the Government will help lead international efforts to secure the necessary consensus for reform. As well as hosting a conference of the recognised nuclear weapon states on confidence-building measures towards disarmament and convening the main donors of the IAEA, we will also play a full part in the US-hosted conference on nuclear security and press for greater action in tackling nuclear security challenges. This is consistent with our overall view that the international community must recognise nuclear security as a fourth pillar of the global nuclear framework.

1.31 It is equally vital that, beyond the NPT Review Conference, there is sustained momentum in facing up to the nuclear challenges of the modern age. The UK is committed to a sustained long-term effort and will use its experience as a nuclear nation, and our scientific expertise – notably through the new Nuclear Centre of Excellence – to make progress on safe, proliferation resistant nuclear technology and techniques. We will also continue to work with our international partners to build the improved global security and create the conditions required for a world free of nuclear weapons.

UN Resolution 1887 (2009)

[S/RES/1887 24 September 2009]

Adopted by the Security Council at its 6191st meeting, on 24 September

The Security Council,

Resolving to seek a safer world for all and to create the conditions for a world without nuclear weapons, in accordance with the goals of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), in a way that promotes international stability, and based on the principle of undiminished security for all,

Reaffirming 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 above Statement (S/23500) 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,

Reaffirming that proliferation of weapons of mass destruction, and their means of delivery, constitutes a threat to international peace and security,

Bearing in mind the responsibilities of other organs of the United Nations and relevant international organizations in the field of disarmament, arms control and non-proliferation, as well as the Conference on Disarmament, and supporting them to continue to play their due roles,

Underlining that the NPT remains the cornerstone of the nuclear non-proliferation regime and the essential foundation for the pursuit of nuclear disarmament and for the peaceful uses of nuclear energy,

Reaffirming its firm commitment to the NPT and its conviction that the international nuclear non-proliferation regime should be maintained and strengthened to ensure its effective implementation, and *recalling* in this regard the outcomes of past NPT Review Conferences, including the 1995 and 2000 final documents,

Calling for further progress on all aspects of disarmament to enhance global security,

Recalling the Statement by its President adopted at the Council's meeting held on 19 November 2008 (S/PRST/2008/43),

Welcoming the decisions of those non-nuclear-weapon States that

have dismantled their nuclear weapons programs or renounced the possession of nuclear weapons,

Welcoming the nuclear arms reduction and disarmament efforts undertaken and accomplished by nuclear-weapon States, and *underlining* the need to pursue further efforts in the sphere of nuclear disarmament, in accordance with Article VI of the NPT,

Welcoming in this connection the decision of the Russian Federation and the United States of America to conduct negotiations to conclude a new comprehensive legally binding agreement to replace the Treaty on the Reduction and Limitation of Strategic Offensive Arms, which expires in December 2009,

Welcoming and *supporting* the steps taken to conclude nuclear-weapon-free zone treaties and *reaffirming* 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, and in accordance with the 1999 United Nations Disarmament Commission guidelines, enhances global and regional peace and security, strengthens the nuclear non-proliferation regime, and contributes toward realizing the objectives of nuclear disarmament,

Noting its support, in this context, for the convening of the Second Conference of States Parties and signatories of the Treaties that establish Nuclear-Weapon-Free Zones to be held in New York on 30 April 2010,

Reaffirming its resolutions 825 (1993), 1695 (2006), 1718 (2006), and 1874 (2009),

Reaffirming its resolutions 1696 (2006), 1737 (2006), 1747 (2007), 1803 (2008), and 1835 (2008),

Reaffirming all other relevant non-proliferation resolutions adopted by the Security Council,

Gravely concerned about the threat of nuclear terrorism, and *recognizing* the need for all States to take effective measures to prevent nuclear material or technical assistance becoming available to terrorists,

Noting with interest the initiative to convene, in coordination with the International Atomic Energy Agency (IAEA), an international conference on the peaceful uses of nuclear energy,

Expressing its support for the convening of the 2010 Global Summit on Nuclear Security,

Affirming its support for the Convention on the Physical Protection of Nuclear Material and its 2005 Amendment, and the Convention for the Suppression of Acts of Nuclear Terrorism,

Recognizing the progress made by the Global Initiative to Combat Nuclear Terrorism, and the G-8 Global Partnership,

Noting the contribution of civil society in promoting all the objectives of the NPT,

Reaffirming its resolution 1540 (2004) and the necessity for all States to implement fully the measures contained therein, and *calling upon* all Member States and international and regional organizations to cooperate actively with the Committee established pursuant to that resolution, including in the course of the comprehensive review as called for in resolution 1810 (2008),

1. *Emphasizes* that a situation of non-compliance with non-proliferation obligations shall be brought to the attention of the Security Council, which will determine if that situation constitutes a threat to international peace and security, and *emphasizes* the Security Council's primary responsibility in addressing such threats;

2. *Calls upon* States Parties to the NPT to comply fully with all their obligations and fulfil their commitments under the Treaty,

3. *Notes* that enjoyment of the benefits of the NPT by a State Party can be assured only by its compliance with the obligations thereunder;

4. *Calls upon* all States that are not Parties to the NPT to accede to the Treaty as non-nuclear-weapon States so as to achieve its universality at an early date, and pending their accession to the Treaty, to adhere to its terms;

5. *Calls upon* the Parties to the NPT, pursuant to Article VI of the Treaty, to undertake to pursue negotiations in good faith on

effective measures relating to nuclear arms reduction and disarmament, and on a Treaty on general and complete disarmament under strict and effective international control, and *calls on* all other States to join in this endeavour;

6. *Calls upon* all States Parties to the NPT to cooperate so that the 2010 NPT Review Conference can successfully strengthen the Treaty and set realistic and achievable goals in all the Treaty's three pillars: non-proliferation, the peaceful uses of nuclear energy, and disarmament;

7. *Calls upon* all States to refrain from conducting a nuclear test explosion and to sign and ratify the Comprehensive Nuclear Test Ban Treaty (CTBT), thereby bringing the treaty into force at an early date;

8. *Calls upon* the Conference on Disarmament to negotiate a Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices as soon as possible, *welcomes* the Conference on Disarmament's adoption by consensus of its Program of Work in 2009, and *requests* all Member States to cooperate in guiding the Conference to an early commencement of substantive work;

9. *Recalls* the statements by each of the five nuclear-weapon States, noted by resolution 984 (1995), in which they give security assurances against the use of nuclear weapons to non-nuclear-weapon State Parties to the NPT, and *affirms* that such security assurances strengthen the nuclear non-proliferation regime;

10. *Expresses* particular concern at the current major challenges to the non-proliferation regime that the Security Council has acted upon, *demands* that the parties concerned comply fully with their obligations under the relevant Security Council resolutions, and *reaffirms* its call upon them to find an early negotiated solution to these issues;

11. *Encourages* efforts to ensure development of peaceful uses of nuclear energy by countries seeking to maintain or develop their capacities in this field in a framework that reduces proliferation risk and adheres to the highest international standards for safeguards, security, and safety;

12. *Underlines* that the NPT recognizes in Article IV the inalienable right of 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, and *recalls* in this context Article III of the NPT and Article II of the IAEA Statute;

13. *Calls upon* States to adopt stricter national controls for the export of sensitive goods and technologies of the nuclear fuel cycle;

14. *Encourages* the work of the IAEA on multilateral approaches to the nuclear fuel cycle, including assurances of nuclear fuel supply and related measures, as effective means of addressing the expanding need for nuclear fuel and nuclear fuel services and minimizing the risk of proliferation, and *urges* the IAEA Board of Governors to agree upon measures to this end as soon as possible;

15. *Affirms* that effective IAEA safeguards are essential to prevent nuclear proliferation and to facilitate cooperation in the field of peaceful uses of nuclear energy, and in that regard:

a. *Calls upon* all non-nuclear-weapon States party to the NPT that have yet to bring into force a comprehensive safeguards agreement or a modified small quantities protocol to do so immediately,

b. *Calls upon* all States to sign, ratify and implement an additional protocol, which together with comprehensive safeguards agreements constitute essential elements of the IAEA safeguards system,

c. *Stresses* the importance for all Member States to ensure that the IAEA continue to have all the necessary resources and authority to verify the declared use of nuclear materials and facilities and the absence of undeclared activities, and for the IAEA to report to the Council accordingly as appropriate;

16. *Encourages* States to provide the IAEA with the cooperation necessary for it to verify whether a state is in compliance with its safeguards obligations, and *affirms* the Security Council's resolve

to support the IAEA's efforts to that end, consistent with its authorities under the Charter;

17. *Undertakes* to address without delay any State's notice of withdrawal from the NPT, including the events described in the statement provided by the State pursuant to Article X of the Treaty, while noting ongoing discussions in the course of the NPT review on identifying modalities under which NPT States Parties could collectively respond to notification of withdrawal, and *affirms* that a State remains responsible under international law for violations of the NPT committed prior to its withdrawal;

18. *Encourages* States to require as a condition of nuclear exports that the recipient State agree that, in the event that it should terminate, withdraw from, or be found by the IAEA Board of Governors to be in non-compliance with its IAEA safeguards agreement, the supplier state would have a right to require the return of nuclear material and equipment provided prior to such termination, non-compliance or withdrawal, as well as any special nuclear material produced through the use of such material or equipment;

19. *Encourages* States to consider whether a recipient State has signed and ratified an additional protocol based on the model additional protocol in making nuclear export decisions;

20. *Urges* States to require as a condition of nuclear exports that the recipient State agree that, in the event that it should terminate its IAEA safeguards agreement, safeguards shall continue with respect to any nuclear material and equipment provided prior to such termination, as well as any special nuclear material produced through the use of such material or equipment;

21. *Calls for* universal adherence to the Convention on Physical Protection of Nuclear Materials and its 2005 Amendment, and the Convention for the Suppression of Acts of Nuclear Terrorism;

22. *Welcomes* the March 2009 recommendations of the Security Council Committee established pursuant to resolution 1540 (2004) to make more effective use of existing funding mechanisms, including the consideration of the establishment of a voluntary fund, and *affirms* its commitment to promote full implementation of resolution 1540 (2004) by Member States by ensuring effective and sustainable support for the activities of the 1540 Committee;

23. *Reaffirms* the need for full implementation of resolution 1540 (2004) by Member States and, with an aim of preventing access to, or assistance and financing for, weapons of mass destruction, related materials and their means of delivery by non-State actors, as defined in the resolution, *calls upon* Member States to cooperate actively with the Committee established pursuant to that resolution and the IAEA, including rendering assistance, at their request, for their implementation of resolution 1540 (2004) provisions, and in this context *welcomes* the forthcoming comprehensive review of the status of implementation of resolution 1540 (2004) with a view to increasing its effectiveness, and *calls upon* all States to participate actively in this review;

24. *Calls upon* Member States to share best practices with a view to improved safety standards and nuclear security practices and raise standards of nuclear security to reduce the risk of nuclear terrorism, with the aim of securing all vulnerable nuclear material from such risks within four years;

25. *Calls upon* all States to manage responsibly and minimize to the greatest extent that is technically and economically feasible the use of highly enriched uranium for civilian purposes, including by working to convert research reactors and radioisotope production processes to the use of low enriched uranium fuels and targets;

26. *Calls upon* all States to improve their national capabilities to detect, deter, and disrupt illicit trafficking in nuclear materials throughout their territories, and *calls upon* those States in a position to do so to work to enhance international partnerships and capacity building in this regard;

27. *Urges* all States to take all 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 sensitive materials, and to control access to intangible transfers of technology;

28. *Declares* its resolve to monitor closely any situations involving

the proliferation of nuclear weapons, their means of delivery or related material, including to or by non-State actors as they are defined in resolution 1540 (2004), and, as appropriate, to take such measures as may be necessary to ensure the maintenance of international peace and security;

29. *Decides* to remain seized of the matter.

Report of the International Commission on Nuclear Non-proliferation and Disarmament

[November 2009. Synopsis: full report available online at www.icnnd.org]

This Synopsis is a highly abbreviated and selective distillation of the very much more detailed analysis and argument in the Commission's Report. The references given are to sections and paragraphs in that full report, which is available online at www.icnnd.org.

A COMPREHENSIVE ACTION AGENDA A. WHY THIS REPORT, AND WHY NOW

[Eds...]

B. NUCLEAR THREATS AND RISKS

- **Existing Nuclear-Armed States.** Twenty years after the end of the Cold War there are at least 23,000 nuclear warheads still in existence, with a combined blast capacity equivalent to 150,000 Hiroshima bombs. The U.S. and Russia together have over 22,000, and France, the UK, China, India, Pakistan and Israel around 1,000 between them. Nearly half of all warheads are still operationally deployed, and the U.S. and Russia each have over 2,000 weapons on dangerously high alert, ready to be launched immediately – within a decision window of just 4-8 minutes for each president – in the event of perceived attack. The command and control systems of the Cold War years were repeatedly strained by mistakes and false alarms. With more nuclear-armed states now, and more system vulnerabilities, the near miracle of no nuclear exchange cannot continue in perpetuity.

- **New Nuclear-Armed States.** The Nuclear Non-Proliferation Treaty (NPT) system has been under severe strain in recent years, with the International Atomic Energy Agency (IAEA) struggling with verification, compliance and enforcement failures, and backward steps occurring in the world's most volatile regions. India and Pakistan joined the undeclared Israel as fully-fledged nuclear-armed states in 1998; North Korea is now likely to have some half-dozen nuclear explosive devices; and Iran probably now has weapon-making capability, with real potential for generating a regional proliferation surge should it choose to cross the weaponization red-line.

- **Nuclear Terrorism.** Terrorist groups exist with the intent, and capacity, to create massive nuclear destruction. With manageable technology long in the public domain, and black market sourcing, a Hiroshima-sized nuclear device could possibly be detonated from a truck or small boat inside any major city. A "dirty bomb", combining conventional explosives with radioactive materials like medical isotopes, would be a much easier option: while not generating anything like the casualties of a fission or fusion bomb, it would have a psychological impact at least equal to 9/11.

- **Peaceful Uses of Nuclear Energy.** The likely rapid expansion of civil nuclear energy in the decades ahead, not least in response to climate-change concerns, will present some additional proliferation and security risks. Particularly if accompanied by the construction of new national facilities for enrichment at the front end of the fuel cycle and reprocessing at the back end, it could mean a great deal more fissile material becoming potentially available for destructive purposes.

C. MEETING THE CHALLENGE OF NUCLEAR DISARMAMENT

BASIC THEMES

- **Delegitimizing nuclear weapons.** The critical need is to finally transform perceptions of the role and utility of nuclear weapons, from occupying a central place in strategic thinking to being seen as quite marginal, and ultimately wholly unnecessary. There are good answers to all the familiar deterrence and other

justifications for retaining nuclear weapons.

- It is neither defensible nor sustainable for some states to argue that nuclear weapons are an indispensable, legitimate and open-ended guarantor of their own and allies' security, but that others have no right to acquire them to protect their own perceived security needs.
- "Extended deterrence" does not have to mean extended nuclear deterrence.]
- **A phased approach.** Achieving a nuclear weapon free world will be a long, complex and formidably difficult process, most realistically pursued as a two-phase process, with minimization the immediate goal and elimination the ultimate one.
- Short term (to 2012) and medium term (to 2025) efforts should focus on achieving as soon as possible, and no later than 2025, a "minimization point" characterised by very low numbers of warheads (less than 10 per cent of present arsenals), agreed "no first use" doctrine, and force deployments and alert status reflecting that doctrine.
- Analysis and debate should commence now on the conditions necessary to move from the minimization point to elimination, even if a target date for getting to zero cannot at this stage be credibly specified.

KEY POLICIES

- **Action Consensus.** The 2010 NPT Review Conference should agree on a 20-point statement, "A New International Consensus for Action on Nuclear Disarmament", updating and extending the "Thirteen Practical Steps" agreed in 2000.
- **Numbers.** No later than 2025 U.S. and Russian arsenals should be reduced to a total of 500 nuclear warheads each, with at least no increases, and desirably significant reductions, in the arsenals – now totalling some 1,000 warheads – of the other nuclear-armed states. A global maximum of 2,000 warheads would represent a more than 90 per cent reduction in present arsenals
- All nuclear-armed states should now explicitly commit not to increase the number of their nuclear weapons.
- **Doctrine.** Pending the ultimate elimination of nuclear weapons, every nuclear-armed state should make as soon as possible, and no later than 2025, an unequivocal "no first use" (NFU) declaration.
- If not prepared to go so far now, each such state – and in particular the U.S. in its Nuclear Posture Review – should at the very least accept the principle that the "sole purpose" of possessing nuclear weapons is to deter others from using such weapons against that state or its allies.
- Allied states affected by such declarations should be given firm assurances that they will not be exposed to other unacceptable risks, including from biological and chemical weapons.
- New and unequivocal negative security assurances (NSAs) should be given by all nuclear-armed states, supported by binding Security Council resolution, that they will not use nuclear weapons against NPT-compliant non-nuclear weapon states.
- **Force Deployment and Alert Status.** Changes should be made as soon as possible to ensure that, while remaining demonstrably survivable to a disarming first strike, nuclear forces are not instantly useable. Stability should be maximized by deployments and launch alert status being transparent.
- The decision-making fuse for the launch of any nuclear weapons must be lengthened, and weapons taken off launch-on-warning alert as soon as possible.
- **Parallel Security Issues.** *Missile defence* should be revisited, with a view to allowing the further development of theatre ballistic missile defence systems, including potential joint operations in areas of mutual concern, but setting severe limits on strategic ballistic missile defences.
- *Conventional arms imbalances*, both quantitative and qualitative, between the nuclear-armed states, and in particular the relative scale of U.S. capability, need to be seriously addressed if

this issue is not to become a significant impediment to future bilateral and multilateral nuclear disarmament negotiations.

- Continuing strong efforts should be made to develop more effective ways of defending against potential *biological* attacks including building a workable verification regime, and to promote universal adherence to the Biological and Toxin Weapons Convention and the Chemical Weapons Convention.
- Ongoing attempts to prevent an arms race in outer space (PAROS) should be strongly supported.
- **Testing.** All states that have not already done so should sign and ratify the Comprehensive Nuclear-Test-Ban Treaty (CTBT) unconditionally and without delay. U.S. ratification is a critically needed circuit-breaker: it would have an immediate impact on other hold-out states, and add major new momentum to both disarmament and non-proliferation efforts.
- Pending the CTBT's entry into force, all states should continue to refrain from nuclear testing.
- **Availability of Fissile Material.** All nuclear-armed states should declare or maintain a moratorium on the production of fissile material for weapon purposes pending the negotiation and entry into force as soon as possible of a Fissile Material Cut-off Treaty (FMCT).
- On the question of pre-existing stocks, a phased approach should be adopted, with the first priority a cap on production; then an effort to ensure that all fissile material other than in weapons becomes subject to irreversible, verified non-explosive use commitments; and with fissile material released through dismantlement being brought under these commitments as weapon reductions are agreed.
- As an interim step, all nuclear-armed states should voluntarily declare their fissile material stocks and the amount they regard as excess to their weapons needs, place such excess material under IAEA safeguards as soon as practicable, and convert it as soon as possible to forms that cannot be used for nuclear weapons.

D. MEETING THE CHALLENGE OF NON-PROLIFERATION

BASIC THEMES

- Nuclear non-proliferation efforts should focus both on the demand side – persuading states that nuclear weapons will not advance their national security or other interests – and the supply side, through maintaining and strengthening a comprehensive array of measures designed to make it as difficult as possible for states to buy or build such weapons.

KEY POLICIES

- **NPT Safeguards and Verification.** All states should accept the application of the IAEA Additional Protocol. To encourage universal take-up, acceptance of it should be a condition of all nuclear exports.
- The Additional Protocol and its annexes should be updated and strengthened to make clear the IAEA's right to investigate possible weaponization activity, and by adding specific reference to dual-use items, reporting on export denials, shorter notice periods and the right to interview specific individuals.
- **NPT Compliance and Enforcement.** In determining compliance, the IAEA should confine itself essentially to technical criteria, applying them with consistency and credibility, and leaving the political consequences for the Security Council to determine.
- The UN Security Council should severely discourage withdrawal from the NPT by making it clear that this will be regarded as *prima facie* a threat to international peace and security, with all the punitive consequences that may follow from that under Chapter VII of the UN Charter.
- A state withdrawing from the NPT should not be free to use for non-peaceful purposes nuclear materials, equipment and technology acquired while party to the NPT. Any such material provided before withdrawal should so far as possible be returned, with this being enforced by the Security Council.
- **Strengthening the IAEA.** The IAEA should make full use of the authority already available to it, including special inspections,

and states should be prepared to strengthen its authority as deficiencies are identified.

- The IAEA should be given a one-off injection of funds to refurbish the Safeguards Analytical Laboratory; a significant increase in its regular budget support, without a “zero real growth” constraint; and sufficient security of future funding to enable effective medium to long term planning.
- **Non-NPT Treaties and Mechanisms.** The Nuclear Suppliers Group (NSG) should develop a criteria-based approach to cooperation agreements with states outside the NPT, taking into account factors such as ratification of the CTBT, willingness to end unsafeguarded fissile material production, and states’ record in securing nuclear facilities and materials and controlling nuclear-related exports.
- The Proliferation Security Initiative (PSI) should be reconstituted within the UN system as a neutral organization to assess intelligence, coordinate and fund activities, and make both generic and specific recommendations or decisions concerning the interdiction of suspected materials being carried to or from countries of proliferation concern.
- **Extending Obligations to Non-NPT States.** Recognising the reality that the three nuclear-armed states now outside the NPT – India, Pakistan and Israel – are not likely to become members any time soon, every effort should be made to achieve their participation in parallel instruments and arrangements which apply equivalent non-proliferation and disarmament obligations.
- Provided they satisfy strong objective criteria demonstrating commitment to disarmament and non-proliferation, and sign up to specific future commitments in this respect, these states should have access to nuclear materials and technology for civilian purposes on the same basis as an NPT member.
- These states should participate in multilateral disarmament negotiations on the same basis as the nuclear-weapon state members of the NPT, and not be expected to accept different treatment because of their non-membership of that treaty.
- **Priorities for the 2010 NPT Review Conference.** The primary focus should be on reaching agreement on:
 - a new 20-point statement, “A New International Consensus for Action on Nuclear Disarmament”, updating and extending the “Thirteen Practical Steps” agreed in 2000;
 - measures to strengthen NPT safeguards and verification, compliance and enforcement, and the IAEA (as above);
 - forward movement on the Middle East Weapons of Mass Destruction Free Zone, with the UN Secretary-General convening an early conference of all relevant states to address creative and fresh ways to implement the 1995 resolution;
 - strengthened implementation of nuclear security measures (see Meeting Terrorism Challenge below); and
 - further support for peaceful uses of nuclear energy.

E. MEETING THE CHALLENGE OF NUCLEAR TERRORISM

BASIC THEMES

- Effectively countering terrorism of any kind involves a complex mix of nationally and internationally coordinated protection and policing strategies (most immediately important in dealing with the threat of nuclear terrorism), and also political, peacebuilding and psychological strategies (necessary to address the underlying causes of terrorist behaviour).
- At the 2010 Nuclear Security Summit, and in related policy deliberations, the main need is to focus on the effective implementation of existing agreed measures rather than the development of new ones.

KEY POLICIES

- All states should agree to take effective measures to strengthen the security of nuclear materials and facilities, including by adopting and implementing the 2005 amendment to the Convention on the Physical Protection of Nuclear Material,

accelerating delivery of the Cooperative Threat Reduction and associated programs worldwide, and making a greater commitment to international capacity building and information sharing.

- On the control of material useable for “dirty bombs”, further efforts need to be made to cooperatively implement the Code of Conduct on the Safety and Security of Radioactive Sources, with assistance to states in updating legislation and licensing practice and promoting awareness among users.
- Strong support should be given to the emerging science of nuclear forensics, designed to identify the sources of materials found in illicit trafficking or used in nuclear explosions.

F. MEETING THE CHALLENGE OF CIVIL NUCLEAR ENERGY

BASIC THEMES

- The use of nuclear energy for peaceful purposes should continue to be strongly supported as one of the three fundamental pillars of the NPT, along with disarmament and non-proliferation. Increased resources should be provided, including through the IAEA’s Technical Cooperation Programme, to assist developing states in taking full advantage of peaceful nuclear energy for human development.
- Proliferation resistance should be endorsed by governments and industry as an essential objective in the design and operation of nuclear facilities, and promoted through both institutional and technical measures – neither is sufficient without the other.

KEY POLICIES

- **Nuclear Energy Management.** Support should be given to the initiative launched at the 2008 Hokkaido Toyako G8 Summit for international cooperation on nuclear energy infrastructure, designed to raise awareness worldwide of the importance of the three Ss – safeguards, security and safety – and assist countries concerned in developing the relevant measures.
- New technologies for spent fuel treatment should be developed to avoid current forms of reprocessing altogether.
- The increasing use of plutonium recycle, and the prospective introduction of fast neutron reactors, must be pursued in ways which enhance non-proliferation objectives and avoid adding to proliferation and terrorism risks.
- International measures such as spent fuel take-back arrangements by fuel suppliers, are desirable to avoid increasing spent fuel accumulations in a large number of states.
- **Multilateralizing the Nuclear Fuel Cycle** – in particular through fuel banks and multilateral management of enrichment, reprocessing and spent fuel storage facilities – should be strongly supported. Such arrangements would play an invaluable role in building global confidence in the peaceful uses of nuclear energy, and provide an important foundation for a world free of nuclear weapons, for which a necessary requirement will be multilateral verification and control of all sensitive fuel cycle activities.

G. MOBILIZING AND SUSTAINING POLITICAL WILL

BASIC THEMES

- The will to do something difficult, sensitive or expensive will rarely be a given in international or domestic politics. It usually has to be painfully and laboriously constructed, case by case, context by context, with four main elements needing to come together:
 - *leadership*: without which inertia will always prevail – top down (from the major nuclear-armed states, particularly the U.S. and Russia), from peer groups (like-minded states worldwide) and bottom up (from civil society);
 - *knowledge*: both specialist and general, of the nature, magnitude and urgency of the nuclear problem: requiring better education and training in schools and universities, and stronger advocacy directed to policymakers, and those in the media and elsewhere who most influence them;
 - *strategy*: having a confident sense that there is a productive way forward: not just general objectives, but realistic action plans with detailed paths mapped and target benchmarks set; and

- *process*: having the institutional and organisational means at hand – “campaign treaties”, or other research and advocacy structures – to advance the relevant strategy in practice.

KEY POLICIES

- **Nuclear Weapons Convention.** Work should commence now, supported by interested governments, on further refining and developing the concepts in the model convention now in circulation, making its provisions as workable and realistic as possible, with the objective of having a fully-worked through draft available to inform and guide multilateral disarmament negotiations as they gain momentum.
- **Report Card.** To help sustain political will over time, a regular “report card” should be published in which a distinguished international panel, with appropriately professional and broad based research support, would evaluate the performance of both nuclear-armed and non-nuclear-armed states against the action agendas identified in this report.
- **Monitoring and Advocacy Centre.** Consideration should be given to the establishment of a “Global Centre on Nuclear Non-proliferation and Disarmament” to act as a focal point and clearing house for the work being done on nuclear non-proliferation and disarmament issues by many different institutions and organizations in many different countries, to provide research and advocacy support both for like-minded governments and for civil society organisations, and to prepare the “report card” described above.

THE COMPREHENSIVE ACTION AGENDA

THE SHORT TERM ACTION AGENDA TO 2012: ACHIEVING INITIAL BENCHMARKS

On Disarmament

- Early agreement on a Strategic Arms Reduction Treaty (START) follow-on treaty, with the U.S. and Russia agreeing to deep reductions in deployed strategic weapons, addressing the issue of strategic missile defence and commencing negotiations on further deep cuts in all classes of weapons.
- Early movement on nuclear doctrine, with all nuclear-armed states declaring at least that the sole purpose of retaining the nuclear weapons they have is to deter others from using such weapons against them or their allies (while giving firm assurances to such allies that they will not be exposed to unacceptable risk from other sources, including in particular chemical and biological weapons).
- All nuclear-armed states to give strong negative security assurances to complying non-nuclear weapon states parties to the NPT, supported by binding Security Council resolution, that they will not use nuclear weapons against them.
- Early action on nuclear force postures, with particular attention to the negotiated removal to the extent possible of weapons from “launch-on-warning” status.
- Early commitment by all nuclear-armed states to not increasing their nuclear arsenals.
- Prepare the ground for a multilateral disarmament process by all nuclear-armed states conducting relevant studies; engaging in strategic dialogues with the U.S., Russia and each other; and commencing a joint dialogue within the framework of the Conference on Disarmament work program.

On Non-Proliferation

- A positive outcome for the May 2010 NPT Review Conference, with member states reaching agreement on measures to strengthen the NPT regime, including improved safeguards, verification, compliance and enforcement; measures to strengthen the effectiveness of the IAEA; “A New International Consensus for Action on Nuclear Disarmament” statement on disarmament issues; and measures to advance the implementation of the Middle East and other existing and proposed Nuclear Weapon Free Zones.
- Satisfactory negotiated resolution of the North Korea and Iran nuclear program problems.

- Movement toward strengthening non-proliferation regimes outside the NPT, and applying equivalent disciplines to NPT non-members.

On Both Disarmament and Non-Proliferation

- Bring into force the Comprehensive Nuclear-Test-Ban Treaty.
- Conclude negotiations on an Fissile Material Cut-off Treaty.

On Nuclear Security

- Bring into force the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material, accelerate implementation of the cooperative threat reduction and associated programs designed to secure dangerous nuclear weapons, materials and technology worldwide, and achieve greater commitment to international capacity building and information sharing.

On Peaceful Uses of Nuclear Energy

- Movement toward greater multilateralization of the nuclear fuel cycle, and government-industry cooperation on proliferation-resistant technologies and other measures designed to reduce any risks associated with the expansion of civil nuclear energy.
- Promotion of international cooperation on nuclear energy infrastructure to raise awareness worldwide of the importance of the three Ss – safeguards, security and safety – and assist countries concerned in developing relevant measures.

THE MEDIUM TERM ACTION AGENDA TO 2025:

GETTING TO THE MINIMIZATION POINT

- Progressive achievement of interim disarmament objectives, culminating by 2025 in a “minimization point” characterized by:
 - low numbers: a world with no more than 2,000 nuclear warheads (less than 10 per cent of today’s arsenals);
 - agreed doctrine: every nuclear-armed state committed to no first use;
 - credible force postures: verifiable deployments and alert status reflecting that doctrine.
- Progressive resolution of parallel security issues likely to impact on nuclear disarmament negotiations:
 - missile delivery systems and strategic missile defence;
 - space based weapons systems;
 - biological weapons;
 - conventional arms imbalances.
- Development and building of support for a comprehensive Nuclear Weapons Convention to legally underpin the ultimate transition to a nuclear weapon free world.
- Complete implementation (to extent already not achieved by 2012) of short term objectives crucial for both disarmament and non proliferation:
 - Comprehensive Nuclear-Test-Ban Treaty in force;
 - Fissile Material Cut-off Treaty negotiated and in force, and a further agreement negotiated to put all fissile material not in weapons under international safeguards;
 - Measures to strengthen the NPT regime and the IAEA agreed and in force;
 - Nuclear security measures in force, and cooperative threat reduction and associated programs fully implemented;
 - Progressive implementation of measures to reduce the proliferation risks associated with the expansion of civil nuclear energy.

THE LONGER TERM ACTION AGENDA BEYOND 2025:

GETTING TO ZERO

- Create political conditions, regionally and globally, sufficiently cooperative and stable for the prospect of major war or aggression to be so remote that nuclear weapons are seen as having no remaining deterrent utility.
- Create the military conditions in which conventional arms imbalances, missile defence systems or any other national or intergovernmental-organisation capability is not seen as so inherently destabilizing as to justify the retention of a nuclear deterrent capability.

- Create verification conditions that will ensure confidence that any violation of the prohibition of nuclear weapons would be readily detected.
- Create the international legal regime and enforcement conditions that will ensure that any state breaching its prohibition obligations not to retain, acquire or develop nuclear weapons will be effectively penalized.
- Create fuel cycle management conditions that will ensure complete confidence that no state has the capacity to misuse uranium enrichment or plutonium reprocessing for weapons development purposes.
- Create personnel oversight conditions to ensure confidence that individuals' know-how in the design and building of nuclear weapons will not be misapplied in violation of prohibition obligations.

[Eds...]

**Statement to the 64th Regular Session of the
United Nations General Assembly by IAEA
Director General Dr. Mohamed ElBaradei**

[New York, 2 November 2009]

[Eds...]

Since I first spoke to you in 1998, the Agency has moved from being a relatively unknown technical organization, whose work was of interest mainly to specialists in the nuclear field, to becoming a major player at the centre of issues critical to international peace and security. The Agency has gained universal respect for its independence and objectivity in nuclear verification, safety and security. We have also made considerable progress in bringing the benefits of peaceful nuclear technology to developing countries, improving their access to energy, health care, food and clean water.

While I leave office after 12 years with pride in the IAEA's many achievements, I must also express some disappointment. Disappointment that we are still fighting the same battles to secure sufficient funding as we were back in the 1990s; that the development side of our mandate remains chronically underfunded; and that we still lack adequate legal authority to do our job effectively in verification, safety and security. On a more positive note, nuclear disarmament, which failed to make any headway in the two decades since the end of the Cold War, is now back at the top of the international agenda and there is reason to hope that we may see a breakthrough.

[Eds...]

The world seems set for a significant expansion in the use of nuclear power, with scores of countries expressing interest in introducing it as part of their energy mix. Not surprisingly, most of these are from the developing world, which urgently needs a dramatic increase in electricity supply if it is to lift its people out of poverty. Energy is the engine of development. For many countries, nuclear power, with its good performance and safety record, is a way to meet their surging demand for energy, reduce their vulnerability to fluctuations in the cost of fossil fuels and combat climate change. The IAEA has adjusted its priorities to focus more on the nuclear power programmes of what we call the "newcomers."

Nuclear safety has improved significantly since the shock of Chernobyl in 1986, but the risk of accidents can never be eliminated completely. It is in all our interests to ensure that the highest safety standards are upheld everywhere. IAEA safety standards have become the global benchmark and have recently been adopted by the European Union. I would like to see the safety standards accepted by all countries and, ideally, made binding.

Turning to the development side of our mandate, the Agency is the principal vehicle for multilateral nuclear technology transfer, helping countries to use nuclear techniques in food and agriculture, human health, water resources and the environment.

[Eds...]

Back in 1998, our Technical Cooperation Programme totalled a

modest \$80 million per year. Ten years later, in 2008, the programme disbursed \$96 million - a negligible increase considering inflation and the growth in Agency membership from 127 countries to the present 150, as well as the increasing development needs of Member States. We can and should do much more, but that requires a significant increase in funding which regrettably has not been made available to us.

I urge donor states to recognise the link between security, which we all seek, and development. Without development, there can be no security - the reverse is also true. Improving life for the two billion people - one third of humanity - who live on less than \$2 per day is not just the right thing to do; it is also the smart thing to do. By helping to address the root causes of instability and insecurity, including endemic conflicts, poor governance and poverty, we make it less likely that countries will feel the temptation to seek nuclear or other weapons of mass destruction.

The gravest threat the world faces today, in my opinion, is that extremists could get hold of nuclear or radioactive materials. In the wake of the 9/11 attacks, the IAEA initiated a comprehensive programme to combat the risk of nuclear terrorism. I am proud of the speed and efficiency with which the Agency established an effective nuclear security programme which has provided \$50 million in equipment, training and other assistance to Member States in the last three years. But it is disconcerting that nuclear security continues to be funded almost entirely from voluntary contributions, which come with many conditions attached and are both insufficient and unpredictable. Much more needs to be done. The number of incidents of illicit trafficking and other unauthorised activities reported to our Illicit Trafficking Database - over 200 last year - remains a cause of grave concern and might well be only the tip of the iceberg.

The global non-proliferation landscape has changed radically in the last two decades. The way in which the Agency implements safeguards has also undergone a metamorphosis. We have moved beyond simple verification of declared nuclear material at declared facilities to assessing information on a State's entire nuclear programme and, most importantly, verifying the absence of undeclared activities. The Model Additional Protocol, which was approved in 1997, has become an essential verification tool. Within the limited resources and capabilities available to us, we have made increasing use of advanced technology critical to verification today such as remote monitoring, environmental sampling and satellite imagery.

As I reported to the Security Council summit on nuclear disarmament in September, our ability to detect possible clandestine nuclear material and activities depends on the extent to which we are given the necessary legal authority, technology and resources. Regrettably, we face continuing major shortcomings in all three areas, which, if not addressed, could put the entire non-proliferation regime at risk. In over 90 states, the Agency either has no verification authority at all, or its authority is inadequate, because these countries have not concluded the necessary agreements with the Agency. That means we often cannot verify whether a country is engaged in clandestine nuclear activities.

Our credibility depends on our independence. Additional funding is urgently needed for state-of-the-art technology so that, for example, we can independently validate environmental sampling analyses. We also need improved and consistent access to top-quality satellite imagery. Continuing with budgets that fall far short of our essential verification needs in the coming years is not a viable option.

Iraq and the DPRK were the two cases of suspected nuclear proliferation preoccupying the international community when I took office. I will always lament the fact that a tragic war was launched in Iraq, which has cost the lives of possibly hundreds of thousands of innocent civilians. This was done on the basis of a false pretext, without authorisation from the Security Council, and despite the Agency and the United Nations Monitoring, Verification and Inspection Commission having found no evidence that Iraq had revived its nuclear weapons programme or programmes involving other weapons of mass destruction. It gives me no consolation that the Agency's findings were subsequently vindicated.

In the case of the DPRK, sixteen years after the IAEA reported that country to the Security Council for non-compliance with its non-proliferation obligations, it has moved from the likely possession of

undeclared plutonium to acquiring nuclear weapons. The on-again, off-again nature of the dialogue between the DPRK and the international community has stymied the resolution of this issue, which is a glaring example of the fragility and shortcomings of the non-proliferation regime.

Important lessons need to be learned from Iraq and the DPRK. The main one is that we must let diplomacy and thorough verification take their course, however lengthy and tiresome the process might be. We need to carefully assess the veracity of intelligence information. We must engage those with whom we have differences in dialogue rather than seeking to isolate them. We must act within the framework of international institutions - in this case, the IAEA and the Security Council - and empower them, rather than bypass them through unilateral action. The Agency, for its part, must draw conclusions justified by the facts only. It must not jump the gun or be influenced by political considerations.. [Eds...]

All of these lessons are applicable today in the case of Iran, whose nuclear programme remains an issue before both the Agency and the Security Council. Six years have passed since Iran was reported to the IAEA Board of Governors for failing to declare material and activities to the Agency, in violation of its safeguards agreement. As a result of difficult and painstaking work, the Agency has acquired a better understanding of Iran's civil nuclear programme. Nevertheless, a number of questions and allegations relevant to the nature of that programme are still outstanding and need to be clarified by Iran through transparency and cooperation with the Agency. [Eds...]

I therefore urge Iran to be as forthcoming as possible in responding soon to my recent proposal, based on the initiative of the U.S., Russia and France, which aimed to engage Iran in a series of measures that could build confidence and trust and open the way for comprehensive and substantive dialogue between Iran and the international community. [Eds...]

The Agency cannot do its nuclear verification work in isolation. It depends on a supportive political process, with the Security Council at its core. The Council needs to develop an effective, comprehensive compliance mechanism that does not rely only on sanctions, which too often hurt the vulnerable and the innocent. [Eds...]

I have in the past drawn the General Assembly's attention to the growing number of states that have mastered uranium enrichment or plutonium reprocessing. Any one of these states has the capacity to develop nuclear weapons in a short span of time - a margin of security which is too close for comfort. To address this challenge, which could be the Achilles Heel of non-proliferation, I believe that we need to move from national to multinational control of the nuclear fuel cycle. As a first step, I have proposed the establishment of a low enriched uranium bank to assure states a guaranteed last-resort supply of nuclear fuel for their reactors so that they might not need their own enrichment or reprocessing capability.

[Eds...] I remain convinced that some such mechanism is essential as more and more countries introduce nuclear energy. Our ultimate goal should be the full multinationalization of the sensitive parts of the fuel cycle - uranium enrichment and plutonium reprocessing - as we move towards a world free from nuclear weapons.

Such a world is, I believe, within our grasp following the courageous initiative of President Obama and the resumption of serious disarmament negotiations between the two largest nuclear weapon states. Nuclear weapons are, regrettably, still seen as bringing power and prestige and providing an insurance policy against possible attack. However, by demonstrating their irreversible commitment to achieving a world free from nuclear weapons, the weapon states can greatly enhance the value and legitimacy of the non-proliferation regime and gain the moral authority to call on the rest of the world to curb the proliferation of these inhumane weapons. I do not expect to see a world free from nuclear weapons in my lifetime, but I am increasingly hopeful that my children may live in such a world, particularly in light of the growing realization that, with the technology out of the box and an increasing risk of nuclear terrorism, the danger of nuclear weapons being used has increased considerably. The recent adoption of resolution 1887 by the Security Council, pledging to create the

conditions for a world without nuclear weapons, is encouraging. It is vital that the 2010 NPT Review Conference should build on this momentum.

[Eds...]

We live in an increasingly globalised world and none of the major problems we face - terrorism, hunger, arms control, climate change - can be solved by any one country alone. We need effective international institutions.

Ultimately, we need a new global system of collective security that entails an overhaul of the United Nations system and, above all, of the Security Council. A new system in which no country feels the need to rely on nuclear weapons for its security. A new system with effective global mechanisms for conflict prevention, peacekeeping and peacemaking. An equitable and inclusive system in which security is not perceived as a zero sum game, or based on domination, or on a balance of power. A system that places human security and human solidarity at its core, that grasps our shared destiny as one human family and that enables all of us to live together free from fear and free from want.

[Eds...]

Milan Document on Nuclear Disarmament and Non-Proliferation

[Pugwash Conferences on Science and World Affairs,
29 January 2010]

[Editorial note: Footnote not included]

Below are some considerations coming out of a meeting in Milan organized by Pugwash and the University of Milan (Universita' degli Studi di Milano), 29 January 2010, with an eye to the upcoming 2010 NPT Review Conference. The meeting involved more than 40 participants from 13 countries, including former defense and foreign ministers, current and former international disarmament diplomats and other scientific and policy experts.

While this document represents fairly the discussions held, it is the sole responsibility of Pugwash Secretary General Paolo Cotta-Ramusino, Professor of Physics, Universita' degli Studi di Milano and Pugwash President Jayantha Dhanapala, former UN Under-Secretary-General for Disarmament Affairs.

The upcoming Non Proliferation Treaty (NPT) Review Conference (May 2010, New York) will examine the treaty implementation and, in particular, the status of the three NPT basic pillars (disarmament, non proliferation and access to nuclear energy for peaceful uses by NPT members). It is an important opportunity to call the world's attention to the serious risks associated with nuclear weapons, and the ultimate need to eliminate such weapons and to work towards a legally-binding document (such as a convention) banning the possession of such weapons. *Work for such a legally binding document should begin soon and hopefully yield some concrete proposals before the 2015 NPT Review Conference.*

In the upcoming 2010 NPT Review Conference it will be extremely important, in order to prevent decay and breakdown of the world-wide nuclear non-proliferation regime, to show that concrete progress is being made towards that final goal of eliminating nuclear weapons, and to reassure the world's public opinion that such progress will be strongly sustained in the future. In particular, in order to support concrete steps in the direction of nuclear disarmament, the 13 practical steps approved by the 2000 NPT Review Conference should be restated by the 2010 NPT Review Conference with the necessary updates.

Reinforce the (political and legal) commitments to nuclear disarmament. Drastically decrease the numbers of weapons

1. The present number of intact nuclear weapons (reportedly over 23000) should be drastically reduced. The largest weapons reductions should of course be made by the two major nuclear weapon States (US and Russia) that possess about 95% of the world's combined nuclear arsenal. An effective ladder for scaling down the number of nuclear weapons of the most nuclear-armed nations should be clearly defined. As a first step, Russia and the US are expected to bring to successful conclusion, before the NPT Review Conference, their on-going negotiations, aimed at developing a successor treaty to their recently expired START 1

agreement.

2. Reductions of longer-range and shorter-range nuclear weapons should be vigorously pursued in nuclear negotiations. As in the past, unilateral actions can significantly contribute to this process. Decommissioned nuclear weapons should be dismantled and not only stored separately from delivery systems. Fissile material from dismantled weapons should be made accessible to the IAEA for inspection. Effective procedures for verifying weapon dismantlement should be actively pursued.

3. Active promotion of nuclear disarmament is the responsibility of all the members of NPT (in fact of all countries, even if nuclear-weapons states have a special responsibility in this regard). This implies that states with relatively smaller arsenals should do their share of the disarmament work. Also non-nuclear weapons countries hosting nuclear weapons belonging to other countries should send these weapons back to the owner and request their dismantlement. Finally all non-nuclear weapons states should pursue the elimination of nuclear weapons from their territories, not even allowing them in transit, by promoting nuclear-weapons-free zones. Extending nuclear-weapons-free zones can be seen as a complementary avenue to achieving a nuclear-weapons-free world.

Reinforce the political and legal commitments to nuclear disarmament: decrease the military role and the political influence of nuclear arsenals

4. The stated aim of nuclear weapons possession by nuclear-weapons states should be no more than to deter the use of nuclear weapons by others. There is absolutely no need to keep any nuclear weapon at a high alert status. A high alert status entails a serious risk of a nuclear launch by mistake even now, 20 years after the end of the cold war.

5. Concepts like extended deterrence (meant in various ways as nuclear defense against nonnuclear attacks or the planning of the use of nuclear weapons to compensate conventional inferiority or to protect allies against possible nuclear or even chemical or biological weapons attacks) have shown to be of very limited value during the cold war and should be phased out. They should be replaced by a generalized no-first use posture by states possessing nuclear weapons. Moreover no-first use policies should be made even more explicit by extending security guarantees to states that do not possess nuclear weapons. Pending the complete elimination of nuclear weapons, the latter should be guaranteed that they will never be attacked with nuclear weapons.

6. Extended deterrence in no way should require the stationing of nuclear weapons on other countries' territories. An international norm should be developed, forbidding such extraterritorial deployments. European countries have a clear role to play in this respect and should take an active approach to fulfill their own responsibilities.

7. Possession of nuclear weapons is *not* an instrument for enhancing regional or global influence or political and economic leverage. This statement should be clearly understood and stated explicitly whenever useful. This notion, contrary to some conventional wisdom of the past, applies specifically to the major nuclear weapons states, where the possession of nuclear weapons is manifestly not of any help in dealing with military, political or economic crises.

8. Both nuclear and non-nuclear weapon states should nevertheless exercise maximum restraint in the development of military applications of science and technology, such as ballistic missile defense, that could create potentially destabilizing situations, both in the regional and global context, thus complicating the task of reducing the reliance on nuclear weapons.

9. Nuclear-weapons states should develop internal structures, agencies, legislation, budget allocations and the like, to reduce the role of nuclear weapons in defense doctrines, and eventually to eliminate such weapons from national arsenals. "Modernization" and other forms of technical improvement and expansion of capabilities of existing arsenals should be prevented in all possible ways.

Promote nuclear disarmament: involve the states that are not parties to the NPT

10. States that are not parties to the NPT should be induced in all possible ways to eliminate their nuclear weapons and join the NPT. In the meantime they should be encouraged to support the general goals of the NPT by taking concrete steps in the direction of reducing their nuclear arsenals, preventing nuclear proliferation, opening up their nuclear facilities to IAEA inspections and monitoring, respecting nuclear weapons-free-zones, and joining all possible other arms control treaties such as the CWC, BWC, CTBT, etc.

Promote nuclear disarmament: make progress in the establishment of a zone free of weapons of mass destruction in the Middle East (ME) and particularly of a nuclear-weapons-free zone

11. The idea of establishing a zone free of weapons of mass destruction in the Middle East was an integral part of the success of the 1995 Review and Extension Conference. It has also been at various times and with various characterizations pushed forward by the main Middle Eastern states. It is important that the 2010 NPT Review Conference states unequivocally that concrete progress should be made in the creation of such a zone. Consultations should be organized involving all the Middle Eastern states aimed at defining an "agenda of progress" for a ME zone free of weapons of mass destruction. A UN-sponsored international conference should be called for, to discuss the implementation of the ME zone free of weapons of mass destruction and particularly of a nuclear-weapons free zone. The UN could appoint a coordinator to help the process of establishing a zone free of weapons of mass destructions and particularly a nuclear-weapons-free zone in the Middle East.

Promote nuclear disarmament: ensure CTBT entry into force, push forward the FMCT

12. The CTBT should be signed and ratified immediately by all those states that are bound by other treaties or agreements not to test nuclear weapons or that declared that they do not intend to test in the future. To do otherwise would just be a continuation of the practice of holding arms control treaties hostage to political pressures, irrespective of their actual value and merit. If some states continue to block entry into force of the CTBT, they will have to justify that position to the international community. Permanently ending nuclear testing for all and hence impeding new nuclear weapons developments and stopping the production of fissile materials for weapons purposes are all important elements supporting the goal of global nuclear disarmament. Regardless of the timing of the entry into force of the CTBT, the CTBT Organization in Vienna, should be strengthened.

Prevent nuclear proliferation: strengthen the IAEA and the international monitoring & control regime

13. In light of the present spread of nuclear activities for civilian purposes, it is clearly in the collective interest that all such activities be properly monitored and controlled by the competent international organization, namely the IAEA. The IAEA itself should be strengthened both in its workforce and in its ability to operate. The (model) additional protocol should be considered as the new norm, in terms of the relations between the agency and the member states. All members of the NPT should be encouraged to sign and ratify the (model) additional protocol.

14. Work should be pursued to develop improved proliferation-resistant technologies in all stages of the nuclear power production process.

15. Nuclear fuel production should be soon internationalized, without prejudice to the inalienable right recognized in Article IV of the treaty. International consortiums for enriching uranium and for the production of nuclear fuel should be encouraged and the monitoring of these international consortiums should be firmly in the hands of the IAEA. Phasing-out of reprocessing in favor of interim storage should also be encouraged.

16. Efforts should be made to improve the monitoring capabilities of the IAEA beyond the additional protocol. A critical analysis of the problems, gaps and shortcomings of the monitoring systems should be made in the spirit of objective and constructive criticism.

Prevent nuclear proliferation. Strengthen and harmonize national legislation to prevent illicit traffic of nuclear material and of technical devices that could be used in building nuclear weapons

17. The effectiveness of resolution 1540 should be thoroughly examined. Countries should be encouraged to include in their legislation provisions to control, intercept and punish the illicit transfer of nuclear material (particularly of fissile material). The legislation should guarantee the possibility of intercepting illicit traffic of materials and technologies that could be used to manufacture nuclear weapons or nuclear explosive devices. Dual-use materials and technologies should attract particular attention, and their transfer should be regulated by national legislation and international agreements. Because the availability of Highly Enriched Uranium (HEU) provides the most 'easy' avenue for manufacturing nuclear explosive devices by possible non-state actors, countries should be encouraged and helped to progressively phase out reactors using HEU and to replace them with reactors using Low Enriched Uranium (LEU) fuel. The huge existing stocks of HEU, as well as the large amounts that will be obtained from nuclear disarmament, should be down-blended as quickly and as completely as possible to LEU (to be then employed as fuel for energy-producing nuclear reactors).

Ensure the right of all NPT member-states to develop nuclear activities for civilian purposes

18. The right of NPT parties to develop, research and use nuclear energy for peaceful purposes is recognized under the treaty and should not be subject to constraints or limitations. This right should be exercised in accordance with the obligations prescribed by the treaty.

19. Assistance to civilian nuclear programs of member states should be guaranteed to all parties to the NPT without prejudice, while enforcing all the applicable control and monitoring activities.

20. Assisting the development of national nuclear energy programs of NPT member states should include also advising member states of all the risks and problems involved with civilian nuclear programs. Reference should be made to problems related with economic sustainability, with environmental concerns (including all the serious problems related to waste disposal), with the control and the training of technicians, with the organization of emergency responses in case of serious technical problems. This should happen of course without prejudice to the inalienable right guaranteed by article IV of the NPT.

The President's Nuclear Vision: We will spend what is necessary to maintain the safety, security and effectiveness of our weapons.

Joe Biden

[Wall Street Journal, 29 January 2010]

The United States faces no greater threat than the spread of nuclear weapons. That is why, last April in Prague, President Obama laid out a comprehensive agenda to reverse their spread, and to pursue the peace and security of a world without them.

He understands that this ultimate goal will not be reached quickly. But by acting on a number of fronts, we can ensure our security, strengthen the global nonproliferation regime, and keep vulnerable nuclear material out of terrorist hands.

For as long as nuclear weapons are required to defend our country and our allies, we will maintain a safe, secure and effective nuclear arsenal. The president's Prague vision is central to this administration's efforts to protect the American people—and that is why we are increasing investments in our nuclear arsenal and infrastructure in this year's budget and beyond.

Among the many challenges our administration inherited was the slow but steady decline in support for our nuclear stockpile and infrastructure, and for our highly trained nuclear work force. The stockpile, infrastructure and work force played a critical and evolving role in every stage of our nuclear experience, from the Manhattan Project to the present day. Once charged with developing ever more powerful weapons, they have had a new mission in the 18 years since we stopped conducting nuclear tests. That is to maintain the strength of the nuclear arsenal.

For almost a decade, our laboratories and facilities have been underfunded and undervalued. The consequences of this neglect—like the growing shortage of skilled nuclear scientists and engineers and the aging of critical facilities—have largely escaped public notice. Last year, the Strategic Posture Commission led by former Defense Secretaries William Perry and James Schlesinger warned that our nuclear complex requires urgent attention. We agree.

The budget we will submit to Congress on Monday both reverses this decline and enables us to implement the president's nuclear-security agenda. These goals are intertwined. The same skilled nuclear experts who maintain our arsenal play a key role in guaranteeing our country's security now and for the future. State-of-the-art facilities, and highly trained and motivated people, allow us to maintain our arsenal without testing. They will help meet the president's goal of securing vulnerable nuclear materials worldwide in the coming years, and enable us to track and thwart nuclear trafficking, verify weapons reductions, and to develop tomorrow's cutting-edge technologies for our security and prosperity.

To achieve these goals, our budget devotes \$7 billion for maintaining our nuclear-weapons stockpile and complex, and for related efforts. This commitment is \$600 million more than Congress approved last year. And over the next five years we intend to boost funding for these important activities by more than \$5 billion. Even in a time of tough budget decisions, these are investments we must make for our security. We are committed to working with Congress to ensure these budget increases are approved.

This investment is long overdue. It will strengthen our ability to recruit, train and retain the skilled people we need to maintain our nuclear capabilities. It will support the work of our nuclear labs, a national treasure that we must and will sustain. Many of our facilities date back to World War II, and, given the safety and environmental challenges they present, cannot be sustained much longer. Increased funding now will eventually enable considerable savings on both security and maintenance. It also will allow us to clean up and close down production facilities we no longer need.

Our budget request is just one of several closely related and equally important initiatives giving life to the president's Prague agenda. Others include completing the New START agreement with Russia, releasing the Nuclear Posture Review on March 1, holding the Nuclear Security Summit in April, and pursuing ratification and entry into force of the Comprehensive Test Ban Treaty.

We will by these initiatives seek to strengthen an emerging bipartisan consensus on how best to secure our nation. These steps will strengthen the nonproliferation regime, which is vital to holding nations like North Korea and Iran accountable when they break the rules, and deterring others from trying to do so.

Reflecting this consensus, Sen. John McCain has joined the president in endorsing a world without nuclear weapons—a goal that was articulated by President Ronald Reagan, who in 1984 said these weapons must be "banished from the face of the Earth." This consensus was inspired by four of our most eminent statesmen—Messrs. Henry Kissinger, William Perry, Sam Nunn and George P. Shultz.

Some critics will argue that we should not constrain our nuclear efforts in any way. Others will assert that retaining a robust deterrent is at odds with our nonproliferation agenda. These four leaders last week in these pages argued compellingly that "maintaining high confidence in our nuclear arsenal is critical as the numbers of these weapons goes down. It is also consistent with and necessary for U.S. leadership in nonproliferation, risk reduction and arms reduction goals."

This shared commitment serves our security. No nation can secure itself by disarming unilaterally, but as long as nuclear weapons exist, all nations remain ever on the brink of destruction. As President Obama said in Prague, "We cannot succeed in this endeavor alone, but we can lead it, we can start it."

Remarks of (U.S.) Vice President Biden at National Defense University

[The White House, Office of the Vice President,
18 February 2010]

The Path to Nuclear Security: Implementing the President's Prague Agenda

[Eds...]

Last April, in Prague, President Obama laid out his vision for protecting our country from nuclear threats.

He made clear we will take concrete steps toward a world without nuclear weapons, while retaining a safe, secure, and effective arsenal as long as we still need it. We will work to strengthen the Nuclear Non-Proliferation Treaty. And we will do everything in our power to prevent the spread of nuclear weapons to terrorists and also to states that don't already possess them.

It's easy to recognize the threat posed by nuclear terrorism. But we must not underestimate how proliferation to a state could destabilize regions critical to our security and prompt neighbors to seek nuclear weapons of their own.

Our agenda is based on a clear-eyed assessment of our national interest. We have long relied on nuclear weapons to deter potential adversaries.

Now, as our technology improves, we are developing non-nuclear ways to accomplish that same objective. The Quadrennial Defense Review and Ballistic Missile Defense Review, which Secretary Gates released two weeks ago, present a plan to further strengthen our preeminent conventional forces to defend our nation and our allies.

Capabilities like an adaptive missile defense shield, conventional warheads with worldwide reach, and others that we are developing enable us to reduce the role of nuclear weapons, as other nuclear powers join us in drawing down. With these modern capabilities, even with deep nuclear reductions, we will remain undeniably strong.

As we've said many times, the spread of nuclear weapons is the greatest threat facing our country.

That is why we are working both to stop their proliferation and eventually to eliminate them. Until that day comes, though, we will do everything necessary to maintain our arsenal.

[Eds...]

During the Cold War, we tested nuclear weapons in our atmosphere, underwater and underground, to confirm that they worked before deploying them, and to evaluate more advanced concepts. But explosive testing damaged our health, disrupted our environment and set back our non-proliferation goals.

Eighteen years ago, President George H.W. Bush signed the nuclear testing moratorium enacted by Congress, which remains in place to this day.

Under the moratorium, our laboratories have maintained our arsenal through the Stockpile Stewardship Program without underground nuclear testing, using techniques that are as successful as they are cutting edge.

Today, the directors of our nuclear laboratories tell us they have a deeper understanding of our arsenal from Stockpile Stewardship than they ever had when testing was commonplace.

Let me repeat that - our labs know more about our arsenal today than when we used to explode our weapons on a regular basis. With our support, the labs can anticipate potential problems and reduce their impact on our arsenal.

[Eds...] in December, Secretary Chu and I met at the White House with the heads of the three nuclear weapons labs. They described the dangerous impact these budgetary pressures were having on their ability to manage our arsenal without testing. They say this situation is a threat to our security. President Obama and I agree.

That's why earlier this month we announced a new budget that reverses the last decade's dangerous decline.

It devotes \$7 billion to maintaining our nuclear stockpile and modernizing our nuclear infrastructure. To put that in perspective, that's \$624 million more than Congress approved last year—and an increase of \$5 billion over the next five years. Even in these tight fiscal times, we will commit the resources our security requires.

This investment is not only consistent with our nonproliferation agenda; it is essential to it. Guaranteeing our stockpile, coupled with broader research and development efforts, allows us to pursue deep nuclear reductions without compromising our security. As our conventional capabilities improve, we will continue to reduce our reliance on nuclear weapons.

[Eds...]

In September, the President chaired an historic meeting of the UN Security Council, which unanimously embraced the key elements of the President's vision.

[Eds...]

We believe we have developed a broad and deep consensus on the importance of the President's agenda and the steps we must take to achieve it. The results will be presented to Congress soon.

In April, the President will also host a Nuclear Security Summit to advance his goal of securing all vulnerable nuclear material within four years. We cannot wait for an act of nuclear terrorism before coming together to share best practices and raise security standards, and we will seek firm commitments from our partners to do just that.

In May, we will participate in the Non-Proliferation Treaty Review Conference. We are rallying support for stronger measures to strengthen inspections and punish cheaters.

The Treaty's basic bargain - that nuclear powers pursue disarmament and non-nuclear states do not acquire such weapons, while gaining access to civilian nuclear technology - is the cornerstone of the non-proliferation regime.

Before the treaty was negotiated, President Kennedy predicted a world with up to 20 nuclear powers by the mid-1970s. Because of the Non-Proliferation Treaty and the consensus it embodied, that didn't happen.

Now, 40 years later, that consensus is fraying. We must reinforce this consensus, and strengthen the treaty for the future.

And, while we do that, we will also continue our efforts to negotiate a ban on the production of fissile materials that can be used in nuclear weapons.

We know that completing a treaty that will ban the production of fissile material will not be quick or easy - but the Conference on Disarmament must resume its work on this treaty as soon as possible.

The last piece of the President's agenda from Prague was the ratification of the Comprehensive Test Ban Treaty.

A decade ago, we led this effort to negotiate this treaty in order to keep emerging nuclear states from perfecting their arsenals and to prevent our rivals from pursuing ever more advanced weapons.

We are confident that all reasonable concerns raised about the treaty back then - concerns about verification and the reliability of our own arsenal - have now been addressed. The test ban treaty is as important as ever.

As President Obama said in Prague, "we cannot succeed in this endeavor alone, but we can lead it, we can start it."

Some friends in both parties may question aspects of our approach. Some in my own party may have trouble reconciling investments in our nuclear complex with a commitment to arms reduction. Some in the other party may worry we're relinquishing capabilities that keep our country safe.

With both groups we respectfully disagree. As both the only nation to have used nuclear weapons, and as a strong proponent of non-proliferation, the United States has long embodied a stark but inevitable contradiction. The horror of nuclear conflict may make its occurrence unlikely, but the very existence of nuclear weapons leaves the human race ever at the brink of self-destruction,

particularly if the weapons fall into the wrong hands.

Many leading figures of the nuclear age grew ambivalent about aspects of this order. Kennan, whose writings gave birth to the theory of nuclear deterrence, argued passionately but futilely against the development of the hydrogen bomb. And Robert Oppenheimer famously lamented, after watching the first mushroom cloud erupt from a device he helped design, that he had become “the destroyer of worlds.”

President Obama is determined, and I am as well, that the destroyed world Oppenheimer feared must never become our reality. That is why we are pursuing the peace and security of a world without nuclear weapons. The awesome force at our disposal must always be balanced by the weight of our shared responsibility.

[Eds...]