Promotion of Peaceful Uses of Nuclear Energy

Joint working paper submitted by the members of the Non-Proliferation and Disarmament Initiative (Australia, Canada, Chile, Germany, Japan, Mexico, Nigeria, the Netherlands, the Philippines, Poland, Turkey and the United Arab Emirates)

The present joint working paper highlights the steps that all the parties to the Treaty on the Non-Proliferation of Nuclear Weapons can take in the pillar of the peaceful uses of nuclear energy, thereby enhancing the implementation of the Treaty and contributing to the strengthening of the three mutually reinforcing pillars of the Treaty.

Overview

1. Article IV of the Treaty on the Non-proliferation of Nuclear Weapons stipulates that nothing in the Treaty shall be interpreted as affecting the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II and III of the Treaty.

2. Under this article, nuclear science and technology and its peaceful applications have made substantial contributions to improving the quality of life and the well-being of people around the world.

3. Peaceful applications of nuclear science and technology also play a role in realizing the goals of the 2030 Agenda for Sustainable Development, and, to this end, the Non-Proliferation and Disarmament Initiative believes that access to the benefits made available by the peaceful uses of nuclear energy should be enlarged to the greatest extent practicable.

4. In this regard, it is important for States to reach out beyond those involved in the nuclear field to inform international development practitioners about the contributions that nuclear energy can make to achieving sustainable development objectives. Furthermore, ensuring the highest levels of safety and security, ensuring effective communication to stakeholders and raising public awareness of the benefits of the peaceful uses of nuclear energy are essential to building the acceptance needed to enhance the application of the peaceful uses of nuclear energy.
Basic radiation education, training and human resources development are also important for the sustainable development of the peaceful uses of nuclear energy.

Cooperation with the International Atomic Energy Agency

5. In promoting the peaceful uses of nuclear energy, the International Atomic Energy Agency (IAEA) has long played an indispensable role. The Agency’s activities under “Atoms for Peace and Development” are contributing to the implementation of the 2030 Agenda for Sustainable Development.

6. To continue responding to the growing needs in the area of nuclear science and technology applications for development, the Non-Proliferation and Disarmament Initiative encourages IAEA to work in a more systematic manner to raise awareness of its activities with key players in the field of development and to strengthen partnerships with relevant organizations to enhance the synergies between relevant activities. In this context, the International Conference on the IAEA Technical Cooperation Programme to be held in 2017, the International Ministerial Conference on Nuclear Power in the Twenty-first Century to be held in the United Arab Emirates in 2017 and the Ministerial Conference on Nuclear Science, Technology and Applications for Peaceful Uses to be held in 2018 represent important opportunities to realize this goal, and the Non-Proliferation and Disarmament Initiative will actively support these IAEA events.

7. At the same time, IAEA is encouraged to make further efforts to enhance the efficiency, effectiveness, transparency and sustainability of its technical cooperation programme. In particular, all States parties need to take responsibility to pay their target share to the IAEA Technical Cooperation Fund, which is the most important mechanism for the implementation of the technical cooperation programme, and to take practical steps to ensure higher rates of attainment for the Fund. Public-private partnerships should be strengthened with the objective of enhancing the technical cooperation programme and its socioeconomic impact in member States.

8. With regard to the enhancement of the technical cooperation programme, it should also be noted that regional cooperative arrangements, such as the Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology for Asia and the Pacific, the Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology, the Regional Cooperative Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean and the African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology, can be effective and efficient by providing assistance and facilitating technology transfer, complementing the technical cooperation activities of IAEA in individual countries and promoting South-South and triangular cooperation.

9. Furthermore, the Non-Proliferation and Disarmament Initiative welcomes the increasing number of IAEA member States that have made voluntary contributions through the Peaceful Uses Initiative to IAEA activities in relation to applying peaceful applications of nuclear technology. This has enabled the Agency to further develop its programme and to be more flexible and expeditious in responding to emergency needs, as most recently demonstrated by its swift response to the Zika virus outbreak.

10. The Non-Proliferation and Disarmament Initiative welcomes that contributions to the Peaceful Uses Initiative have reached 100 million euros in total and encourages States parties, groups of countries and relevant organizations in a position to do so to build upon this achievement.
11. The Non-Proliferation and Disarmament Initiative welcomes the steady progress on the Renovation of the Nuclear Applications Laboratories (ReNuAL) project, which will establish a strong foundation for the development of fully fit-for-purpose and modern laboratories to support continued growth in nuclear applications. The Non-Proliferation and Disarmament Initiative also encourages IAEA to make further efforts on resource mobilization for ReNuAL+.

Nuclear safety

12. While it is the prerogative of each State to establish its own national energy policy, including fuel cycle policies, in accordance with its national requirements and taking into account relevant international obligations, the use of nuclear energy must be accompanied, at all its stages, by commitments to and ongoing implementation of the highest standards of safety and security, as well as effective safeguards with full transparency.

13. To this end, the Non-Proliferation and Disarmament Initiative emphasizes the importance of the development, implementation and continuous improvement of appropriate infrastructure, as well as efforts and investments in human resources development. It is also important that States parties continue to build upon lessons learned from the Fukushima Daiichi accident to enhance worldwide nuclear safety, with scientifically based policymaking, implementation and communication to the public.

14. In developing safety infrastructure and adequate human resources, international organizations, such as IAEA, the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD) and other multilateral cooperation frameworks, have played an important role, establishing safety standards and norms, providing peer review services and sharing good practices. International cooperation through such frameworks should therefore be further encouraged.

15. In addition, while acknowledging that responsibility for nuclear safety within a State rests entirely with that State and recognizing the increasing number of countries considering introducing nuclear power to their energy supply mix, the Non-Proliferation and Disarmament Initiative affirms the importance of international cooperation in nuclear safety.

16. In this regard, States parties are encouraged to adopt the OECD common approaches for officially supported export credits and environmental and social due diligence and to host relevant IAEA peer review missions, such as the Integrated Nuclear Infrastructure Review Mission, the Integrated Regulatory Review Service and the Site and External Events Design Review Services, at the appropriate phase of a nuclear programme and prior to commissioning their first nuclear power plant in particular.

17. The Non-Proliferation and Disarmament Initiative recognizes that international conventions related to nuclear safety, including the Convention on Nuclear Safety, together with the Vienna Declaration on Nuclear Safety and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, provide a platform for international peer review and cooperation for the enhancement of nuclear safety. The Non-Proliferation and Disarmament Initiative calls upon those States parties that have not done so to participate in such conventions and all contracting parties to the conventions to work towards their effective and sustainable implementation. Those States parties who have not yet done so are also encouraged to join the international nuclear liability instruments.
Nuclear security

18. The Non-Proliferation and Disarmament Initiative welcomes the progress made over the past several years in developing and enhancing national nuclear security regimes worldwide, as noted in the communiqué issued at the 2016 Nuclear Security Summit and the ministerial declaration of the International Conference on Nuclear Security: Commitments and Actions, convened by IAEA in 2016.

19. The implementation of nuclear security and physical protection measures remains a fundamental responsibility of States in accordance with their obligations. All States should maintain, at all times, effective and comprehensive nuclear security of all nuclear and other radioactive material under their control. While recognizing the distinctions between nuclear security and nuclear safety measures, the Non-Proliferation and Disarmament Initiative also reaffirms the common aim of and important synergies between these two related areas.

20. The Non-Proliferation and Disarmament Initiative underlines that measures to strengthen nuclear security facilitate international cooperation in the fields of the peaceful uses of nuclear energy and technology and the promotion of the peaceful uses of nuclear energy, as nuclear security is essential to the responsible production, storage, transfer and use of nuclear and other radioactive material, to the exchange of nuclear material for peaceful purposes and for maintaining public support for the peaceful uses of nuclear energy.

21. States parties are encouraged to recognize the challenge posed by emerging nuclear security threats and to take the necessary action to mitigate those threats, for instance, the threat of cyberattacks against nuclear installations, and the need to take effective measures to strengthen computer security. States parties also need to ensure adequate national capabilities, based on national security threat assessments, to prevent, detect and respond to illicit trafficking of and other unauthorized activities associated with nuclear and other radioactive material.

22. The Non-Proliferation and Disarmament Initiative reaffirms the central role of IAEA in strengthening the international nuclear security architecture, in facilitating and coordinating international cooperation among relevant organizations and initiatives and in providing assistance to States parties in fulfilling their nuclear security responsibilities. In this regard, the Non-Proliferation and Disarmament Initiative welcomes the outcome of the International Conference on Nuclear Security: Commitments and Actions, organized by IAEA in Vienna in December 2016, which emphasized this role. The Non-Proliferation and Disarmament Initiative further encourages IAEA to continue to assist States, upon request, in strengthening their national regulatory control of nuclear and other radioactive material.

23. In helping IAEA fulfil its central role in facilitating and coordinating efforts to enhance nuclear security worldwide, the Non-Proliferation and Disarmament Initiative encourages States parties to provide, where feasible, IAEA with reliable and sufficient technical, financial and human resources to undertake its nuclear security-related activities, including through voluntary contributions to the IAEA Nuclear Security Fund.

24. The Non-Proliferation and Disarmament Initiative welcomes the entry into force on 8 May 2016 of the Amendment to the Convention on the Physical Protection of Nuclear Material of 2005 and stresses the importance of its full and universal implementation. All States that have not yet done so are encouraged to become parties to the amended Convention and the International Convention for the Suppression of Acts of Nuclear Terrorism and to fully implement their obligations.
25. The Non-Proliferation and Disarmament Initiative expresses its serious concern over the risk that non-State actors might acquire nuclear weapons, their means of delivery or materials needed to produce nuclear weapons, and reminds States of the necessity of fulfilling their obligations under Security Council resolution 1540 (2004).

26. The Non-Proliferation and Disarmament Initiative supports the activities of international initiatives, such as the Global Initiative to Combat Nuclear Terrorism and the Group of Eight Global Partnership against the Spread of Weapons and Materials of Mass Destruction, to continuously strengthen nuclear security as well as encourage continued engagement with relevant stakeholders, such as members of civil society and the nuclear industry. The Non-Proliferation and Disarmament Initiative welcomes the establishment of the Nuclear Security Contact Group with its aim to sustain action to address continuing and evolving nuclear security challenges.

27. The Non-Proliferation and Disarmament Initiative supports the efforts of States to provide education and training opportunities to personnel involved in nuclear science and technology and its peaceful applications, including by establishing centres of excellence. The Non-Proliferation and Disarmament Initiative further encourages centres of excellence to collaborate internationally and regionally to enhance capacity-building efforts, such as through the Nuclear Security Training and Support Centres Network and the International Nuclear Security Education Network.