

Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

24 April 2012

Original: English

First session

Vienna, 30 April-11 May 2012

Implementation of the Treaty on the Non-Proliferation of Nuclear Weapons: peaceful uses of nuclear energy

Working paper submitted by the United States of America

1. In December 1953, President of the United States of America Dwight Eisenhower proposed to the United Nations General Assembly that experts be mobilized “to apply atomic energy to the needs of agriculture, medicine, and other peaceful activities”. Since that initiative, known as “Atoms for Peace”, the United States has been fully committed to cooperating with other States and the International Atomic Energy Agency (IAEA) to support the use of nuclear energy for peaceful purposes throughout the world. In Seoul in March, President Obama reiterated this commitment “to harnessing the power of the atom, not for war, but for peaceful purposes”.

2. Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons acknowledges the right of parties to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II of the Treaty. Together with article III on safeguards, articles I and II comprise the non-proliferation obligations of the Treaty. Article IV also calls for “the fullest possible exchange of equipment, materials and scientific and technical information” for developing nuclear energy for peaceful purposes, “with due consideration for the needs of the developing areas of the world”.

3. To help ensure the safety and security of our own nuclear activities and to contribute to international cooperation in these areas, the United States is party to the relevant international conventions, including 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 Radioactive Waste Management and the Convention on the Physical Protection of Nuclear Material. The United States has signed the amendment to the Convention on Physical Protection of Nuclear Material and the International Convention for the Suppression of Acts of Nuclear Terrorism. The United States Senate provided advice and consent for the ratification of the International Convention for the Suppression of Acts of Nuclear Terrorism and the Convention on Physical Protection of Nuclear Material amendment in 2008; both of which are now awaiting implementing legislation.



4. The United States is dedicated to international cooperation on the use of nuclear energy for peaceful purposes in accordance with article IV of the Treaty and with the corresponding items of the 2010 Nuclear Non-Proliferation Treaty Review Conference Action Plan. The United States meets its commitment to article IV in a variety of ways, both bilaterally and multilaterally. Avenues for cooperation include: support for IAEA technical cooperation and other programmes on such issues as nuclear safety; peaceful nuclear cooperation agreements between the United States and other countries, which provide the legal framework for nuclear commerce; and cooperation programmes between United States Government agencies and their foreign counterparts.

International Atomic Energy Agency technical assistance

5. The IAEA statute contains the objective of accelerating and enlarging “the contribution of atomic energy to peace, health and prosperity throughout the world”. A major component of IAEA efforts in this area is carried out through its Technical Cooperation Programme, supported by contributions to the Technical Cooperation Fund. The United States remains the largest single contributor to the Fund, contributing more than one quarter (more than \$40 million) of its total since the 2010 Review Conference. In addition to those financial contributions, the United States provides in kind support to IAEA, including hosting its training courses, hosting fellowships under technical cooperation projects and providing cost-free experts based on IAEA needs. This vital support, which goes back decades, is a key element of our article IV efforts. We encourage all States to support the Technical Cooperation Programme by ensuring that it has the resources needed and that those resources are used efficiently and effectively.

International Atomic Energy Agency Peaceful Uses Initiative

6. At the 2010 Review Conference, the United States Secretary of State announced, on behalf of President Obama, the IAEA Peaceful Uses Initiative, to raise \$100 million in additional funding for IAEA activities for peaceful uses of nuclear energy over five years. The United States has pledged \$50 million towards this goal and is working with IAEA and other countries and contributors to match that pledge before the next Review Conference in 2015. We welcome the partnership of the Czech Republic, Hungary, Japan, New Zealand, the Republic of Korea and Sweden, and we encourage other States to support this effort. Our efforts to provide additional funding for peaceful uses through IAEA will help meet the objective of Action 55 of the 2010 Action Plan.

7. The Peaceful Uses Initiative allows contributors to support unfunded projects that have been developed and prioritized by IAEA in consultation with its member States to expand and accelerate the implementation of such technical cooperation. In the two years since the 2010 Review Conference, the United States contribution has funded more than \$18 million in specific national and regional projects of the Initiative, benefiting nearly 120 IAEA member States. In particular, the United States contributions to this campaign focus on providing developing countries with training and equipment to apply nuclear techniques in human health, food security, water resource management and developing infrastructure for the safe and secure operation of nuclear power. We look forward to continuing to work with IAEA and other contributors to support additional projects in the coming years.

8. The Peaceful Uses Initiative provides the funding flexibility needed for IAEA to be responsive to unexpected needs, such as the projects requested by member States following the 2011 accident at the Fukushima Daiichi nuclear power plant. Support for the Initiative demonstrates the ongoing commitment of the United States and other contributing States parties to the Treaty to fulfilling our article IV commitment to international cooperation in the peaceful uses of nuclear energy and to strengthening IAEA activities in this important area. Please see the written description of the United States contribution to the Initiative, which can be obtained from United States Preparatory Committee delegation members.

United States nuclear cooperation agreements

9. President Eisenhower's 1953 "Atoms for Peace" address to the General Assembly laid the foundation for civil nuclear cooperation between the United States and other countries and organizations. Currently, the United States has entered into formal, legally binding nuclear cooperation agreements involving 49 States. When engaging in nuclear cooperation, the United States is mindful of the importance of encouraging the highest standards for nuclear non-proliferation. These agreements provide the legal framework for nuclear commerce, including the export of nuclear material, nuclear reactors and significant reactor components. In the past two years, the United States has brought into force a new nuclear cooperation agreement with the Russian Federation and renewed an existing agreement with Australia.

10. In addition to nuclear cooperation agreements between the United States and other States allowing nuclear commerce, United States technical agencies have cooperative arrangements with their counterparts in more than 40 countries. Such arrangements allow for the exchange of some scientific and technological information, best practices and training. In particular, much of this cooperation seeks to develop the skilled workforce needed for the peaceful uses of nuclear energy, with necessary attention to nuclear safety, security and safeguards. Finally, the United States has bilateral nuclear cooperation committees with several countries, which provide for exchanges on a broad range of nuclear policy issues and facilitate coordination of projects in technology development, reactor and radioisotope safety, emergency management, security and safeguards.

11. In order to encourage States to minimize the use of highly enriched uranium in civilian stocks, the United States implements a reactor conversion programme, which supports the conversion of domestic and international civilian research reactors and isotope production facilities from the use of highly enriched uranium, which is usable in nuclear weapons, to low enriched uranium fuel, where technically and economically feasible.

New framework for civil nuclear cooperation

12. In April 2009, President Obama stated in Prague that, "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". In 2012 in Seoul, he referred to this new framework in calling for "an international commitment to unlocking the fuel cycle of the future". Countries in compliance with their non-proliferation obligations and considering or expanding nuclear power programmes should be assured that they will have reliable access

both to peaceful nuclear technologies and to fuel services and that they need not consider the expense and difficulty of developing indigenous enrichment or reprocessing capabilities. While the global demand for reactor fuel is expected to be met through the well-functioning international nuclear fuel market, establishing additional fuel assurance mechanisms, such as an international fuel bank, reinforces confidence. The United States has strongly supported the development of such mechanisms. We have welcomed approval by the IAEA Board of Governors of three fuel assurance mechanisms for IAEA member States. These include the nuclear fuel reserve in Angarsk, Russian Federation, which the IAEA Board of Governors approved in 2009; the low enriched uranium bank under IAEA auspices, approved in 2010; and the Model Nuclear Fuel Assurances Agreement, proposed by the United Kingdom of Great Britain and Northern Ireland and approved in 2011, which provides a mechanism for assured supply between partner States and IAEA. The IAEA low enriched uranium bank will be funded through contributions of nearly \$50 million from the United States, \$50 million from the Nuclear Threat Initiative, €25 million from the European Union, \$10 million from the United Arab Emirates, \$10 million from Kuwait and \$5 million from Norway. The United States has fully supported each of these measures and will continue to consider additional multilateral measures to ensure reliable access to nuclear fuel, an objective of Action 58 in the 2010 Action Plan.

13. In addition, in August 2011, the United States Energy Secretary formally announced the availability of nuclear fuel from the American assured fuel supply, a reserve of about 230 tons of low enriched uranium, compared with the future IAEA low enriched uranium bank of about 60 to 80 tons, derived from highly enriched uranium that is excess to defence needs. As previously announced in 2005 by the United States Energy Secretary, this material was made available from 17.4 metric tons of excess highly enriched uranium, which was blended down to low enriched uranium and is held in reserve to deal with disruptions in the nuclear fuel supply. It is stored at the Westinghouse fuel fabrication site in South Carolina, United States. Any United States supplier experiencing a fuel supply disruption for which low enriched uranium cannot be obtained through normal market conditions can apply for use of the assured fuel supply, after which it would be able to supply that fuel to foreign entities under appropriate conditions.
