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

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Implementation of the conclusions and recommendations for follow-on actions of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

Report submitted by Norway

Introduction

1. Pursuant to action 20 of the Final Document of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, and to underline the importance of transparency and confidence-building, Norway submits the present report on national activities carried out since 2015 to implement the conclusions and recommendations of the 2010 Review Conference along the three pillars of the Non-Proliferation Treaty: nuclear disarmament, nuclear non-proliferation and peaceful uses of nuclear energy. Norway finds all three pillars to be equally important.

Pillar I: nuclear disarmament (actions 1-22)

2. Norway is fully committed to the objective of the total elimination of nuclear weapons. Nuclear disarmament can only be achieved through balanced, mutual, irreversible and verifiable reductions of nuclear weapons. The Non-Proliferation Treaty is the cornerstone of our collective efforts.

3. Implementation of commitments under the Non-Proliferation Treaty is a key element of Norway's disarmament and non-proliferation efforts. Norway's priorities across all pillars are as follows:

- To continue Norway's nuclear disarmament verification efforts. This work is being advanced at the United Nations level through the International Partnership for Nuclear Disarmament Verification and the Quad Nuclear Verification Partnership with Sweden, the United Kingdom and the United States.
- To promote measures to reduce the risk of nuclear weapons being used, such as steps to improve early warning systems and to decrease the operational readiness of nuclear weapons.





- To promote confidence-building measures, such as greater transparency on the part of nuclear-weapon States and strengthened negative security assurances.
- To participate actively in initiatives for nuclear disarmament, notably Creating an Environment for Nuclear Disarmament and Stepping Stones for Advancing Nuclear Disarmament (Stockholm Initiative for Nuclear Disarmament).
- To strengthen non-proliferation efforts by promoting universal adherence to the International Atomic Energy Agency (IAEA) Comprehensive Safeguards Agreement and the Additional Protocol thereto.
- To strengthen the global norm against nuclear testing by calling for the entry into force of the Comprehensive Nuclear-Test-Ban Treaty.
- To promote negotiations on, and the adoption of, a fissile material cut-off treaty, as well as practical measures to reduce existing fissile material stocks.
- To derive the greatest possible practical benefits from peaceful uses of nuclear technology that can play a part in achieving the Sustainable Development Goals in areas such as health, food and water security and environmental monitoring.
- To strengthen cooperation with like-minded allies to promote Norway's disarmament policy priorities. Norway will work with countries from other regional groups to counteract polarization between countries that have ratified the Non-Proliferation Treaty.
- To continue Norway's long-standing engagement in nuclear security to prevent nuclear and radiological material from falling into the wrong hands. Minimizing and phasing out the use of highly enriched uranium will continue to be priorities.

Norway has put forward and supported several initiatives in the United Nations 4. that are delivering tangible results. We have taken a leading international role in the field of nuclear disarmament verification. Norway headed the effort regarding General Assembly resolution 71/67, which led to the establishment of the Group of Governmental Experts on Nuclear Disarmament Verification. Norway chaired the Group, which held its first meeting in Geneva in May 2018. The Group ended its work in April 2019 and presented its consensus report (A/74/90) to the General Assembly in autumn 2019. It was concluded in the report that "verification is essential in the process of nuclear disarmament and to achieving a world without nuclear weapons" and that "[a] credible verification regime in which all States have confidence will be essential for maintaining a world without nuclear weapons". Based on the report, the General Assembly adopted resolution 74/50 in December 2019. The aim of the resolution was twofold: to gain the approval of the General Assembly of the Group's report and to decide on follow-on activities within the framework of the United Nations. In the resolution, the establishment of another group of governmental experts on nuclear disarmament verification, which would carry out its activities between 2021 and 2022, was called for, which means that this important work will continue within the United Nations framework. Norway stands ready to chair this group. Norway is a champion of action 8 of the Agenda for Disarmament of the Secretary-General, nuclear disarmament verification.

5. Nuclear disarmament and promoting the full implementation of the Non-Proliferation Treaty has been a policy priority for Norway for decades, and the Storting (parliament) reaffirmed by consensus its support for the policy in 2016.

6. Norway reaffirms its commitment to applying the principles of irreversibility, verifiability and transparency in relation to the implementation of its obligations under the Non-Proliferation Treaty. In addition to its work on verification, Norway is submitting a separate working paper on the principle of irreversibility.

7. Norway is emphasizing the rapid entry into force of the Comprehensive Nuclear-Test-Ban Treaty. Norway is committed to negotiations on a treaty to cap the production of fissile materials, including addressing existing stocks.

8. Norway has supported a wide range of disarmament actions through its grant schemes for disarmament and non-proliferation. The programmes supported promote the dissemination of information on policies and frameworks connected to disarmament. The overall goals of these programmes are to inform and engage the public and to secure competence and capacity in developing countries in the field of disarmament.

9. Norway supports initiatives to build capacity and diversity. Educating the next generation of arms control experts is of crucial importance. Norway has therefore supported the Oslo Nuclear Project under the auspices of the University of Oslo. The Project provides research-based analyses, education and training to a new generation of experts on nuclear weapons and international security. It brings together the perspectives of academics and practitioners on some of the key challenges in the areas of non-proliferation and arms control.

10. Nuclear disarmament and non-proliferation cannot be viewed in isolation from nuclear security efforts. Norway is therefore a strong supporter of efforts to reduce stocks of highly enriched uranium and to limit and eventually eliminate the use of highly enriched uranium.

11. Norway is a member of the North Atlantic Treaty Organization (NATO). On 5 March 2020, NATO released a statement on the Non-Proliferation Treaty, marking the fiftieth anniversary of its entry into force. In the statement, NATO allies reaffirmed their support for the ultimate goal of a world without nuclear weapons in full accordance with all provisions of the Treaty, including article VI, in an ever more effective and verifiable way that promotes international stability and is based on the principle of undiminished security for all.

12. The Norwegian authorities maintain close contact with research institutions and civil society organizations in Norway and other countries on issues relating to nuclear disarmament.

13. Norway has co-sponsored and voted in favour of multiple General Assembly resolutions promoting nuclear disarmament and non-proliferation, including resolutions emphasizing elimination of nuclear weapons.

14. Norway has encouraged improved dialogue aimed at confidence- and securitybuilding measures to enhance transparency and reduce risk. One of Norway's priorities is greater transparency on the part of nuclear-weapon States and strengthened negative security assurances.

15. As a member of the Conference on Disarmament, Norway supported the establishment of a set of subsidiary bodies within the Conference in 2018, including a body to discuss nuclear disarmament and a body for effective international arrangements, to safeguard non-nuclear-weapon States against the use or threat of use of nuclear weapons.

16. Norway participated actively in the 2016 Open-ended Working Group in Geneva taking forward multilateral nuclear disarmament negotiations, and submitted papers together with like-minded countries on a progressive approach to nuclear disarmament.

Nuclear-weapon-free zone treaties

17. Norway is a strong supporter of nuclear-weapon-free zones established on the basis of arrangements freely arrived at among the States of the region concerned.

18. Norway has supported resolutions on treaties for existing nuclear-weapon-free zones during the current review cycle (the seventy-first, seventy-second, seventy-third and seventy-fourth sessions of the General Assembly, 2016–2020), including the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (the Treaty of Tlatelolco), the Treaty on the Southeast Asia Nuclear Weapon-Free Zone (the Bangkok Treaty), the African Nuclear-Weapon-Free Zone Treaty (the Treaty of Pelindaba) and the Treaty on a Nuclear-Weapon-Free Zone in Central Asia.

19. Norway has supported Mongolia's self-declared nuclear-weapon-free status by supporting General Assembly resolutions 71/43 and 73/44 on Mongolia's international security and nuclear-weapon-free status and resolution 73/71 on the fourth Conference of Nuclear-Weapon-Free Zones and Mongolia, 2020.

20. Norway continues to support the establishment of a Middle East zone free of nuclear weapons and other weapons of mass destruction, freely arrived at among States of the region (most recently, resolution 74/30).

Comprehensive Nuclear-Test-Ban Treaty

21. Norway ratified and deposited its instruments of ratification of the Comprehensive Nuclear-Test-Ban Treaty on 15 July 1999. Norway has fulfilled its responsibilities under the International Monitoring System. There are six monitoring stations on Norwegian territory, all of which have been certified to comply with all technical requirements and specifications by the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization. These stations are transmitting their data continuously to the International Data Centre of the Preparatory Commission in Vienna.

22. Norway's contributions to verification and the verification regime are aimed at enhancing confidence and security-building measures.

23. Norway has repeatedly called upon all remaining States to sign and ratify the Comprehensive Nuclear-Test-Ban Treaty, in particular the remaining eight annex 2 States whose ratifications are needed for the Treaty to enter into force. Norway has made numerous efforts to promote the Treaty's entry into force, including through its support for the Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty.

24. The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization in Vienna is implementing the Treaty's verification regime in preparation for its entry into force. Since 1997, Norway has, without interruption, contributed experts who have helped to organize the work in the Preparatory Commission technical policymaking organs on behalf of all Member States.

25. Norway supports the modernization effort aimed at the International Data Centre and the International Monitoring System and considers this effort to be an essential element in maintaining the sustainability and credibility of the verification regime of the Comprehensive Nuclear-Test-Ban Treaty.

26. Norway has contributed financially to Comprehensive Nuclear-Test-Ban Treaty capacity-building activities, including training courses for developing countries.

27. Norway supports the Comprehensive Nuclear-Test-Ban Treaty Young Professionals Network, a community of young scientists and professionals working on monitoring and verification of the Treaty. The network was created to enable a new generation of experts to take the work of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization forward.

28. Norway has contributed financially and technically to capacity-building in Central Asia within the field of Comprehensive Nuclear-Test-Ban Treaty verification.

A key activity in this regard has been the establishment and operation of a training centre in Almaty, in close cooperation with experts in Kazakhstan. Since 2010, more than 100 people from the five countries in Central Asia have attended month-long courses that include lectures and hands-on training.

29. Norway will continue to work to ensure that the Comprehensive Nuclear-Test-Ban Treaty enters into force.

Fissile material cut-off treaty

30. Norway considers it a priority for the Conference on Disarmament to start negotiations on a non-discriminatory, multilateral and effectively verifiable fissile material cut-off treaty. Such a treaty is the next logical step in the multilateral arms control agenda and is essential to advance nuclear disarmament. Over the past five years, Norway has supported resolutions in the General Assembly on forwarding the fissile material cut-off treaty agenda and calling for early commencement of negotiations on such a treaty.

31. It is necessary to deal with the entire field of weapons-usable material comprehensively. All nuclear-armed States should conclude and implement arrangements to place fissile material no longer required for military purposes under the IAEA verification regime. Norway advocates the principle of irreversible disposition to ensure that excess stockpiles of fissile material remain outside the military cycle. To that end, IAEA monitoring is required.

Nuclear disarmament verification

32. As noted in the introduction of the present report, Norway has been actively promoting work on nuclear disarmament verification. Norway has been engaged in this field for more than a decade. The engagement began as a bilateral cooperation between the United Kingdom and Norway - a nuclear-weapon State and a non-nuclear-weapon State. The rationale was to show that a non-nuclear-weapon State could engage in nuclear disarmament verification without being in breach of non-proliferation obligations under the Non-Proliferation Treaty. The United Kingdom-Norway Initiative explored solutions to the problems of information barriers and managed access, described in working papers NPT/CONF.2010/WP.41 and NPT/CONF.2015/WP.31. The bilateral cooperation was expanded in 2016 to include the United States and Sweden, forming the Quad Nuclear Verification Partnership. The Quad conducted the large-scale LETTERPRESS exercise in 2017. The Partnership continues the technical work to develop an in-depth methodology, procedures and techniques for incorporating non-nuclear-weapon States into nuclear weapon disarmament verification. A working paper on the efforts of the Quad (NPT/CONF.2020/WP.2) will be presented for the tenth Review Conference.

33. Norway has been an active partner in the International Partnership for Nuclear Disarmament Verification, which hosted its first plenary session in Oslo in fall 2015. Norway has been supportive of outreach activities.¹ Norway will continue to support and engage with the Partnership.

34. Norway has advocated establishing a multilateral funding mechanism for capacity-building with regard to nuclear disarmament verification under the auspices of the Office for Disarmament Affairs.

¹ Norway participated in planning for the Geneva Outreach Symposium originally planned for March 2020. Owing to the coronavirus disease (COVID-19) pandemic, the organizers and hosts decided that the event could not be held on the scheduled dates.

35. Norway has provided financial support to several civil society projects involving nuclear disarmament verification, with a particular focus on building regional hubs and capacities on this topic. Norway has contributed financial support to the inclusion of developing countries as active participants in the International Partnership for Nuclear Disarmament Verification.

Transparency and reporting

36. To increase transparency under the Non-Proliferation Treaty, Norway is submitting the present national report to the 2020 Review Conference and will continue to carry out updated reporting in future review cycles.

37. The previous reports of Norway on implementation of article VI of the Non-Proliferation Treaty and paragraph 4 (c) of the 1995 decision on principles and objectives for nuclear non-proliferation and disarmament are documents NPT/CONF.2005/PC.II/34, NPT/CONF.2005/PC.III/28, NPT/CONF.2005/36, NPT/CONF.2010/PC.I/18 and NPT/CONF.2010/PC.II/12.

Education

38. It is important to ensure ongoing competence and capacity in the field of disarmament and non-proliferation. Norway is supporting a research and education programme at the University of Oslo that offers analyses of challenges relating to nuclear weapons and international security and educates a new generation of experts in these areas. Norway is supporting capacity-building programmes through the United Nations Institute for Disarmament Research and the Vienna Centre on Disarmament and Non-Proliferation.

39. Norway supports a key project, led by the Norwegian Institute of International Affairs, that is focused on Asia. The project is aimed at providing policy-relevant insights on how to promote arms restraint and foster new progress on nuclear disarmament. The project uses cooperation with and outreach to scholars, practitioners and civil society groups, including partners in developing countries, to promote capacity-building and ideas for new and innovative approaches. It seeks to provide platforms through which participants from rival nuclear-armed States can exchange ideas on arms restraint and disarmament.

40. Norway supports capacity-building projects through the Verification Research, Training and Information Centre. The project is aimed at supporting the work of the Group of Governmental Experts on Nuclear Disarmament Verification and enhancing the existing knowledge base of verification techniques to determine how to strengthen it and guide it towards the future. The objective is to build on the network of international expertise in nuclear disarmament verification and existing capabilities in selected countries to develop regional hubs. The hubs that the Centre is focused on are in South America (Argentina and Brazil), Africa (South Africa) and Central Asia (Kazakhstan). Norway supports a new research project from the United Nations Institute for Disarmament Research on verification of nuclear disarmament. The project will explore practical application of an approach to disarmament verification based on confirming the absence of nuclear weapons. Norway supports a Convention on Nuclear Safety project that seeks to provide guidance on how to tackle the political, technical and legal issues involved in verifying non-strategic nuclear warhead holdings.

Pillar II: nuclear non-proliferation (actions 23-46)

41. Norway participates in the work of the Vienna Group of Ten, which has submitted a working paper to the Review Conference on seven topics for consideration: the Comprehensive Nuclear-Test-Ban Treaty; compliance and verification; export controls; cooperation in the peaceful uses of nuclear energy; nuclear safety; nuclear security; and discouraging withdrawal from the Non-Proliferation Treaty (NPT/CONF.2020/WP.3).

Nuclear safeguards

42. Norway signed the Non-Proliferation Treaty in 1970. The Comprehensive Safeguards Agreement was entered into in 1972, and the Additional Protocol thereto in 2000. Integrated safeguards were implemented in Norway in 2002, after IAEA was able to draw the broader conclusion that all nuclear material in Norway remained in peaceful use. A State-level safeguards approach for Norway was approved in 2016.

43. Norway continues to promote the universal acceptance of the IAEA Comprehensive Safeguards Agreement and its Additional Protocol as the international verification standard, and it calls upon all States that have not yet done so to sign and bring into force the Additional Protocol.

44. Norway has long experience with the implementation of the Comprehensive Safeguards Agreement, including the Additional Protocol thereto. Norway has, on several occasions, shared its expertise with countries that are considering, or are in the process of implementing, the Additional Protocol.

45. The IAEA Board of Governors approved the Protocol Additional to the Agreement between Norway and IAEA for the Application of Safeguards in Connection with the Non-Proliferation Treaty on 24 March 1999. It was signed in Vienna on 29 September 1999 and entered into force on 16 May 2000.

46. The Norwegian Radiation and Nuclear Safety Authority is responsible for the State System of Accountancy and Control. The Authority performs inspections of nuclear sites or facilities in Norway independently or together with IAEA.

47. Every year since 2002, when the integrated safeguards approach is implemented, IAEA has been able to draw the broader conclusion that all nuclear material in Norway remains in peaceful use.

48. Norway has good communication with IAEA concerning the implementation of the State-level integrated safeguards approach. Norway welcomes close dialogue with IAEA on further developing safeguards and making them more effective.

49. Norway participates actively in the European Safeguards Research and Development Association, an association of European organizations formed to advance and harmonize research and development in the area of safeguards. The Association provides a forum for the exchange of information and ideas between nuclear facility operators, safeguards authorities and persons engaged in research and development.

50. Norway is particularly engaged with the European Safeguards Research and Development Association Implementation of Safeguards Working Group, whose main objectives are to share experiences and discuss how to further develop safeguards.

51. Norway has paid all its assessed contributions to IAEA, as well as made voluntary contributions to the IAEA Technical Cooperation Fund. For the current review cycle, Norway has provided financial support for the Renovation of the Nuclear Applications Laboratories projects (ReNuAL and ReNuAL Plus), the Peaceful Uses Initiative, the Nuclear Security Fund and human resources in the form of Junior Professional Officers. Norway has contributed financially to the establishment and operation of the IAEA Low Enriched Uranium Bank in Kazakhstan.

Export controls

52. Under the Export Control Act of 18 December 1987, goods and technology that may be of significance to other countries' development, production or use of military products, or that may directly serve to develop a country's military capability, or goods and technology that may be used to carry out terrorist acts, may not be exported from the Norwegian customs area without special permission.

53. Norway is an active member in all the multilateral export control regimes, including the Zangger Committee, the Nuclear Suppliers Group, the Missile Technology Control Regime, the Australia Group and the Wassenaar Arrangement. The respective guidelines and control lists are implemented through Norwegian legislation and an effective licensing system. Norway consistently reports its denials to the respective export control regimes.

54. Nuclear materials and goods that can be used to manufacture such materials are subject to a licensing requirement. Goods that can, directly or indirectly, contribute to the development and production of nuclear weapons or other nuclear explosive devices, or their delivery systems, are also subject to export controls. Specific conditions of supply must be fulfilled before the export of nuclear materials can be permitted.

55. When making decisions regarding the export of nuclear-related goods, Norway ensures that the safeguards and compliance records of recipient States are taken into account. When deciding on granting an export licence, security concerns always prevail over economic interest. Each licence application is handled on a case-by-case basis and involves a risk assessment based on the nature of the goods and a general assessment of the recipient State, including its track record in non-proliferation commitments, the bona fides of the end user and the stated end use, the potential risk of unwanted end use and the risk of diversion. Furthermore, a condition of supply involves a requirement of Government-to-Government assurances, including assurances that IAEA safeguards are applied to the material in question.

56. Norway has implemented its requirements under Security Council resolution 1540 (2004), in which the Council decided that all States should refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes. Norway plays an active role on the Security Council Committee established pursuant to resolution 1540 (2004).

57. Norway has had two research reactors in operation for more than 50 years: the Halden boiling water reactor in Halden and the Joint Establishment Experimental Pile (JEEP) II reactor in Kjeller. Those reactors were shut down permanently in 2018 and 2019, respectively. Research on reactor safety has been performed in connection with both reactors, in particular under the Halden project, in which national organizations in 19 countries are collaborating on a joint programme under the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD). Although the Halden reactor has been shut down, the OECD project is continuing, in particular activities within the Man-Technology-Organization programme, which is focused on advances in human factors, human reliability and human-machine interaction in support of upgraded and new control rooms. The programme activities include condition-based maintenance and planning and training for decommissioning.

58. Norway places great importance on the security of nuclear materials and facilities and is committed to continuous improvement of its nuclear security regime.

59. International Physical Protection Advisory Service missions were held in Norway in 2003 and 2015. The missions provided a valuable contribution to ongoing efforts to improve nuclear security in Norway. Following the recommendations of the 2015 International Physical Protection Advisory Service mission, a government forum for the protection of nuclear installations and nuclear fuel was established. The government forum was designed to promote ongoing development of the nuclear security regime in Norway and strengthen coordination between the involved parties.

60. Norway continues to implement its commitments from the Nuclear Security Summit process. After Norway launched a gift basket at the 2016 Nuclear Security Summit on minimizing and eliminating the use of highly enriched uranium in civilian application, a follow-up international symposium on highly enriched uranium minimization was organized in Oslo in 2018. In 2019, Norway held an international meeting on minimization of stocks of highly enriched uranium in a uranium-thorium mixture. Norway has managed to remove all the caesium source-based blood irradiators at hospitals and replace them with X-ray technology, which is less of a security concern. Norway has cooperated extensively and internationally on nuclear security matters, including through the Nuclear Security Contact Group, the Group of Seven Global Partnership and the Global Initiative to Combat Nuclear Terrorism. Norway contributes to the Nuclear Security Guidance Committee of IAEA, as well as other agency-led initiatives.

61. The nuclear action plan of the Government of Norway supports non-proliferation activities in Russia, Ukraine and potentially other countries in Eurasia. Activities under this funding mechanism include cooperation with the Russian authorities on removal of legacy spent nuclear fuel and on physical protection during transport and at storage facilities. In Ukraine, radiation portals have been installed at border crossings, radiation detection equipment has been provided and training is carried out. The aim is to enhance the capability of the Ukrainian border guard to detect material out of regulatory control. There is regulatory cooperation with the radiation protection authority in Ukraine to enhance security measures.

62. Norway has implemented the recommendations contained in IAEA document INFCIRC/225/Rev.4 on physical protection of nuclear material and nuclear facilities in national legislation.

63. Norway is a party to the Convention on the Physical Protection of Nuclear Material and Nuclear Facilities and deposited its instrument of acceptance to the Amendment to the Convention on 20 August 2009, which entered into force through national legislation in May 2016. Norwegian laws and regulations governing nuclear security comply with the Convention, its annexes and its Amendment. On 11 November 2019, Norway submitted a national report to IAEA on its laws and regulations in accordance with article 14.1 of the Convention.

64. Norway supports a successful Review Conference on the Amendment to the Convention on the Physical Protection of Nuclear Material and Nuclear Facilities in 2021 and is using every opportunity to encourage other States to sign and ratify the Convention and the Amendment thereto. Norway has provided financial support to facilitate the participation of a broad range of States parties in the preparatory process leading up to the Review Conference on the Amendment to the Convention.

65. Norway has adopted the IAEA Code of Conduct on the Safety and Security of Radioactive Sources, including its supplementary guidance, and has participated in the relevant international meetings on the Code since it was adopted, in 2004.

66. Norway remains committed to the Global Initiative to Combat Nuclear Terrorism and is engaged in efforts internationally to strengthen prevention, detection and response to nuclear smuggling and nuclear terrorism. Norway is planning to

co-host a regional Global Initiative event in Oslo in September 2021, together with Finland, that is focused on the exchange of information on radioactive materials outside of regulatory control in the Nordic-Baltic countries.

67. Norway submitted its national report on the implementation of Security Council resolution 1540 (2004) on 28 October 2004 (S/AC.44/2004/(02)/31), with additional information submitted on 12 October 2005 (S/AC.44/2004/(02)/31/Add.1).

68. The Incident and Trafficking Database is a valuable mechanism that contributes to nuclear security internationally. Norway is one of the 138 States participating in the Database programme.

69. Through the European Economic Area Grants and the Norway Grants, Norway has funded several workshops, in addition to projects, on nuclear safety and security in countries in Eastern Europe, such as Romania and Slovakia. The project in Slovakia increased the capability to detect and deter smuggling of nuclear material on the border with Ukraine and enhanced mutual cooperation and information exchange.²

Pillar III: peaceful uses of nuclear energy (actions 47-64)

70. Norway makes extensive use of ionizing radiation in medicine and industry. Very few category 1 radioactive sources remain, as linear accelerators or X-ray irradiators are used instead. Two new proton therapy centres are being built. Industrial uses are largely related to Norway's comprehensive oil and gas industry and are dominated by industrial radiography and well logging.

71. Norway has been supporting regulatory capacity-building over a long period of time in Eastern Europe and Central Asia and is providing an extra budgetary contribution to IAEA (through the Norway Grants) to gain support for specific projects.

72. A number of nuclear safety and security projects are financed under the European Economic Area Grants and the Norway Grants. These projects are closely coordinated with activities carried out under the nuclear action plan of the Government of Norway, first established in 1995 and revised five times since.³ Many of the projects are conducted in cooperation with IAEA.

73. Together with Peru, Norway co-chaired the Working Group on the Regular Budget and Technical Cooperation Fund Targets for 2020–2021 for the IAEA Draft Programme and Budget 2020–2021 (GOV/2019/25).

74. Actions 24, 25 and 42 provide information on comprehensive safeguards agreements, additional protocols and the Convention on the Physical Protection of Nuclear Material and Nuclear Facilities. The Nuclear Energy Act of 12 May 1972 (amended in 2018) relates to the development and utilization of nuclear energy in Norway. The Act establishes a licensing regime for nuclear installations and nuclear materials and sets out a third-party liability regime for compensation for nuclear damage. The Act on Radiation Protection and Use of Radiation (No. 36 of 12 May

² More information on the programme in Slovakia is available at https://eeagrants.org/news/ programme-agreement-signed-good-governance-and-cross-border-cooperationprogrammeslovakia. More information on the programme in Romania is available at www2.dsa.no/en/topicarticles/91967/a-norway-grants-project-with-romania and https://eeagrants.org/archive/2009-2014/projects/RO18-0001.

³ In 1995, the Government of Norway adopted a nuclear action plan to address a 1994 white paper on nuclear activities and chemical weapons in areas adjacent to Norway's northern borders (report No. 34 (1993–1994) to the Storting (parliament)), including nuclear waste from the arms race. The action plan was revised in 1998, 2005, 2008, 2013 and 2018. The Storting allocated close to 2 billion Norwegian kroner for the action plan between 1995 and the current period of 2018–2022.

2000) regulates all use of ionizing radiation for both workers and the public. In additional, the Regulations on Radiation Protection and Use of Radiation (Radiation Protection Regulations) are aimed at ensuring the proper use of radiation, preventing harmful effects of radiation on human health and contributing to the protection of the environment. The Act of 13 March 1981 No. 6 Concerning Protection Against Pollution and Concerning Waste, which relates to radioactive pollution and radioactive waste, regulates such pollution and waste.

Nuclear safety

75. Norway supports the highest standards of nuclear safety. Norway is party to, implements and fulfils its obligations to all relevant treaties in the area of nuclear safety, including, but not limited to: the Convention on Nuclear Safety (signed on 21 September 1994, ratified on 29 September 1994 and entered into force on 24 October 1996), the Convention on Early Notification of a Nuclear Accident (signed on 26 September 1986, ratified on 26 September 1986 and entered into force on 27 October 1986), the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (signed on 26 September 1986, ratified on 26 September 1986 and entered into force on 26 February 1987) and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (signed on 29 September 1997, ratified on 12 January 1998 and entered into force on 18 June 2001).

76. Norway is party to and implements the International Convention for the Suppression of Acts of Nuclear Terrorism (signed on 16 September 2005 and ratified on 20 February 2014).

77. The IAEA standards for safety and security are being utilized and are implemented in the licence conditions in the regulation of the nuclear facilities at Institute for Energy Technology.

78. In June 2019, Norway hosted the Integrated Regulatory Review Service of IAEA. The team performed a two-week mission to review the regulatory safety framework in Norway. The mission was conducted at the request of the Government of Norway and hosted by the Norwegian Radiation and Nuclear Safety Authority. Following the review, the team documented the identified good practices, recommendations and suggestions in a report.

79. Norway has participated in all review meetings of the contracting parties to the Convention on Nuclear Safety, including an extraordinary meeting. In the period from 1999 to 2019, Norway has submitted national reports on the implementation of the obligations of the Convention on Nuclear Safety. Norway participated in all the Joint Convention review meetings and submitted national reports on the implementation of the obligations of the Joint Convention in the period from 2003 to 2018. All reports to the Convention on Nuclear Safety and Joint Convention are publicized. Norway is participating in the IAEA Nuclear Security Guidance Committee and the Nuclear Safety Standards Committee, in addition to other relevant committees (the Radiation Safety Standards Committee and the Emergency Preparedness and Response Standards Committee).

80. Norway participates in working groups to exchange and share experiences, such as the Western European Nuclear Regulators Association, the European Nuclear Security Regulators Association and the European Safeguards and Research Development Association. Norway has committed itself to the Code of Conduct for the Safety of Research Reactors, as well as to the Code of Conduct on the Safety and Security of Radioactive Sources. Through its cooperation with countries in Eastern Europe, Norway has funded several workshops on nuclear safety and security. 81. Norway has been a strong supporter of highly enriched uranium minimization and has hosted three international symposiums on highly enriched uranium minimization, in 2006, 2012 and 2018, in cooperation with IAEA. Norway has led efforts on a joint statement on minimizing and eliminating the use of highly enriched uranium in civilian applications, circulated as IAEA document INFCIRC/912 and supported by 23 countries. To further minimize remaining stocks of highly enriched uranium that are technically difficult to process, Norway hosted a technical meeting on minimizing highly enriched uranium in a uranium-thorium mixture in 2019, in cooperation with the National Nuclear Security Administration of the United States Department of Energy, to share knowledge on potential technical solutions and disposition options.

82. Norway has provided extrabudgetary support to IAEA to contribute to conversion efforts in Eastern European and miniature neutron source research reactors. Norway has contributed financially to the repatriation of a spent highly enriched uranium core from Nigeria to China in 2018.

83. Norway supports the principles enshrined in the nuclear liability conventions. The regulations governing nuclear third-party liability are set out in the Act of 12 May 1972 on Nuclear Energy Activities. The Act enabled Norway to ratify the 1960 Paris Convention on Third-Party Liability in the Field of Nuclear Energy, on 2 July 1973, and the 1963 Brussels Supplementary Convention, on 7 July 1973.

84. Norway ratified the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention on 11 March 1991.

85. On 23 November 2010, Norway ratified the additional protocol to amend the Paris Convention on nuclear third-party liability. The protocol is not yet in force.

86. On 26 November 2010, Norway ratified the additional protocol amending the Brussels Supplementary Convention on third-party liability in the field of nuclear energy. The protocol is not yet in force.

87. Norway is committed to continuing to improve its nuclear security regime. Norway contributes to the Nuclear Security Guidance Committee of IAEA, as well as to other agency-led initiatives, and is committed to international cooperation on nuclear security matters.

88. To strengthen the physical protection of its nuclear facilities, Norway has implemented the Government Forum for Protection of Nuclear Fuel. The Forum is designed to promote the ongoing development of the nuclear security regime in Norway.

89. Norway invited IAEA to conduct an International Physical Protection Advisory Service mission to Norway in 2015. The recommendations of that mission are being implemented.