PART II
SPECIFIC COMMITMENTS AND RECOMMENDATIONS
PART II: SPECIFIC COMMITMENTS AND RECOMMENDATIONS

A. NPT REVIEW CONFERENCE 2010: ACTION PLAN

AGREED FOLLOW-ON ACTIONS

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A. Principles and objectives

**Action 1:** All States parties commit to pursue policies that are fully compatible with the Treaty and the objective of achieving a world without nuclear weapons.

**Action 2:** All States parties commit to apply the principles of irreversibility, verifiability and transparency in relation to the implementation of their treaty obligations.

B. Disarmament of nuclear weapons

**Action 3:** In implementing the unequivocal undertaking by the nuclear–weapon States to accomplish the total elimination of their nuclear arsenals, the nuclear weapon States commit to undertake further efforts to reduce and ultimately eliminate all types of nuclear weapons, deployed and non-deployed, including through unilateral, bilateral, regional and multilateral measures.

**Action 4:** The Russian Federation and the United States of America commit to seek the early entry into force and full implementation of the Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms and are encouraged to continue discussions on follow–on measures in order to achieve deeper reductions in their nuclear arsenals.

**Action 5:** The nuclear–weapon States commit to accelerate concrete progress on the steps leading to nuclear disarmament, contained in the Final Document of the 2000 Review Conference, in a way that promotes international stability, peace and undiminished and increased security. To that end, they are called upon to promptly engage with a view to, inter alia:

No Progress | Minimal Progress | Some Progress | Significant Progress | Fully implemented
a. Rapidly moving towards an overall reduction in the global stockpile of all types of nuclear weapons, as identified in action 3; 1.54–94

b. Address the question of all nuclear weapons regardless of their type or their location as an integral part of the general nuclear disarmament process; 1.54–94

c. To further diminish the role and significance of nuclear weapons in all military and security concepts, doctrines and policies; 1.104–46

d. Discuss policies that could prevent the use of nuclear weapons and eventually lead to their elimination, lessen the danger of nuclear war and contribute to the non-proliferation and disarmament of nuclear weapons; 1.88–94

e. Consider the legitimate interest of non–nuclear–weapon States in further reducing the operational status of nuclear weapons systems in ways that promote international stability and security; 1.153–74

f. Reduce the risk of accidental use of nuclear weapons; and 1.165–74

g. Further enhance transparency and increase mutual confidence. 1.36–45

**Action 6**: All States agree that the Conference on Disarmament should immediately establish a subsidiary body to deal with nuclear disarmament, within the context of an agreed, comprehensive and balanced programme of work.

**C. Security assurances**

**Action 7**: All States agree that the Conference on Disarmament should, within the context of an agreed, comprehensive and balanced programme of work, immediately begin discussion of effective international arrangements to assure non–nuclear–weapon States against the use or threat of use of nuclear weapons, to discuss substantively, without limitation, with a view to elaborating recommendations dealing with all aspects of this issue, not excluding an internationally legally binding instrument. The Review Conference invites the Secretary–General of the United Nations to convene a high–level meeting in September 2010 in support of the work of the Conference on Disarmament. 1.136–46

**Action 8**: All nuclear–weapon States commit to fully respect their existing commitments with regard to security assurances. Those nuclear–weapon States that have not yet done so are encouraged to extend security assurances to non–nuclear–weapon States parties to the Treaty. 1.136–46
Action 9: The establishment of further nuclear–weapon–free zones, where appropriate, on the basis of arrangements freely arrived at among States of the region concerned, and in accordance with the 1999 Guidelines of the United Nations Disarmament Commission, is encouraged. All concerned States are encouraged to ratify the nuclear–weapon–free zone treaties and their relevant protocols, and to constructively consult and cooperate to bring about the entry into force of the relevant legally binding protocols of all such nuclear–weapon–free zones treaties, which include negative security assurances. The concerned States are encouraged to review any related reservations.

D. Nuclear testing

Action 10: All nuclear–weapon States undertake to ratify the Comprehensive Nuclear–Test–Ban Treaty with all expediency, noting that positive decisions by nuclear–weapon States would have the beneficial impact towards the ratification of that Treaty, and that nuclear–weapon States have the special responsibility to encourage Annex 2 countries, in particular those which have not acceded to the Treaty on the Non–Proliferation of Nuclear Weapons and continue to operate unsafeguarded nuclear facilities, to sign and ratify.

Action 11: Pending the entry into force of the Comprehensive Nuclear–Test–Ban Treaty, all States commit to refrain from nuclear–weapon test explosions or any other nuclear explosions, the use of new nuclear weapons technologies and from any action that would defeat the object and purpose of that Treaty, and all existing moratoriums on nuclear–weapon test explosions should be maintained.

Action 12: All States that have ratified the Comprehensive Nuclear–Test–Ban Treaty recognize the contribution of the conferences on facilitating the entry into force of that Treaty and of the measures adopted by consensus at the Sixth Conference on Facilitating the Entry into Force of the Comprehensive Nuclear–Test–Ban Treaty, held in September 2009, and commit to report at the 2011 Conference on progress made towards the urgent entry into force of that Treaty.

Action 13: All States that have ratified the Comprehensive Nuclear–Test–Ban Treaty undertake to promote the entry into force and implementation of that Treaty at the national, regional and global levels.
Action 14: The Preparatory Commission for the Comprehensive Nuclear–Test–Ban Treaty Organization is to be encouraged to fully develop the verification regime for the Comprehensive Nuclear–Test–Ban Treaty, including early completion and provisional operationalization of the international monitoring system in accordance with the mandate of the Preparatory Commission, which should, upon entry into force of that Treaty, serve as an effective, reliable, participatory and non–discriminatory verification system with global reach, and provide assurance of compliance with that Treaty.

E. Fissile materials

Action 15: All States agree that the Conference on Disarmament should, within the context of an agreed, comprehensive and balanced programme of work, immediately begin negotiation of a treaty banning the production of fissile material for use in nuclear weapons or other nuclear explosive devices in accordance with the report of the Special Coordinator of 1995 (CD/1299) and the mandate contained therein. Also in this respect, the Review Conference invites the Secretary–General of the United Nations to convene a high–level meeting in September 2010 in support of the work of the Conference on Disarmament.

Action 16: The nuclear–weapon States are encouraged to commit to declare, as appropriate, to the International Atomic Energy Agency (IAEA) all fissile material designated by each of them as no longer required for military purposes and to place such material as soon as practicable under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside military programmes.

Action 17: In the context of action 16, all States are encouraged to support the development of appropriate legally binding verification arrangements, within the context of IAEA, to ensure the irreversible removal of fissile material designated by each nuclear–weapon State as no longer required for military purposes.

Action 18: All States that have not yet done so are encouraged to initiate a process towards the dismantling or conversion for peaceful uses of facilities for the production of fissile material for use in nuclear weapons or other nuclear explosive devices.

F. Other measures in support of nuclear disarmament

Action 19: All States agree on the importance of supporting cooperation among Governments, the United Nations, other international and regional organizations and civil society aimed at increasing confidence, improving transparency and developing efficient verification capabilities related to nuclear disarmament.
Commitments and Recommendations

**Action 20:** States parties should submit regular reports, within the framework of the strengthened review process for the Treaty, on the implementation of the present action plan, as well as of article VI, paragraph 4 (c), of the 1995 decision entitled “Principles and objectives for nuclear non–proliferation and disarmament,” and the practical steps agreed to in the Final Document of the 2000 Review Conference, and recalling the advisory opinion of the International Court of Justice of 8 July 1996.

**Action 21:** As a confidence–building measure, all the nuclear–weapon States are encouraged to agree as soon as possible on a standard reporting form and to determine appropriate reporting intervals for the purpose of voluntarily providing standard information without prejudice to national security. The Secretary–General of the United Nations is invited to establish a publicly accessible repository, which shall include the information provided by the nuclear–weapon States.

**Action 22:** All States are encouraged to implement the recommendations contained in the report of the Secretary–General of the United Nations (A/57/124) regarding the United Nations study on disarmament and non–proliferation education, in order to advance the goals of the Treaty in support of achieving a world without nuclear weapons.

**II. Nuclear Non–proliferation**

**Action 23:** The Conference calls upon all States parties to exert all efforts to promote universal adherence to the Treaty, and not to undertake any actions that can negatively affect prospects for the universality of the Treaty.

**Action 24:** The Conference re–endorses the call by previous review conferences for the application of IAEA comprehensive safeguards to all source or special fissionable material in all peaceful nuclear activities in the States parties in accordance with the provisions of article III of the Treaty.

**Action 25:** The Conference, noting that 18 States parties to the Treaty have yet to bring into force comprehensive safeguards agreements, urges them to do so as soon as possible and without further delay.

**Action 26:** The Conference underscores the importance in complying with the non–proliferation obligations, addressing all compliance matters in order to uphold the Treaty’s integrity and the authority of the safeguards system.

**Action 27:** The Conference underscores the importance of resolving all cases of non–compliance with safeguards obligations in full conformity with the IAEA statute and the respective legal obligations of Member States. In this regard, the Conference calls upon Member States to extend their cooperation to the Agency.
Action 28: The Conference encourages all States parties which have not yet done so to conclude and to bring into force additional protocols as soon as possible and to implement them provisionally pending their entry into force.

Action 29: The Conference encourages IAEA to further facilitate and assist the States parties in the conclusion and entry into force of comprehensive safeguards agreements and additional protocols. The Conference calls on States parties to consider specific measures that would promote the universalization of the comprehensive safeguards agreements.

Action 30: The Conference calls for the wider application of safeguards to peaceful nuclear facilities in the nuclear–weapon States, under the relevant voluntary offer safeguards agreements, in the most economic and practical way possible, taking into account the availability of IAEA resources, and stresses that comprehensive safeguards and additional protocols should be universally applied once the complete elimination of nuclear weapons has been achieved.

Action 31: The Conference encourages all States parties with small quantities protocols which have not yet done so to amend or rescind them, as appropriate, as soon as possible.

Action 32: The Conference recommends that IAEA safeguards should be assessed and evaluated regularly. Decisions adopted by the IAEA policy bodies aimed at further strengthening the effectiveness and improving the efficiency of IAEA safeguards should be supported and implemented.

Action 33: The Conference calls upon all States parties to ensure that IAEA continues to have all political, technical and financial support so that it is able to effectively meet its responsibility to apply safeguards as required by article III of the Treaty.

Action 34: The Conference encourages States parties, within the framework of the IAEA statute, to further develop a robust, flexible, adaptive and cost–effective international technology base for advanced safeguards through cooperation among Member States and with IAEA.

Action 35: The Conference urges all States parties to ensure that their nuclear–related exports do not directly or indirectly assist the development of nuclear weapons or other nuclear explosive devices and that such exports are in full conformity with the objectives and purposes of the Treaty as stipulated, particularly, in articles I, II and III of the Treaty, as well as the decision on principles and objectives of nuclear non–proliferation and disarmament adopted in 1995 by the Review and Extension Conference.

Action 36: The Conference encourages States parties to make use of multilaterally negotiated and agreed guidelines and understandings in developing their own national export controls.
Action 37: The Conference encourages States parties to consider whether a recipient State has brought into force IAEA safeguards obligations in making nuclear export decisions.

Action 38: The Conference calls upon all States parties, in acting in pursuance of the objectives of the Treaty, to observe the legitimate right of all States parties, in particular developing States, to full access to nuclear material, equipment and technological information for peaceful purposes.

Action 39: States parties are encouraged to facilitate transfers of nuclear technology and materials and international cooperation among States parties, in conformity with articles I, II, III and IV of the Treaty, and to eliminate in this regard any undue constraints inconsistent with the Treaty.

Action 40: The Conference encourages all States to maintain the highest possible standards of security and physical protection of nuclear materials and facilities.

Action 41: The Conference encourages all States parties to apply, as appropriate, the IAEA recommendations on the physical protection of nuclear material and nuclear facilities (INFCIRC/225/Rev.4 (Corrected)) and other relevant international instruments at the earliest possible date.

Action 42: The Conference calls on all States parties to the Convention on the Physical Protection of Nuclear Material to ratify the amendment to the Convention as soon as possible and encourages them to act in accordance with the objectives and the purpose of the amendment until such time as it enters into force. The Conference also encourages all States that have not yet done so to adhere to the Convention and adopt the amendment as soon as possible.

Action 43: The Conference urges all States parties to implement the principles of the revised IAEA Code of Conduct on the Safety and Security of Radioactive Sources, as well as the Guidance on the Import and Export of Radioactive Sources approved by the IAEA Board of Governors in 2004.

Action 44: The Conference calls upon all States parties to improve their national capabilities to detect, deter and disrupt illicit trafficking in nuclear materials throughout their territories, in accordance with their relevant international legal obligations, and calls upon those States parties in a position to do so to work to enhance international partnerships and capacity–building in this regard. The Conference also calls upon States parties to establish and enforce effective domestic controls to prevent the proliferation of nuclear weapons in accordance with their relevant international legal obligations.
**Action 45**: The Conference encourages all States parties that have not yet done so to become party to the International Convention for the Suppression of Acts of Nuclear Terrorism as soon as possible.

**Action 46**: The Conference encourages IAEA to continue to assist the States parties in strengthening their national regulatory controls of nuclear material, including the establishment and maintenance of the State systems of accounting for and control of nuclear material, as well as systems on regional level. The Conference calls upon IAEA Member States to broaden their support for the relevant IAEA programmes.

### III. Peaceful Uses of Nuclear Energy

**Action 47**: Respect each country’s choices and decisions in the field of peaceful uses of nuclear energy without jeopardizing its policies or international cooperation agreements and arrangements for peaceful uses of nuclear energy and its fuel cycle policies.

**Action 48**: Undertake to facilitate, and reaffirm the right of States parties to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy.

**Action 49**: Cooperate with other States parties or international organizations in the further development of nuclear energy for peaceful purposes, with due consideration for the needs of the developing areas of the world.

**Action 50**: Give preferential treatment to the non–nuclear–weapon States parties to the Treaty, taking the needs of developing countries, in particular, into account.

**Action 51**: Facilitate transfers of nuclear technology and international cooperation among States parties in conformity with articles I, II, III, and IV of the Treaty, and eliminate in this regard any undue constraints inconsistent with the Treaty.

**Action 52**: Continue efforts, within IAEA, to enhance the effectiveness and efficiency of its technical cooperation programme.

**Action 53**: Strengthen the IAEA technical cooperation programme in assisting developing States parties in the peaceful uses of nuclear energy.

**Action 54**: Make every effort and to take practical steps to ensure that IAEA resources for technical cooperation activities are sufficient, assured and predictable.

**Action 55**: Encourage all States in a position to do so to make additional contributions to the initiative designed to raise 100 million dollars over the next five years as extra–budgetary contributions to IAEA activities, while welcoming the contributions already pledged by countries and groups of countries in support of IAEA activities.
**Action 56**: Encourage national, bilateral and international efforts to train the necessary skilled workforce needed to develop peaceful uses of nuclear energy.

**Action 57**: Ensure that, when developing nuclear energy, including nuclear power, the use of nuclear energy must be accompanied by commitments to and ongoing implementation of safeguards as well as appropriate and effective levels of safety and security, consistent with States’ national legislation and respective international obligations.

**Action 58**: Continue to discuss further, in a non-discriminatory and transparent manner under the auspices of IAEA or regional forums, the development of multilateral approaches to the nuclear fuel cycle, including the possibilities of creating mechanisms for assurance of nuclear fuel supply, as well as possible schemes dealing with the back-end of the fuel cycle without affecting rights under the Treaty and without prejudice to national fuel cycle policies, while tackling the technical, legal and economic complexities surrounding these issues, including, in this regard, the requirement of IAEA full scope safeguards.

**Action 59**: Consider becoming party, if they have not yet done so, to the Convention on Nuclear Safety, the Convention on Early Notification of a Nuclear Accident, the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, the International Convention for the Suppression of Acts of Nuclear Terrorism, the Convention on the Physical Protection of Nuclear Material, and to ratify its amendment so that it may enter into force at an early date.

**Action 60**: Promote the sharing of best practices in the area of nuclear safety and security, including through dialogue with the nuclear industry and the private sector, as appropriate.

**Action 61**: Encourage States concerned, on a voluntary basis, to further minimize highly enriched uranium in civilian stocks and use, where technically and economically feasible.

**Action 62**: Transport radioactive materials consistent with relevant international standards of safety, security and environmental protection, and to continue communication between shipping and coastal States for the purpose of confidence-building and addressing concerns regarding transport safety, security and emergency preparedness.

**Action 63**: Put in force a civil nuclear liability regime by becoming party to relevant international instruments or adopting suitable national legislation, based upon the principles established by the main pertinent international instruments.
Action 64: The Conference calls upon all States to abide by the decision adopted by consensus at the IAEA General Conference on 18 September 2009 on prohibition of armed attack or threat of attack against nuclear installations, during operation or under construction.

IV. The Middle East, particularly implementation of the 1995 Resolution on the Middle East

... 7. The Conference emphasizes the importance of a process leading to full implementation of the 1995 Resolution on the Middle East. To that end, the Conference endorses the following practical steps:

(a) The Secretary–General of the United Nations and the co-sponsors of the 1995 Resolution, in consultation with the States of the region, will convene a conference in 2012, to be attended by all States of the Middle East, on the establishment of a Middle East zone free of nuclear weapons and all other weapons of mass destruction, on the basis of arrangements freely arrived at by the States of the region, and with the full support and engagement of the nuclear-weapon States. The 2012 Conference shall take as its terms of reference the 1995 Resolution;

(b) Appointment by the Secretary–General of the United Nations and the co-sponsors of the 1995 Resolution, in consultation with the States of the region, of a facilitator, with a mandate to support implementation of the 1995 Resolution by conducting consultations with the States of the region in that regard and undertaking preparations for the convening of the 2012 Conference. The facilitator will also assist in implementation of follow-on steps agreed by the participating regional States at the 2012 Conference. The facilitator will report to the 2015 Review Conference and its Preparatory Committee meetings;

(c) Designation by the Secretary–General of the United Nations and the co-sponsors of the 1995 Resolution, in consultation with the States of the region, of a host Government for the 2012 Conference;

(d) Additional steps aimed at supporting the implementation of the 1995 Resolution, including that IAEA, the Organisation for the Prohibition of Chemical Weapons and other relevant international organizations be requested to prepare background documentation for the 2012 Conference regarding modalities for a zone free of nuclear weapons and other weapons of mass destruction and their delivery systems, taking into account work previously undertaken and experience gained;

(e) Consideration of all offers aimed at supporting the implementation of the 1995 Resolution, including the offer of the European Union to host a follow–on seminar to that organized in June 2008.
Other regional issue [DPRK]

The Conference strongly urges the Democratic People’s Republic of Korea to fulfil the commitments under the Six–Party Talks, including the complete and verifiable abandonment of all nuclear weapons and existing nuclear programmes in accordance with the September 2005 joint statement, and urges the Democratic People’s Republic of Korea to return, at an early date, to the Treaty and to its adherence with its IAEA safeguards agreement. The Conference also calls on the Democratic People’s Republic of Korea and all States parties to fully implement all relevant nuclear non–proliferation and disarmament obligations. The Conference reaffirms its firm support for the Six–Party Talks and remains determined to achieve the satisfactory and comprehensive resolution to the issues involved through diplomatic means.
B. NUCLEAR SECURITY SUMMITS 2010 & 2012: COMMITMENTS

WASHINGTON SUMMIT 2010

[A. Global Nuclear Security Architecture]

[ICSANT] Recognizing the importance of the International Convention for the Suppression of Acts of Nuclear Terrorism as an important legally binding multilateral instrument addressing threats posed by acts of nuclear terrorism:

1. Participating States Parties to the Convention will work together to achieve universality of the Convention, as soon as possible; 3.41

2. Participating States Parties to the Convention will assist States, as appropriate and upon their request, to implement the Convention; and 3.44–50

3. Participating States Parties to the Convention encourage discussions among States Parties to consider measures to ensure its effective implementation, as called for in Article 20 of the Convention. 3.44–50

[CPPNM] Recognizing the importance of the Convention on the Physical Protection of Nuclear Material, as the only multilateral legally binding agreement dealing with the physical protection of nuclear material in peaceful uses, and the value of the 2005 Amendment to the Convention in strengthening global security:

1. Participating States Parties to the Convention will work towards its universal adherence and where applicable, to accelerate the ratification processes of the Amendment to the Convention and to act for early implementation of that Amendment; 3.36–43

2. Participating States Parties to the Convention call on all States to act in accordance with the object and purpose of the Amendment until such time as it enters into force; and 3.39

[UNSCR 1540] Noting the need to fully implement United Nations Security Council Resolution (UNSCR) 1540 (2004) on preventing non-State actors from obtaining weapons of mass destruction (WMD), their means of delivery and related materials, in particular as it relates to nuclear material:
1 Participating States support the continued dialogue between the Security Council committee established pursuant to UNSCR 1540 and States and support strengthened international cooperation in this regard, in accordance with relevant United Nations resolutions and within the framework of the United Nations Global Counterterrorism Strategy; 3.51–55

2 Participating States support the activities of the Security Council committee established pursuant to UNSCR 1540 to promote full implementation; 3.53–55

3 Participating States recognize the importance of complete and timely reporting as called for by UNSCR 1540, and will work with other States to do so, including by providing technical support or assistance, as requested; 3.55

4 Participating States note the outcome of Comprehensive Review by the Security Council committee established pursuant to UNSCR 1540, including the consideration of the establishment of a voluntary fund, and express their support for ensuring the effective and sustainable support for the activities of the 1540 Committee; 3.51–55

5 With respect to the nuclear security–related aspects of Paragraph 3, sections (a) and (b) of UNSCR 1540, Participating States recognize the importance of evaluating and improving their physical protection systems to ensure that they are capable of achieving the objectives set out in relevant International Atomic Energy Agency (IAEA) Nuclear Security Series documents and as contained in the document “Physical Protection of Nuclear Material and Nuclear Facilities,” (INFCIRC/225); and 3.52–54

6 Participating States in a position to do so are encouraged to provide technical assistance to those States that request it through appropriate mechanisms, including through the Committee’s efforts to match needs with available resources. 3.51–55

[B. Role of the IAEA]

Welcoming IAEA activities in support of national efforts to enhance nuclear security worldwide and commending the work of the IAEA for the provision of assistance, upon request, through its Nuclear Security Programme and for the implementation of the Nuclear Security Plan 2010 – 2013, approved by the Board of Governors in September 2009 and noted by the IAEA General Conference, and welcoming IAEA programs to advance new technologies to improve nuclear security and nuclear materials accountancy.
Recognizing that the IAEA is facilitating the development by member states, in the framework of the Nuclear Security Series, of guidance and recommendations relating to the prevention and detection of, and response to, theft, sabotage, unauthorized access and illegal transfer, or other malicious acts involving, inter alia, nuclear material, and associated facilities, and is providing guidance in developing and implementing effective nuclear security measures.

Noting that pursuit of the objectives of this Work Plan will not be interpreted so as to alter the mandate or responsibilities of the IAEA:

1. Participating States note that the IAEA’s Nuclear Security Series of documents provides recommendations and guidance to assist States in a wide range of aspects of nuclear security, and encourage the widest possible participation by all its member states in the process; 3.76–80

2. Participating States in a position to do so, will work actively with the IAEA towards the completion and implementation, as appropriate, of the guidance provided by the Nuclear Security Series, and to assist, upon request, other States in doing so; 3.76–80

3. Participating States in particular welcome and support the IAEA’s efforts to finalize the fifth revision of the recommendations contained in INFCIRC/225, which will be published in the Nuclear Security Series; 3.77–78

4. Participating States recognize the importance of nuclear material accountancy in support of nuclear security and look forward to the completion of the technical guidance document on “Nuclear Material Accountancy Systems at Facilities”; 3.79

5. Participating States will endeavor to incorporate, as appropriate, the relevant principles set out in the Nuclear Security Series documents, into the planning, construction, and operation of nuclear facilities; 3.81–82

6. Participating States, when implementing their national nuclear security measures, will support the use of the IAEA Implementing Guide on the Development, Use and Maintenance of the Design Basis Threat to elaborate their national design basis threat as appropriate, to include the consideration of outsider and insider threats; 3.81–82
7 Participating States welcome the IAEA’s efforts to assist States to develop, upon request, Integrated Nuclear Security Support Plans to consolidate their nuclear security needs into integrated plans for nuclear security improvements and assistance; 

8 Participating States recognize the value of IAEA support mechanisms such as the International Physical Protection Advisory Service missions to review, as requested, their physical protection systems for civilian nuclear material and facilities; and 

9 Participating States call upon all member states of the IAEA in a position to do so to provide the necessary support to enable the IAEA to implement these important activities.

[C. International Cooperation]

Noting the contributions to the promotion of nuclear security by the U.N. and initiatives such as the Global Initiative to Combat Nuclear Terrorism, the G–8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, as well as other bilateral, regional, multilateral, and nongovernmental activities within their respective mandates and memberships:

1 Participating States will work together, as appropriate, to ensure that nuclear security cooperation mechanisms are complementary, reinforcing, efficient, consistent with related IAEA activities, and appropriately matched to identified needs in those States requesting assistance; 

2 Participating States encourage, where appropriate, expanded participation in and commitment to international initiatives and voluntary cooperative mechanisms aimed at improving nuclear security and preventing nuclear terrorism; and 

3 Participating States welcome the intent of the members of the G–8 Global Partnership, in a position to do so, to undertake additional programming to enhance nuclear security.
[D. Nuclear Materials]

Recognizing States’ rights to develop and use nuclear energy for peaceful purposes, and noting the responsibility of each State for the use and management of all nuclear materials and facilities under its jurisdiction and recognize that highly enriched uranium and separated plutonium are particularly sensitive and require special precautions:

1. Participating States will consider, where appropriate, the consolidation of national sites where nuclear material is held; 3.130

2. Participating States will continue to exercise particular care in ensuring the safe and secure transport of nuclear materials, both in domestic and international transport; 3.34–35, 3.107, 3.119

3. Participating States, where appropriate, will consider on a national basis the safe, secure and timely removal and disposition of nuclear materials from facilities no longer using them; 3.120–30

4. Participating States will continue to exercise particular care in securing and accounting for separated plutonium, taking into consideration the potential of various forms for use in a nuclear explosive device; 3.120–24, 4.60–68

5. Participating States will consider, where appropriate, converting highly–enriched–uranium fuelled research reactors, and other nuclear facilities using highly enriched uranium, to use low enriched uranium, where it is technically and economically feasible; 3.120–30

6. Participating States, as appropriate, will collaborate to research and develop new technologies that require neither highly enriched uranium fuels for reactor operation nor highly enriched uranium targets for producing medical or other isotopes, and will encourage the use of low enriched uranium and other proliferation–resistant technologies and fuels in various commercial applications such as isotope production; 3.128–29, 4.58–68

7. Participating States in a position to do so will provide assistance to those States requesting assistance to secure, account for, consolidate, and convert nuclear materials; and 3.121–30

8. Participating States will consider how to best address the security of radioactive sources, as well as consider further steps as appropriate. 3.60–61, 3.129
Mindful of the responsibilities of every Participating State to maintain effective nuclear security and a robust domestic regulatory capacity:

1. Participating States will establish and maintain effective national nuclear security regulations, including the periodic review and adjustment of the regulations as the State considers appropriate.

2. Participating States undertake to maximize regulatory independence, consistent with each State’s particular legal and institutional structures.

3. Participating States will undertake to build regulatory capacity and ensure sufficiently trained and fully vetted professional nuclear security staff and adequate resources, taking into account current needs and future expansion of their respective nuclear programs; and

4. Participating States will pursue the review and enforcement of compliance with national nuclear security regulations as a matter of priority.

Understanding the role of the nuclear industry, including the private sector, in nuclear security and recognizing that national governments are responsible for standard setting within each State:

1. Participating States will work, in guiding the nuclear industry, to promote and sustain strong nuclear security culture and corporate commitment to implement robust security practices, including regular exercises and performance testing of nuclear security features, consistent with national regulations;

2. Consistent with State requirements, Participating States will facilitate exchange of best practices, where legally and practically feasible, in nuclear security in the nuclear industry, and in this respect, will utilize relevant institutions to support such exchanges; not only strategic but all classes of weapons, and not only deployed weapons but those in storage and those awaiting destruction (but still capable of reconstitution and deployment) as well. [7.8; 18.1–3]

3. Participating States encourage nuclear operators and architect/engineering firms to take into account and incorporate, where appropriate, effective measures of physical protection and security culture into the planning, construction, and operation of civilian nuclear facilities and provide technical assistance, upon request, to other States in doing so.
[G. Nuclear Security Culture]

Emphasizing the importance of the human dimension of nuclear security, the need to enhance security culture, and the need to maintain a well-trained cadre of technical experts:

1. Participating States will promote cooperation, as appropriate, among international organizations, governments, industries, other stakeholders, and academia for effective capacity building, including human resources development in nuclear security programs; 3.155–63

2. Participating States will encourage the creation of and networking among nuclear security support centres for capacity building to disseminate and share best practices and will support IAEA activities in this area; 3.155–63

3. Participating States encourage the creation of adequate national nuclear security capacities, and encourage supplier countries and technology suppliers to support those capacities in the recipient countries, including human resources development through education and training, upon request and consistent with each State’s particular legal and institutional structures; 3.155–63

4. Participating States will encourage an integrated approach to education and training and institutional capacity building by all stakeholders having a key role in establishing and maintaining adequate security infrastructure; and 3.155–60

5. Participating States will encourage the implementation of national measures to ensure the proper management of sensitive information in order to prevent illicit acquisition or use of nuclear material, and, where appropriate, will support bilateral and multilateral capacity building projects, upon request. 3.155–63

[H. Information Exchange]

Underscoring the value of exchanging accurate and verified information, without prejudice to confidentiality provisions, to detect, prevent, suppress, investigate, and prosecute acts or attempted acts of illicit nuclear trafficking and nuclear terrorism:
1 Participating States will strive to improve their national criminal laws, as needed, to ensure that they have the adequate authority to prosecute all types of cases of illicit nuclear trafficking and nuclear terrorism and commit to prosecuting these crimes to the full extent of the law;

2 Participating States are encouraged to develop and apply mechanisms to expand sharing of information on issues, challenges, risks and solutions related to nuclear security, nuclear terrorism and illicit nuclear trafficking in a comprehensive and timely manner; and

3 Participating States are encouraged to develop methods and mechanisms, where appropriate, to enhance bilateral and multilateral collaboration in sharing urgent and relevant information on nuclear security and incidents involving illicit nuclear trafficking.

[I. Nuclear Forensics]

Noting the IAEA's and Participating States' work in the field of nuclear detection and nuclear forensics, aimed at assisting States in connection with the detection of and response to illicitly trafficked nuclear material, and determination of its origin, and recognizing the importance of respecting provisions on confidentiality of information:

1 Participating States will consider taking further steps, nationally, bilaterally or multilaterally, to enhance their technical capabilities, including the appropriate use of new and innovative technologies, to prevent and combat illicit nuclear trafficking;

2 Participating States will explore ways to work together to develop national capacities for nuclear forensics, such as the creation of national libraries and an international directory of points of contact, to facilitate and encourage cooperation between States in combating illicit nuclear trafficking, including relevant IAEA activities in this area; and

3 Participating States will explore ways to enhance broader cooperation among local, national and international customs and law enforcement bodies to prevent illicit nuclear trafficking and acts of nuclear terrorism, including through joint exercises and sharing of best practices.
Seoul Summit 2012

We will continue to use the Washington Communiqué and Work Plan as a basis for our future work in advancing our nuclear security objectives. At this Seoul Summit, we agree that we will make every possible effort to achieve further progress in the following important areas:

Global Nuclear Security Architecture

1. We recognize the importance of multilateral instruments that address nuclear security, such as the Convention on the Physical Protection of Nuclear Material (CPPNM), as amended, and the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT). We therefore encourage the universal adherence to these Conventions. We urge states in a position to do so to accelerate their domestic approval of the 2005 Amendment to the CPPNM, seeking to bring the Amendment into force by 2014. We acknowledge the important role of the United Nations (UN) in promoting nuclear security, support the UN Security Council Resolutions 1540 and 1977 in strengthening global nuclear security, and welcome the extension of its mandate. We will strive to use the IAEA Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Rev.5) document and related Nuclear Security Series documents, and reflect them into national practice.

2. We recognize the contributions since the 2010 Summit of international initiatives and processes such as the Global Initiative to Combat Nuclear Terrorism (GICNT) and Global Partnership against the Spread of Weapons and Materials of Mass Destruction, within their respective mandates and memberships. We welcome the wider participation in the GICNT and the Global Partnership and value its extension beyond 2012. Noting the importance of strengthening coordination and complementarity among nuclear security activities, we welcome the proposal of the IAEA to organize an international conference in 2013. We welcome contributions from the industry, academia, institutes and civil society that promote nuclear security.
Role of the IAEA

3 We reaffirm the essential responsibility and central role of the IAEA in strengthening the international nuclear security framework, and recognize the value of the IAEA Nuclear Security Plan 2010–2013. We will work to ensure that the IAEA continues to have the appropriate structure, resources and expertise needed to support the implementation of nuclear security objectives. To this end, we encourage States in a position to do so and the nuclear industry to increase voluntary contributions to the IAEA’s Nuclear Security Fund, as well as in-kind contributions. We also encourage continued IAEA activities to assist, upon request, national efforts to establish and enhance nuclear security infrastructure through its various support programs, and encourage States to make use of these IAEA resources.

Nuclear Materials

4 Recognizing that highly enriched uranium (HEU) and separated plutonium require special precautions, we reemphasize the importance of appropriately securing, accounting for and consolidating these materials. We also encourage States to consider the safe, secure and timely removal and disposition of nuclear materials from facilities no longer using them, as appropriate, and consistent with national security considerations and development objectives.

5 We recognize that the development, within the framework of the IAEA, of options for national policies on HEU management will advance nuclear security objectives. We encourage States to take measures to minimize the use of HEU, including through the conversion of reactors from highly enriched to low enriched uranium (LEU) fuel, where technically and economically feasible, taking into account the need for assured supplies of medical isotopes, and encourage States in a position to do so, by the end of 2013, to announce voluntary specific actions intended to minimize the use of HEU. We also encourage States to promote the use of LEU fuels and targets in commercial applications such as isotope production, and in this regard, welcome relevant international cooperation on high-density LEU fuel to support the conversion of research and test reactors.
Radioactive Sources

6 Taking into account that radioactive sources are widely used and can be vulnerable to malicious acts, we urge States to secure these materials, while bearing in mind their uses in industrial, medical, agricultural and research applications. To this end, we encourage States in a position to do so to continue to work towards the process of ratifying or acceding to the ICSANT; reflect into national practices relevant IAEA Nuclear Security Series documents, the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary document on the IAEA Guidance on the Import and Export of Radioactive Sources; and establish national registers of high– activity radioactive sources where required. We also commit to work closely with the IAEA to encourage cooperation on advanced technologies and systems, share best practices on the management of radioactive sources, and provide technical assistance to States upon their request. In addition, we encourage continued national efforts and international cooperation to recover lost, missing or stolen sources and to maintain control over disused sources.

Nuclear Security and Safety

7 Acknowledging that safety measures and security measures have in common the aim of protecting human life and health and the environment, we affirm that nuclear security and nuclear safety measures should be designed, implemented and managed in nuclear facilities in a coherent and synergistic manner. We also affirm the need to maintain effective emergency preparedness, response and mitigation capabilities in a manner that addresses both nuclear security and nuclear safety. In this regard, we welcome the efforts of the IAEA to organize meetings to provide relevant recommendations on the interface between nuclear security and nuclear safety so that neither security nor safety is compromised. We also welcome the convening of the High Level Meeting on Nuclear Safety and Security initiated by the UN Secretary–General, held in New York on 22 September 2011. Noting that the security of nuclear and other radioactive materials also includes spent nuclear fuel and radioactive waste, we encourage States to consider establishing appropriate plans for the management of these materials.
Transportation Security

8 We will continue efforts to enhance the security of nuclear and other radioactive materials while in domestic and international transport, and encourage States to share best practices and cooperate in acquiring the necessary technologies to this end. Recognizing the importance of a national layered defense against the loss or theft of nuclear and other radioactive materials, we encourage the establishment of effective national nuclear material inventory management and domestic tracking mechanisms, where required, that enable States to take appropriate measures to recover lost and stolen materials.

Combating Illicit Trafficking

9 We underscore the need to develop national capabilities to prevent, detect, respond to and prosecute illicit nuclear trafficking. In this regard, we encourage action-oriented coordination among national capacities to combat illicit trafficking, consistent with national laws and regulations. We will work to enhance technical capabilities in the field of national inspection and detection of nuclear and other radioactive materials at the borders. Noting that several countries have passed export control laws to regulate nuclear transfers, we encourage further utilization of legal, intelligence and financial tools to effectively prosecute offenses, as appropriate and consistent with national laws. In addition, we encourage States to participate in the IAEA Illicit Trafficking Database program and to provide necessary information relating to nuclear and other radioactive materials outside of regulatory control. We will work to strengthen cooperation among States and encourage them to share information, consistent with national regulations, on individuals involved in trafficking offenses of nuclear and other radioactive materials, including through INTERPOL’s Radiological and Nuclear Terrorism Prevention Unit and the World Customs Organization.

Nuclear Forensics

10 We recognize that nuclear forensics can be an effective tool in determining the origin of detected nuclear and other radioactive materials and in providing evidence for the prosecution of acts of illicit trafficking and malicious uses. In this regard, we encourage States to work with one another, as well as with the IAEA, to develop and enhance nuclear forensics capabilities. In this regard, they may combine the skills of both traditional and nuclear forensics through the development of a common set of definitions and standards, undertake research and share information and best practices, as appropriate. We also underscore the importance of international cooperation both in technology and human resource development to advance nuclear forensics.
Nuclear Security Culture

11 Recognizing that investment in human capacity building is fundamental to promoting and sustaining a strong nuclear security culture, we encourage States to share best practices and build national capabilities, including through bilateral and multilateral cooperation. At the national level, we encourage all stakeholders, including the government, regulatory bodies, industry, academia, nongovernmental organizations and the media, to fully commit to enhancing security culture and to maintain robust communication and coordination of activities. We also encourage States to promote human resource development through education and training. In this regard, we welcome the establishment of Centers of Excellence and other nuclear security training and support centers since the Washington Summit, and encourage the establishment of new centers. Furthermore, we welcome the effort by the IAEA to promote networking among such centers to share experience and lessons learned and to optimize available resources. We also note the holding of the Nuclear Industry Summit and the Nuclear Security Symposium on the eve of the Seoul Nuclear Security Summit.

Information Security

12 We recognize the importance of preventing non–state actors from obtaining information, technology or expertise required to acquire or use nuclear materials for malicious purposes, or to disrupt information technology based control systems at nuclear facilities. We therefore encourage States to: continue to develop and strengthen national and facility-level measures for the effective management of such information, including information on the procedures and protocols to protect nuclear materials and facilities; to support relevant capacity building projects; and to enhance cyber security measures concerning nuclear facilities, consistent with the IAEA General Conference Resolution on Nuclear Security(GC(55)/Res/10) and bearing in mind the International Telecommunication Union Resolution 174. We also encourage States to: promote a security culture that emphasizes the need to protect nuclear security related information; engage with scientific, industrial and academic communities in the pursuit of common solutions; and support the IAEA in producing and disseminating improved guidance on protecting information.
International Cooperation

13. We encourage all States to enhance their physical protection of and accounting system for nuclear materials, emergency preparedness and response capabilities and a relevant legal and regulatory framework. In this context, we encourage the international community to increase international cooperation and to provide assistance, upon request, to countries in need on a bilateral, regional, and multicultural level, as appropriate. In particular, we welcome the intent by the IAEA to continue to lead efforts to assist States, upon request. We also reaffirm the need for various public diplomacy and outreach efforts to enhance public awareness of actions taken and capacities built to address threats to nuclear security, including the threat of nuclear terrorism. We will continue to make voluntary and substantive efforts toward strengthening nuclear security and implementing political commitments made in this regard. We welcome the information on the progress made in the field of nuclear security since the Washington Summit provided by the participants at this Seoul Summit. The next Nuclear Security Summit will be held in the Netherlands in 2014.
C. ICNND REPORT 2009: RECOMMENDATIONS

On Overall Disarmament Strategy

1. Nuclear disarmament should be pursued as a two-phase process: with “minimization” to be achieved no later than 2025, and “elimination” as soon as possible thereafter. Short (to 2012), medium (to 2025) and longer term (beyond 2025) action agendas should reflect those objectives. [7.1–5; see also Sections 17, 18, 19]

2. Short and medium term efforts should focus on achieving the general delegitimization of nuclear weapons, and on reaching as soon as possible, and no later than 2025, a “minimization point” characterised by:
   (a) low numbers: a world with no more than 2,000 warheads (less than 10 per cent of present arsenals);
   (b) agreed doctrine: every nuclear-armed state committed to no first use of nuclear weapons; and
   (c) credible force postures: verifiable deployments and alert status reflecting that doctrine. [7.6–15; see also Sections 6 (on delegitimization) and 17–18]

3. 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 now be credibly specified. [7.15–17; see also Section 19]

On Overall Non-Proliferation Strategy

4. 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 (addressed in following recommendations) designed to make it as difficult as possible for states to buy or build such weapons. [8.9–16; see also Sections 9–15]

On NPT Safeguards and Verification

5. All states should accept the application of the Additional Protocol. To encourage universal take-up, acceptance of it should be a condition of all nuclear exports. [9.7]
6 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. [9.8–9]

7 With safeguards needing to move from a mechanistic to an information-driven system, there should be much more information sharing, in both directions, on the part of both states and the IAEA, with the agency re–evaluating its culture of confidentiality and non–transparency. [9.10–11]

**On NPT Compliance and Enforcement**

8 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. [9.15]

9 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. [9.20]

10 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. [9.21–22]

11 All states should make it a condition of nuclear exports that the recipient state agree that, in the event it should withdraw from the NPT, safeguards shall continue with respect to any nuclear material and equipment provided previously, as well as any material produced by using it. [9.23]

**On Strengthening the IAEA**

12 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. [9.24]

13 If the IAEA is to fully and effectively perform its assigned functions, it should be given, as recommended in 2008 by the Zedillo Commission:
Commitments and Recommendations

(a) a one-off injection of funds to refurbish the Safeguards Analytical Laboratory;
(b) a significant increase in its regular budget support, without a “zero real growth” constraint, so as to reduce reliance on extra-budgetary funding for key functions;
(c) sufficient security of future funding to enable medium to long-term planning; and
(d) support from both states and industry in making staff secondments and offering training opportunities. [9.25–27]

14 Consideration should be given to an external review, by the Zedillo Commission or a successor panel, of the IAEA’s organizational culture, in particular on questions of transparency and information sharing. [9.28]

On Non-NPT Treaties and Mechanisms

15 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’ records in securing nuclear facilities and materials and controlling nuclear-related exports. [10.3–9]

16 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. [10.10–12]

On Extending Obligations to Non-NPT States

17 Recognizing 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. [10.13–16]

18 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. [10.17]

19 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. [10.18]
On Banning Testing

20 All states that have not already done so should sign and ratify the CTBT unconditionally and without delay. Pending entry into force, all states should continue to refrain from nuclear testing. [11.1–8]

21 All signatories should provide the necessary financial, technical and political support for the continued development and operation of the CTBTO, including completing the global coverage of its monitoring systems, facilitating on–site inspection when warranted, and establishing effective national data centres and information gathering systems. [11.9–12]

On Limiting the Availability of Fissile Material

22 All states should negotiate to an early conclusion in the Conference on Disarmament a non–discriminatory, multilateral, internationally and effectively verifiable and irreversible Fissile Material Cut–off Treaty (FMCT), banning the production of fissile material for nuclear weapons or other nuclear explosive devices. [12.1–14]

23 All nuclear–armed states should declare or maintain a moratorium on the production of fissile material for weapon purposes pending the entry into force of such a treaty. [12.15]

24 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. [12.18]

25 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. [12.19]

26 The use of HEU in civil research programs should be ended as soon as possible, and the availability and use of separated plutonium in energy programs phased out as viable alternatives are established. [12.20–27]
On Nuclear Security

27 All states should agree to take further measures to strengthen the security of nuclear materials and facilities, including early adoption of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM) and the most recent international standards, accelerated implementation of the Cooperative Threat Reduction (CTR) and associated programs worldwide, and greater commitment to international capacity building and information sharing. [13.1–16, 22–23]

28 At the Global Summit on Nuclear Security in April 2010, and in subsequent follow-up activity, priority attention should be given to the implementation–focused issues identified in Box 13–1. [13.4]

29 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, promoting awareness among users, and generally achieving a safety and security culture. [13.17–21]

30 Efforts should continue to be made to establish an intelligence clearing house which would provide a mechanism by which countries might be willing not only to share their intelligence, but also provide the know–how for other countries to interpret and deal with it. [13.22]

31 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, including through providing additional resources to the Nuclear Smuggling International Technical Working Group. [13.24–25]

On Nuclear Energy Management

32 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. [14.1–3]

33 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. [14.4–6]
34 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. [14.7–8]

35 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. In particular, a key objective of research and development on fast neutron reactors should be to design and operate them so that weapons grade plutonium is not produced. [14.9–15]

36 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. Particular attention should be paid in this respect to take-back of fuel from initial core loads. [14.13]

37 New technologies for spent fuel treatment should be developed to avoid current forms of reprocessing altogether; and, as they are established, use of MOX fuel in thermal reactors, and conventional reprocessing plants, can be phased out. [12.26]

38 Nuclear industry, and government–industry collaboration, will need to play a greater role in mitigating the proliferation risks associated with a growing civilian nuclear sector worldwide. Industry should become a more active partner with governments in the drafting of regulations and treaties that affect its activities, to ensure that they make operational sense and to encourage compliance. [14.16–24]

On Multilateralizing the Nuclear Fuel Cycle

39 Multilateralization of 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. [15.48]

40 Pending the acceptance of more far-reaching proposals, support should be given to voluntary arrangements whereby, in return for assurances of supply, recipient states would renounce the national construction and operation of sensitive fuel cycle facilities for the duration of the agreement. [15.47]
On Priorities for the 2010 NPT Review Conference

The following should be the major priority issues for the 2010 NPT Review Conference:

1.18–31
2.22–35

(a) Action for Disarmament. Agreement on a twenty–point statement, “A New International Consensus for Action on Nuclear Disarmament” (see Box 16–1), updating and extending the “Thirteen Practical Steps” agreed in 2000.

(b) Strengthening Safeguards and Enforcement. Agreement:
- that all states should accept the application of the Additional Protocol and that, to encourage its universal take–up, acceptance should be made a condition of all states’ nuclear exports;
- to declare that a state withdrawing from the NPT is not free to use for non–peaceful purposes nuclear materials, equipment and technology acquired while party to the NPT;
- to recommend that the Security Council make it clear that any withdrawal will be regarded prima facie as a threat to international peace and security; and

(c) to recommend to states that they make it a condition of nuclear exports that safeguards agreements continue to apply after any such withdrawal. Strengthening the IAEA. Agreement that the IAEA’s budget be significantly increased – without any “zero real growth” constraint, and so as to reduce reliance on extra–budgetary support for key functions – as recommended in 2008 by the Zedillo Commission.

(d) Middle East Weapons of Mass Destruction Free Zone. Agreement that the Secretary–General of the UN should convene an early conference of all relevant states to address creative and fresh ways to implement the 1995 resolution, including the identification of confidence building measures that all key states in the region can embrace, and to commence early consultations to facilitate that.

(e) Nuclear security. Agreement that states should take further measures to strengthen the security of nuclear materials and facilities, including early adoption of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material and the most recent international standards, accelerated implementation of the cooperative threat reduction and associated programs worldwide, and greater commitment to international capacity building and information sharing.

(f) Peaceful uses. Agreement that the inalienable right to the use of nuclear energy for peaceful purposes remains one of the fundamental objectives of the NPT and to dedicate increased resources, including through the IAEA’s Technical Coopération Programme, to assist developing states in taking full advantage of peaceful nuclear energy for human development.
On Reducing Weapon Numbers: Bilateral and Multilateral Processes

42 The “minimization point” objective should be to achieve no later than 2025 a global total of no more than 2,000 nuclear warheads, with the U.S. and Russia reducing to a total of 500 nuclear weapons each, and with at least no increases (and desirably significant reductions) in the arsenals of the other nuclear–armed states. The objective must be to cut not only strategic but all classes of weapons, and not only deployed weapons but those in storage and those awaiting destruction (but still capable of reconstitution and deployment) as well. [7.8; 18.1–3]

43 To bring the bilateral target within achievable range, the U.S. and Russia should accelerate implementation of the START follow–on treaty now being negotiated, bringing forward the envisaged reductions under this to no later than 2015. [17.13]

44 Once this treaty is ratified, the U.S. and Russia should resume intensive negotiations with a view to reaching a further START agreement no later than 2015, which would bring the total number of warheads down to no more than 1000 for each, and hopefully much less, by the year 2020. [17.12–13]

45 To achieve the minimization point objective of a global maximum of no more than 2,000 warheads, with the nuclear–armed states other than the U.S. and Russia having no more than 1,000 between them, the highest priority need is for all nuclear–armed states to explicitly commit not to increase the number of their nuclear weapons, and such declarations should be sought from them as soon as possible. [17.15–16]

46 To prepare the ground for multilateral disarmament negotiations, strategic dialogues should be initiated by all the nuclear–armed states with each other, and systematic and substantial national studies conducted of all the issues – including missile defence, conventional imbalances and disarmament verification – that will arise at all stages of the process. [17.17–19, 22–24]

47 Consideration should be given to the Conference on Disarmament in Geneva as an appropriate forum for initial consultations, on a formal or informal basis, between all the nuclear–armed states, given the need, if the multilateral disarmament process is to advance, for there to be early agreement on an appropriate negotiating process. [7.9; 17.20–21]

48 To facilitate future verification processes, in the credibility of which all nuclear–armed states will have a mutual interest, “nuclear archaeology” steps should be taken now by them to ensure that all relevant records are identified, secured and preserved, and relevant measurements and samples are taken. [17.25–26]
### On Nuclear Doctrine: No First Use, Extended Deterrence, and Negative Security Assurances

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Progress</th>
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<tbody>
<tr>
<td>49</td>
<td>Pending the ultimate elimination of nuclear weapons, every nuclear–armed state should make an unequivocal “no first use” declaration, committing itself to not using nuclear weapons either preventively or pre–emptively against any possible nuclear adversary, keeping them available only for use, or threat of use, by way of retaliation following a nuclear strike against itself or its allies. [17.28]</td>
<td>No Progress</td>
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<td>50</td>
<td>If not prepared at this stage to make such a declaration, every nuclear–armed state should at least accept the principle that the sole purpose of possessing nuclear weapons – until such time as they can be eliminated completely – is to deter others from using such weapons against that state or its allies. [7.10; 17.28–32]</td>
<td>Some Progress</td>
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<td>51</td>
<td>The allies in question – those presently benefitting from extended deterrence – should be given firm assurances that they will not be exposed to unacceptable risk from other sources, including especially biological and chemical weapons. In this context, continuing strong efforts should be made to promote universal adherence to the Biological and Toxin Weapons Convention and the Chemical Weapons Convention, and to develop more effective ways of ensuring compliance with the former. [17.29]</td>
<td>Minimal Progress</td>
</tr>
<tr>
<td>52</td>
<td>It is particularly important that at least a “sole purpose” statement be made in the U.S. Nuclear Posture Review due for publication early in 2010, placing pressure as this would on other nuclear–armed states to be more forthcoming, and undermining “double standards” arguments at the 2010 NPT Review Conference. [17.32]</td>
<td>Minimal Progress</td>
</tr>
<tr>
<td>53</td>
<td>New and unequivocal negative security assurances (NSAs) should be given by all the nuclear–armed states, supported by binding Security Council resolution, that they will not use nuclear weapons against non–nuclear weapon states. The only qualification should be that the assurance would not extend to a state determined by the Security Council to be in non–compliance with the NPT to so material an extent as to justify the non–application of any NSA. [17.33–39]</td>
<td>Minimal Progress</td>
</tr>
<tr>
<td>54</td>
<td>All NPT nuclear–weapon state members should sign and ratify the protocols for all the Nuclear Weapon Free Zones, and the other nuclear–armed states (so long as they remain outside the NPT) should issue stand–alone negative security assurances for each of them. [16.16]</td>
<td>Significant Progress</td>
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On Nuclear Force Posture: Launch Alert Status and Transparency

55 The basic objective is to achieve changes to deployment as soon as possible which 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. [7.12–15; 17.40–50]

56 It is crucial that ways be found to lengthen the decision–making fuse for the launch of any nuclear weapons, and in particular – while recognizing the difficulty and complexity of the negotiating process involved between the U.S. and Russia – that weapons be taken off launch–on–warning alert as soon as possible. [17.43]

57 In order to achieve strategic dialogues capable of making real progress on disarmament, maximum possible transparency in both nuclear doctrine and force postures should be offered by all nuclear–armed states. [17.44]

58 A relaxation of Israel’s policy of complete opacity would be helpful in this respect, but continued unwillingness to do so should not inhibit its engagement in multilateral disarmament negotiations (given that nuclear disarmament can be defined as a process of taking unsafeguarded fissile materials and putting them under international safeguards). [17.45–50]

On North Korea and Iran

59 Continuing efforts should be made, within the framework of the Six-Party Talks, to achieve a satisfactory negotiated solution of the problem of North Korea’s overt pursuit of a nuclear weapons program, involving verifiable denuclearization and resumed commitment to the NPT in return for security guarantees and economic assistance. [17.52–56]

60 Continuing efforts should be made by the P5+1, Security Council and IAEA member states to achieve a satisfactory negotiated resolution of the issue of Iran’s nuclear capability and intentions, whereby any retention of any element of its enrichment program would be accompanied by a very intrusive inspection and verification regime, giving the international community confidence that Iran neither has nor is seeking nuclear weapons. [17.57–60]
On Parallel Security Issues: Missiles, Space, Biological and Conventional Weapons

61 The issue of anti-ballistic missile (ABM) systems 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. It should be recognized that while, in a world without nuclear weapons, strategic missile defences could play an important stabilizing role as an insurance policy against potential cheaters, they now constitute a serious impediment to both bilateral and multilateral nuclear disarmament negotiations. [18.28–30; see also 2.30–34, 17.18]

62 International efforts to curb missile proliferation should continue, but continued failure to multilateralize the INF should not be used as an excuse for either present party to withdraw from it. [2.35–37]

63 Ongoing attempts to prevent an arms race in outer space (PAROS) at the Geneva Conference on Disarmament, and work at the Vienna–based UN Committee on the Peaceful Uses of Outer Space, should be strongly supported. [18.31]

64 Continuing strong efforts should be made to promote universal adherence to the Biological and Toxin Weapons Convention and the Chemical Weapons Convention, and to develop more effective ways of defending against potential biological attacks, including – for all its difficulties – building a workable Convention verification regime. [17.29; 18.32–33]

65 The issue of conventional arms imbalances, both quantitative and qualitative, between the nuclear–armed states, and in particular the relative scale of U.S. capability, needs to be seriously addressed if it is not to become a significant impediment to future bilateral and multilateral nuclear disarmament negotiations, including by revisiting matters covered in the Treaty on Conventional Armed Forces in Europe (CFE). The development of more cooperative approaches to conflict prevention and resolution may well prove more productive in this context than focusing entirely on arms limitation measures. [18.34–36]

On Action Agendas: Short, Medium and Longer Term

66 The Short Term Action Agenda, for the period between now and 2012 – and including the 2010 NPT Review Conference – should focus on the issues we identify in Box 17–1.

1.175–92 Minimal Progress

2.157–67 No Progress

1.193–98 No Progress

1.199–201 Some Progress

1.202–14 Minimal Progress

1.22–31 Minimal Progress
Consideration should be given to the possibility of the United Nations General Assembly holding a Special Session on Disarmament late in 2012, as a way of benchmarking the achievements of the short term and defining the way forward. Any decision should be deferred until mid–2010, to allow for reflection on the outcome of the 2010 Review Conference, and whether enough momentum is building to justify the resources and effort involved. [17.2–3]

The Medium Term Action Agenda, for the period between 2012 and 2025, should focus on the issues we identify in Box 18–1.

The Longer Term Action Agenda, for the period beyond 2025, should focus on establishing the conditions we identify in Box 19–1.

Given that questions of cost–burden sharing are likely to arise as disarmament momentum builds over the longer term, it may be helpful for interested states to commission a detailed study on the calculation of disarmament and non–proliferation costs and possible ways of funding them. [18.26–27]

On Mobilizing and Sustaining Political Will

Sustained campaigning is needed, through both the traditional and new media and direct advocacy, to better inform policy–makers and those who influence them about nuclear disarmament and non–proliferation issues. Capable non–governmental organizations should be appropriately supported by governments and philanthropic foundations to the extent necessary to enable them to perform this role effectively. [20.7–10]

There should be a major renewed emphasis on formal education and training about nuclear disarmament and related issues in schools and universities, focusing on the history of nuclear weapons, the risks and threats involved in their continued deployment and proliferation, and possible ways forward. An associated need is for more specialized courses on nuclear–related issues – from the scientific and technical to the strategic policy and legal – in universities and diplomatic–training and related institutions. [20.11–12]

Work should commence now on further refining and developing the concepts in the model Nuclear Weapons Convention now in circulation, making its provisions as workable and realistic as possible, and building support for them, with the objective of having a fully–worked through draft available to inform and guide multilateral disarmament negotiations as they gain momentum. Interested governments should support with appropriate resources the further development of the NWC. [20.38–44]
74 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. [20.49–50]

75 Consideration should be given to the establishment of a new “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 for both like–minded governments on the one hand, and civil society organizations on the other, and to prepare the “report card” described above. [20.53]

76 Such a centre might be constructed to perform functions at two levels:

(a) a base of full time research and advocacy professionals, drawing directly on the resources of a wide international network of well–established associated research centres; and

(b) a superstructure, in the form of a governing or advisory board drawn from distinguished global figures of wide–ranging experience, giving their imprimatur as appropriate to the centre’s published reports, policy initiatives and campaigns. [20.51–54]