2020 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

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Recognizing the IAEA's Seven Pillars in the Context of Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons

Working paper submitted by Australia, Canada, Colombia, Finland, France, Ireland, Japan, the Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland and the United States of America.

- 1. In recognition of the 50th anniversary of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and on the occasion of its 10th Review Conference, it should be noted that the NPT has provided a framework for States to benefit from the peaceful uses of nuclear energy, science, and technology ("peaceful uses"). Peaceful uses play a vital role in serving the world's energy, health, and agricultural needs, thus helping countries achieve their development objectives and the UN Sustainable Development Goals.
- 2. NPT Parties' commitment to peaceful uses is found in Article IV of the NPT, which states:

(a) Nothing in this 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 and II of this Treaty.

(b) All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also co-operate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

3. With respect to nuclear energy applications, nuclear power plants, including the development and deployment of small modular and advanced reactors, can assist the global effort to transition to clean energy by providing reliable low-carbon electricity and supporting alternative uses beyond electricity such as process heat for industrial applications, hydrogen generation, and water desalination. Non-power nuclear applications also play an increasingly important role. They

assist States Parties in addressing many diverse challenges such as combating zoonotic diseases, diagnosis and treatment of cancer, food safety, water management, or controlling plastic pollution.

- 4. Nuclear power plants and advanced reactor technologies are examples of the benefits of peaceful uses, yet nuclear facilities and materials must be safe and secure, wherever they are located. Threats to the safety and security of nuclear facilities and materials, such as those occurring from Russia's invasion of Ukraine, are entirely contrary to the global nuclear safety and security framework.
- 5. International Atomic Energy Agency (IAEA) Director General Rafael Mariano Grossi outlined his Seven Pillars of Nuclear Safety and Security in his statement to the IAEA Board of Governors meeting on March 2-3, 2022, which was convened to address the safety, security, and safeguards implications of Russia's war against Ukraine.
- 6. These Seven Pillars, derived from existing IAEA nuclear safety standards and nuclear security guidance, are as follows:

(a) The physical integrity of the nuclear facilities, whether it is reactors, fuel ponds, or radioactive waste stores, must be maintained;

(b) All safety and security systems and equipment must be fully functional at all times;

(c) The operating staff must be able to fulfil their respective safety and security duties, and have the capacity to make decisions free of undue pressure;

(d) There must be secure off-site power supply from the grid for all nuclear sites;

(e) There must be uninterrupted logistical supply chains and transportation to and from the sites;

(f) There must be effective on-site and off-site radiation monitoring systems and emergency preparedness and response measures;

(g) And finally, there must be reliable communications with the regulator and others.

- 7. We, the States Parties, that have endorsed this working paper, remain committed to Article IV of the NPT, including the inalienable right of all NPT States 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, as well as the further development of the applications of nuclear energy for peaceful purposes. We recognize that Russia's acts are not the only challenges that may impact the operations of nuclear power plants and other nuclear facilities and materials: non-state actors and civil unrest also pose challenges to existing and future facilities including advanced and small modular reactors. Such threats and risks to nuclear facilities do not respect geographical boundaries; they are and must be recognized as increasingly serious and increasingly real global challenges.
- 8. We urge all NPT States Parties to recognize the Seven Pillars as an important reflection of the basic, core indispensable elements of nuclear safety and security in all circumstances, including in a situation of armed conflict. We recognize that the Pillars reflect long-standing nuclear safety and security best practices and standards that the IAEA collected into one organizing theme in the wake of Russia's further invasion of Ukraine. The Pillars contribute to promoting States Parties' continued benefit from the peaceful uses of nuclear

technology and applications. We welcome the IAEA's role in highlighting these Pillars and in organizing assistance to help Ukraine put them into practice. In due time, we would welcome a review of lessons learned from the current conflict that might help prepare for and respond to future events.

CONCLUSION

- 9. For the NPT Review Conference, we are highlighting the Seven Pillars, given the growing development of, and existing and future challenges to, nuclear power plants, advanced reactors, and small modular reactors - in addition to nuclear facilities such as nuclear fuel production or enrichment plants. Because of Russia's reckless actions, but also with an eye to the future, we need to address new and emerging risks, threats, and technologies to further strengthen nuclear safety and security worldwide.
- 10. We see this Review Conference as an opportunity to highlight that the Seven Pillars are consistent with established best practices and standards within existing international frameworks on nuclear safety and security. The Pillars provide a guide for all countries in addressing present nuclear safety and security challenges, while maintaining the global good arising from Article IV of the Treaty.

Proposed text for outcome document

Emphasizing the inalienable right of all States Parties to develop research, production, and use of nuclear energy, science, and technology for peaceful purposes without discrimination and in conformity with Articles I and II of the Treaty, the Conference encourages all States Parties to recognize the Seven Pillars of Nuclear Safety and Security regarding peaceful nuclear facilities and materials in all circumstances, including in situations of armed conflict.