

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

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National report on measures and activities under the Treaty on the Non-Proliferation of Nuclear Weapons

Report submitted by Georgia

1. Georgia continues to pay special attention to nuclear and radiological security issues. Important steps have been taken for strengthening the nuclear security of the country that have included significant developments at the legislative, institutional, operational and international levels.
2. Georgia supports the existing global nuclear security architecture by implementing its requirements at the national level and demonstrating commitment towards international legal instruments. At the same time, the Government of Georgia actively continues the capacity-building process of its law enforcement and security agencies designated for combating nuclear security violations.
3. Georgia is a party to the following seven universal conventions regarding nuclear and radioactive security:
 - (a) Treaty on the Non-Proliferation of Nuclear Weapons, adopted at London, Moscow and Washington, D.C., on 1 July 1968 – in force for Georgia since 7 March 1994;
 - (b) Convention on the Physical Protection of Nuclear Material, adopted at Vienna on 3 March 1980 – in force for Georgia since 7 October 2006;
 - (c) Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, adopted at Vienna on 5 September 1997 – in force for Georgia since 20 October 2009;
 - (d) International Convention for the Suppression of Acts of Nuclear Terrorism, adopted in New York on 13 April 2005 – in force for Georgia since 23 April 2010;
 - (e) Convention on Early Notification of a Nuclear Accident, adopted at Vienna on 26 September 1986 – in force for Georgia since 5 November 2010;
 - (f) Amendment to the Convention on the Physical Protection of Nuclear Material, adopted at Vienna on 8 July 2005 – in force for Georgia since 8 May 2016;
 - (g) Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, adopted at Vienna on 26 September 1986 – in force for Georgia since 10 May 2018.



4. The status of Georgia of being a party to the international treaties relevant to the report is provided in the table below.

	<i>Title</i>	<i>Status^a</i>
1754	Agreement between the Republic of Georgia and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons	Signature: 29 September 1997
1755	Protocol Additional to the Agreement between the Republic of Georgia and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons	Signature: 29 September 1997
CPPNM	Convention on the Physical Protection of Nuclear Material	Accession: 7 September 2006
CPPNM/A	Amendment to the Convention on the Physical Protection of Nuclear Material	Acceptance: 5 April 2012
NOT	Convention on Early Notification of a Nuclear Accident	Accession: 6 October 2010
ASSIST	Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency	Accession: 10 April 2018
NS	Convention on Nuclear Safety	Non-party
RADW	Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management	Accession: 22 July 2009
ICSANT	International Convention for the Suppression of Acts of Nuclear Terrorism	Accession: 23 April 2010
SUPP	Convention on Supplementary Compensation for Nuclear Damage	Non-party
VC	Vienna Convention on Civil Liability for Nuclear Damage	Non-party
PC	Paris Convention on Third Party Liability in the Field of Nuclear Energy	Non-party

^a For more information, see <https://ola.iaea.org/Applications/FactSheets/Country/Detail?code=GE>.

5. Among the other laws and by-laws that, inter alia, deal with the issues related to nuclear and radioactive security, are the following:

- Law of Georgia on Nuclear and Radiation Safety (prohibits any form of non-peaceful use of nuclear or radioactive materials in the territory of Georgia)
- Law of Georgia on Radioactive Waste (determines the security and safety requirements of radioactive waste management for activities related to radioactive waste and relevant operations)
- Law of Georgia on Licence and Permits (according to this law, any activity related to trading in nuclear and radioactive materials is subject to special licensing)
- Resolution No. 689 of the Government of Georgia on the approval of the Technical Regulations on Categorization of Sources of Ionizing Radiation,

Creation and Maintenance of Registry of Authorization, Sources of Ionization Radiation and Radioactive Waste, adopted on 19 December 2014

- Resolution No. 756 of the Government of Georgia on the approval of the Technical Regulations on the Monitoring of Metal Scrap, adopted on 31 December 2014
- Resolution No. 359 of the Government of Georgia on the approval of the Technical Regulations on the Individual Monitoring and Control Procedure, adopted on 20 July 2015
- Resolution No. 450 of the Government of Georgia on the approval of Technical Regulations on Radiation Safety Norms and Basic Requirements Related to the Handling of Ionizing Radiation Sources, adopted on 27 August 2015
- Resolution No. 189 of the Government of Georgia on the approval of the Technical Regulations on the Rules for Handling Radioactive Waste, adopted on 18 April 2016
- Resolution No. 317 of the Government of Georgia on the approval of the Technical Regulations on Radiation Safety Requirements in the Sphere of Medical Irradiation, adopted on 7 July 2016
- Resolution No. 558 of the Government of Georgia on the approval of the Technical Regulations on Radiation Safety Requirements in Industry, Science and Education, adopted on 15 December 2016
- Resolution No. 123 of the Government of Georgia on the approval of the Technical Regulations on the Main Requirements towards the Assessment of the Safety of Radioactive Waste Management Facilities, adopted on 10 March 2017
- Resolution No. 124 of the Government of Georgia on the approval of the Technical Regulations on the Main Requirements towards the Assessment of the Safety of Radioactive Waste Disposal Facilities, adopted on 10 March 2017
- Resolution No. 72 of the Government of Georgia on the approval of the Technical Regulations on Rules for transport of nuclear and radioactive substances, adopted on 7 February 2018
- Resolution No. 640 of the Government of Georgia on the approval of the Technical Regulations on Preparedness and Response Plan for Nuclear and Radiation Emergency, adopted on 24 December 2019
- Order No. 150 of the Minister of Environment and Natural Resources Protection of Georgia on Rules for Responses to Illicit Trafficking of Nuclear and Radioactive Materials, adopted on 8 December 2014
- Order No. 39 of the Minister of Environment and Natural Resources Protection of Georgia on Approval of the Procedure for Carrying out Activities Connected to Nuclear Non-proliferation Safeguards, adopted on 29 November 2016
- Order No. 26 of the Minister of Environment and Natural Resources Protection of Georgia on Physical Security (Protection) of Nuclear and Radiation Facilities, Radioactive Sources and Waste and Other Sources of Ionizing Radiation, adopted on 26 July 2017
- Order No. 2-763 of the Minister of Environment and Natural Resources Protection of Georgia on the Rules for Inspection of Nuclear and Radiation Activity, adopted on 9 August 2019

6. The governmental Interagency Coordinating Council of Georgia on Combating Chemical, Biological, Radiological and Nuclear Threats has been functioning effectively

since February 2014. Georgia has a national chemical, biological, radiological and nuclear threat reduction strategy elaborated by the Council. The strategy has been updated by the Interagency Council and was adopted by the Government in May 2021. The renewed strategy covers the time frame of 2021–2030. The country's first chemical, biological, radiological and nuclear national action plan, covering the period 2015–2019, has been successfully implemented. The Council renewed the action plan for 2021–2023, which will be adopted by the end of 2021. It should be noted that the chemical, biological, radiological and nuclear strategy and action plan ensured the incorporation of separate institutional efforts into one coherent approach, thus strengthening the overall national capacities of the country to prevent, detect, be prepared for and respond to chemical, biological, radiological and nuclear threats.

7. It is also worth mentioning that, back in 2015, Georgia was the first country among 62 partner States of the European Union Chemical, Biological, Radiological and Nuclear Risk Mitigation Centres of Excellence Initiative, which developed and adopted the national action plan. Since then, The country's experience and recommendations were shared by different countries while elaborating similar national plans.

8. Georgia has the Law on Nuclear and Radioactive Security, which establishes obligatory requirements for public and private entities whose functions involve the handling of radioactive and nuclear materials and sources for peaceful purposes. The Law aims to suppress and prevent all activities derived from the illegal use of such materials and sources.

9. The Law on License and Permits further enhances the national legal framework for nuclear safety and security by subjecting any activity related to trade involving radioactive and nuclear materials to the special licensing procedures.

10. Furthermore, in order to ensure preparedness for responding to nuclear and radiation accidents, and implement the measures necessary for disaster mitigation, the Technical Regulation and Action Plan on Preparedness and Response for a Nuclear or Radiological Emergency was approved by Government of Georgia resolution No. 640 of 24 December 2019.

11. Criminal liability for using or attempting to use radioactive and nuclear substances for terrorism purposes is provided for in the Georgian Law on Combating Terrorism and the Criminal Code. The Law on Combating Terrorism defines the organizational forms, legal foundations and law enforcement coordination issues necessary for combating all forms of terrorism (including nuclear terrorism). Article 324 – Technological Terrorism (chemical, biological, radiological and nuclear-related terrorism) of the Criminal Code of Georgia criminalizes the illegal purchase, storage, carrying, production, transport, transfer or sale of biological, radiological, chemical or bacteriological (biological) weapons, or the components thereof, of pathogenic microorganisms, radioactive and/or other substances harmful to human health and/or the research and development of biological and chemical weapons committed for terrorist purposes (para. 1). Moreover, paragraph 3 of article 324 of the Criminal Code of Georgia envisages criminal liability for the use of such weapons or their components, pathogenic microorganisms and radioactive and/or other substances harmful to human health, including seizure of the facilities constituting nuclear, chemical or increased technological or ecological hazards, committed to influence physical and legal persons or for terrorist purposes.

12. Furthermore, articles 230, 231, 231¹, 231², 232, 235 and 406 of the Criminal Code of Georgia establish criminal liability for the illegal handling, seizure, demand, manufacture or threat by possession and/or use of nuclear substances, as well as weapons of mass destruction-related illegal activities, including the illegal export of weapons of mass destruction technology, scientific-technical information or service.

13. Significant institutional changes have been carried out since 1 August 2015, after establishment of the State Security Service of Georgia. The State Security Service became the lead agency in the process of detecting, suppressing and preventing radioactive and nuclear security violations. As a chair of the Chemical, Biological, Radiological and Nuclear Interagency Coordinating Council, the State Security Service also became a lead agency for coordinating national efforts related to chemical, biological, radiological and nuclear security issues. Currently, the Counterterrorism Centre of the State Security Service is mandated to fight terrorism crimes, whereas the relevant departments of the State Security Service are entitled to combat the illegal turnover of weapons of mass destruction and their components and at the same time to search for and seize radioactive and nuclear substances from crime scenes.

14. In 2016, the Legal Entity of Public Law – the Agency of Nuclear and Radiation Safety was established. The Agency is authorized for the regulatory control of nuclear and radiation safety and also coordinates State efforts for radioactive waste management. The Agency elaborated the radioactive waste management strategy, which was adopted in December 2016 and is being implemented successfully, for 15 years.

15. Furthermore, since July 2013, Georgia has hosted the South-East and Eastern Europe regional secretariat of the Chemical, Biological, Radiological and Nuclear Risk Mitigation Centres of Excellence, which is an initiative of the European Union. The regional secretariat, located in Tbilisi (at the premises of the State Security Service of Georgia since 31 December 2019), unites 10 countries from the region (Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Macedonia, Montenegro, Georgia, Moldova, Serbia and Ukraine) and is supporting regional cooperation, the exchange of experience between the countries and the capacity-building of agencies responsible for the reduction of chemical, biological, radiological and nuclear risks and threats.

16. Georgia remains a dedicated member of the Global Partnership against the Spread of Weapons and Materials of Mass Destruction and also actively participates in the working groups and events of the Global Initiative to Combat Nuclear Terrorism, contributing to the initiative's mission.

17. Georgia is a party to various international and United Nations conventions aiming to reduce radioactive and nuclear-related threats. The country efficiently cooperates with the International Atomic Energy Agency (IAEA), reports to the IAEA Incident and Trafficking Database office and continues to implement a national Integrated Nuclear Security Support Plan. The Plan works as a road map to achieving the best level of State nuclear security.

18. Georgia actively exports the best practices of the country with regard to nuclear and radiation safety, thus making a significant contribution to regional security. One of the notable examples is the event organized in June 2018, at which the State Security Service of Georgia, in partnership with the European Union and the United Nations, hosted the South-East and Eastern Europe regional radiological detection exercise, entitled “Lion Shield”, in Tbilisi. Together with international partners, Georgian experts trained about 35 representatives from Albania, Bosnia and Herzegovina, Macedonia, Moldova, Montenegro, Serbia, Armenia and Ukraine. The training was attended by up to 20 observers from partner countries and international organizations. The exercise was observed and evaluated by experts from IAEA, the International Criminal Police Organization (INTERPOL), the Norwegian Radiation Protection Authority and the Defense Threat Reduction Office, as well as the Office of the Department of Energy of the United States Embassy in Georgia.

19. The State Security Service of Georgia actively supports the Ministry of Internal Affairs of Georgia in border security of the country and provides the radiation controls systems that existed at the State border with high-quality technical and information technology support, as well as the training of personnel. The Legal Entity of Public

Law Operative – Technical Agency of Georgia under the State Security Service, along with United States experts and the support of the Institute for Transuranium Elements of the Joint Research Centre of the European Commission, elaborated and implemented an intensive training course related to detection of and response to radioactive materials. As a result, employees of different structural units of the Ministry of Internal Affairs (the patrol police, the border police, the Special Tasks Department, etc.) and the Ministry of Finance (the Customs Department) are being trained. Furthermore, training curricula and plans for the prevention and non-proliferation of weapons of mass destruction and related materials for the personnel of the Coast Guard Department of the border police of the Ministry of Internal Affairs of Georgia are being elaborated and implemented.

20. Furthermore, to reinforce the fight against the smuggling of chemical, biological, radiological and nuclear materials and substances from the occupied territories of Georgia (where the central Government of Georgia has limited control), in 2017, a special division working on the detection of chemical, biological, radiological and nuclear threats was formed within the Special Tasks Department of the Ministry of Internal Affairs. The division is also actively engaged in monitoring of mass public events for security reasons.

21. The State Security Service of Georgia has prevented a number of cases of illicit handling and sale of nuclear materials, which was also highlighted by the international media. In this regard, among notable examples are two cases in April 2016 (six¹ and five² persons detained, respectively), a case in May 2017 (four persons detained), a case in March 2019 (two persons detained),³ a case in July 2019 (one person detained) and a case in April 2021 (two persons detained) of illegal handling and sale of uranium and other nuclear materials.

22. In the framework of efforts to promote the universalization of adherence to the Non-Proliferation Treaty, Georgia implemented the Treaty provisions into the national legislative framework, established the regime in full compliance with it and remains loyal to the object and purpose while developing national policies and strategic documents and making statements at the different international venues at various levels.

23. As a step that further underscores the country's commitment to nuclear non-proliferation and the peaceful use of nuclear science and technology in compliance with the Non-Proliferation Treaty, Georgia signed the Safeguards Agreement and the Protocol Additional to the Agreement, which have been in force for the country since 3 June 2003.

24. In 2012, the Parliament of Georgia approved the Law of Georgia on Nuclear and Radiation Safety, subsequently modified in 2015. One of the objectives of the Law is to ensure the peaceful use of nuclear materials, and the respective use of equipment and technology, by adhering to their non-proliferation regime, as well as to ensure the safety and security of all types of activities related to nuclear materials and other sources of ionizing radiation, and the use of nuclear materials and other sources of ionizing radiation for peaceful purposes only, to protect humans and the environment from harmful exposure to ionizing radiation in compliance with the legislation of Georgia, including the commitments of Georgia under international agreements (art. 2).

25. The Law of Georgia on Nuclear and Radiation Safety (chap. XIII, arts. 44–48) is dedicated to the implementation of safeguards (agreement and additional protocol) in Georgia. It is the obligation of Georgia to ensure that nuclear materials are used

¹ See <https://www.euronews.com/2016/04/18/georgia-arrests-6-suspected-of-trying-to-sell-uranium>.

² See <https://eurasianet.org/georgia-busts-second-case-uranium-peddling-month>.

³ See <https://www.reuters.com/article/us-georgia-nuclear/georgia-detains-two-for-trying-to-sell-radioactive-uranium-statement-idUSKBN1QU1XX>.

for only peaceful purposes and to prohibit the preparation, possession and transfer of nuclear weapons and other explosive devices containing nuclear materials, as well as the seeking and receipt of assistance for the creation of nuclear weapons and other explosive devices containing nuclear materials.

26. The Law of Georgia on Nuclear and Radiation Safety obliges the Agency of Nuclear and Radiation Safety (the regulatory body) to develop and implement the State System of Accounting for and Control of Nuclear Material in Georgia and describes the requirements for the cooperation of Georgian governmental authorities and licence holders with IAEA, support and assistance to the IAEA Department of Safeguards and Agency inspector activities, as well as the obligations of licence holders: accountancy of nuclear material, physical protection, reporting to the Agency, import-export and incident notifications.

27. The regulatory framework also enshrines the Order of the Minister of Environmental Protection and Agriculture of Georgia on Approval of the Procedure for Carrying out Activities Connected to Nuclear Non-proliferation Safeguards (adopted in September 2016). The main objective of the Order is to establish a State system of accounting and control of nuclear materials, thereby defined as a combination of information registration and analysis of the quantity (weight and item number) of nuclear materials, including their physical condition, chemical composition, measurement results and movement, as well as the development of the corresponding documentation. The accountancy and control of nuclear materials must be carried out at all stages of handling of the nuclear materials (production, use, processing, storage, transport and other phases of the technological process).

28. In line with the Law of Georgia on Nuclear and Radiation Safety, the Order determines the Agency of Nuclear and Radiation Safety to be the authority for regulation and control over the fulfilment of the requirements of the Agreement and its additional protocol and also establishes the position of a national responsible person for the purposes of implementing the agreement. The responsibilities of the Agency and the national responsible person are laid down in the Order, as well as those of licence holders.

29. In particular, a licence holder is obliged to submit to the Agency of Nuclear and Radiation Safety:

- Organizational structure and staff schedule
- Personnel rights and obligations
- Structure and boundaries of material balance areas and key measurement points
- Nuclear materials measurement programme
- Physical protection systems
- Procedure for physical inventory
- Rule for transfer of nuclear materials from one responsible person to another
- Confidentiality rules
- Training of the staff

30. By declaration, a licence holder is obliged to support IAEA and regulatory body inspectors in collecting the necessary information to verify the declared activities and materials and to ensure their uninterrupted access for independent measurements, the collection of samples and other surveys related to nuclear material for the purposes of collection, verification and inspection of reporting in compliance with the Safeguards Agreement. Furthermore, all licensees are obliged to appoint a person responsible for accounting and controlling nuclear materials.

31. The Order also includes details related to registration and accounting, such as: obligations of a person responsible for accounting and control of nuclear materials; time limits for providing notifications; different types of reports; IAEA and national report types and structure; objectives and rules of physical inventory, which shall be carried out twice in each material balance area; and goals of physical inventory. The results of the physical inventory are to be submitted to the Agency of Nuclear and Radiation Safety within 10 days after its completion. Licensees are also obliged to notify the Agency immediately upon detecting unregistered changes in the main accounting register during physical inventory.
32. Specific provisions regulate requirements for the import, export, receipt and transfer of nuclear materials and their return to the manufacturer, with the responsibilities of all engaged parties determined.
33. Under the same Order, the Agency of Nuclear and Radiation Safety is obliged to establish and maintain a registry of nuclear materials and to ensure the security of registered information, documentation and backups and the protection of confidentiality of information in accordance with international and Georgian legislation. The individual responsibilities within the Agency regarding maintenance of the registry are further regulated under the order of the Head of the Agency.
34. In addition to the above, Georgian legislation provides for an annual inspection of all licensees that handle nuclear materials. An assessment takes place with Agency of Nuclear and Radiation Safety forces in the presence of the national responsible person.
35. The criminal sanctions for violating the national rules on treating nuclear material are provided for in the Criminal Code of Georgia (arts. 230, 231 and 245).
36. Based on statutory requirements, the Agency of Nuclear and Radiation Safety periodically invites all organizations that handle nuclear materials to training. The main goals and objectives of the training are to explain the obligations and rights of licensees, as well as rules, cases and examples of the development of main reports (on inventory change reports, general ledgers and physical inventory), which shall be submitted to the Agency. The entities are also provided with the templates of the above-mentioned documents. One such training was conducted in September 2016, when, with the support of IAEA, the Agency organized a training course in Tbilisi on implementing safeguards obligations by the licensees and providing them with updated information about modern devices and measurement methods.
37. The Agency of Nuclear and Radiation Safety has regularly received physical inventory reports since 2016.
38. IAEA verifies the information provided by Georgia within the framework of the obligations determined by the Safeguards Agreement and its additional protocol. The presence of all declared nuclear materials, the physical parameters of all material balance areas and the compliance of the country's design information for each organization using nuclear material are checked. Georgia provides IAEA with the above-mentioned information with maximum accuracy. Accordingly, after the entry into force of the Safeguards Agreement, no cases of undeclared materials or activities were found.
39. With the same objectives, the Agency of Nuclear and Radiation Safety conducts annual inspections of physical protection systems, personal dosimetry records, documentation related to radiation protection and others. The enforcement mechanism is statutorily established in cases of inconsistency.
40. In practice, there have not been any such non-compliance cases detected.

41. Since June 2003, national efforts regarding implementation of the additional protocol in the legislation and execution in practice have been launched. As mentioned above, the comprehensive law of Georgia adopted in 2012 includes a chapter on implementing comprehensive safeguards agreement and additional protocol requirements.

42. Since entry into force, Georgia has begun to declare all necessary information to the IAEA Department of Safeguards: the initial inventory, the material balance areas/key measurement points structure and additional protocol declarations. Since 2016, the Agency of Nuclear and Radiation Safety has implemented Protocol Reporter version 3.0 software. All previous information available in older versions of the software has been transferred to the new software. As of now, all declarations and reports related to comprehensive safeguards agreement and additional protocol requirements are submitted by the Agency through the State declarations portal.

43. Georgia completed questionnaires for all material balance areas/locations outside facilities handling nuclear materials and submitted them to the IAEA Department of Safeguards. The Agency of Nuclear and Radiation Safety regularly submits all annual and quarterly additional protocol declarations in a timely manner. Such well-established practice is a result of, inter alia, the close collaboration of the Agency with all stakeholders involved in export-import control in Georgia and with all licensees.

44. The Agency of Nuclear and Radiation Safety participates in the procedures for the appointment of inspectors and provides (if necessary) support to them in obtaining multiple entry/exit/transit visas. Over the past 15 years, the IAEA Department of Safeguards has conducted several complementary access inspections in Georgia to confirm the absence of undeclared nuclear materials and undeclared nuclear activities, verify the status of decommissioned facilities/locations outside facilities and resolve other questions or inconsistencies.

45. The Agency of Nuclear and Radiation Safety is working on developing a new comprehensive law on radiation protection, nuclear safety and security and is awaiting its adoption in the spring of 2022. It will include updated articles on the comprehensive safeguards agreement and the additional protocol, the responsibilities of licensees – owners of nuclear materials – and authorities, physical protection measures for nuclear materials and transport issues. Rather importantly, the requirement to develop a new regulation on implementation of the additional protocol, which will prescribe the responsibilities and obligations of all authorities and private licence holders in the framework of the additional protocol requirements, will be stated in the new version of law.

46. As far as encouraging others to implement the additional protocol is concerned, the relevant steps taken and loyalty to the object and purpose of the regime are always stated in the official statements of Georgia at various high-level venues.

47. In 2014, with the support of the Federal Office for Economic Affairs and Export Control of Germany and the Export Control and Related Border Security Program of the United States Department of State, Georgia adopted the new Law on the Control of Military and Dual-Use Goods, relevant by-laws and the control list, which are in full compliance with Regulation No. 388/2012 version of the control list adopted in European Union Council Regulation No. 428/2009. In doing so, Georgia has fulfilled the requirements of the European Union Association Agreement and Security Council resolution [1540 \(2004\)](#).

48. The following legislative acts regulate the export of nuclear material to Georgia:

- Law of Georgia on Nuclear and Radiation Safety, 2012
- Law of Georgia on the Control of Military and Dual-Use Goods, 2014

- Decree of the Government of Georgia on the Definition of Control Measures for Military and Dual-Use Goods, 2014
- Decree of the Government of Georgia on Approving the Lists of Military and Dual-Use Goods, 2014
- Order of the Minister of Environmental Protection and Agriculture of Georgia on Approval of the Procedure for Carrying out Activities Connected to Nuclear Non-proliferation Safeguards, 2016

49. At present, Georgia has a well-established export control system, including the relevant legal framework, a permitting system, permit-issuing agencies and customs control.

50. One of the goals of the Law of Georgia on Nuclear and Radiation Safety is to ensure the peaceful use of nuclear materials, relevant equipment and machinery in compliance with the non-proliferation regime. The export of nuclear materials from the territory of Georgia is carried out in accordance with international standards and rules established under the legislation of Georgia.

51. The Agency of Nuclear and Radiation Safety is authorized to grant a permit for the export of radioactive materials. For this purpose, the exporter shall submit to the Agency, inter alia, a guarantee from the receiving party of the radioactive materials regarding receipt of the material.

52. In case of export of nuclear material, the issuance of a permit additionally depends on:

(a) The fulfilment by the exporting and importing parties of their international obligations under the Non-Proliferation Treaty (safeguards and the additional protocol agreements);

(b) The transport of nuclear material in accordance with international obligations.

53. Georgia joined the Convention on the Physical Protection of Nuclear Material in 2006 and started its technical implementation initially through international support, mainly of the Department of Energy of the United States. Georgia created and updated physical protection systems in high radiological risk objects, such as oncological hospitals, nuclear and radiation waste management facilities and scientific institutes, using high-activity radioactive sources and different types of nuclear materials.

54. As for the Amendment to the Convention on the Physical Protection of Nuclear Material, the respective amendments were made in the comprehensive Law of Georgia on Nuclear and Radiation Safety upon acceptance in 2012.

55. Based on the obligations of Georgia, and in addition to the provisions provided for in the Law of Georgia on Nuclear and Radiation Safety, the Order of the Minister of Environmental Protection and Agriculture of Georgia on the Physical Protection of Nuclear and Radiation Facilities, Radioactive Sources, Radioactive Waste and Other Sources of Ionizing Radiation was adopted in 2017. The Order, in total compliance with the Convention on the Physical Protection of Nuclear Material and the Amendment to the Convention, is based on a graded approach and determines the technical requirements and responsibilities of all stakeholders.

56. The Agency of Nuclear and Radiation Safety makes decisions on granting the authorization if the physical protection system of the applicant is in compliance with the statutory requirements. The applicant is obliged to provide the Agency with all the relevant information. The enforcement measures are also prescribed under the legislation in case of infringement of the national legislation.

57. Checking physical protection systems and assessing their vulnerability are principal tasks of the regular (planned and unplanned) inspections of the Agency of Nuclear and Radiation Safety.

58. In terms of international partnership, the Department of Energy of the United States continues to support Georgia in improving and updating physical protection systems for high-radiation risk objects.

59. A reduction in the amount of high enriched uranium in Georgia took place at the Javakhishvili Tbilisi State University Andronikashvili Institute of Physics in 2015. The Institute of Physics had operated with a pool-type research nuclear reactor IRT since 1959. After it was dismantled in 1984, all fuel was transferred outside Georgia: 17 fuel assemblies (enriched to 90 per cent uranium-235) were exported to the Institute of Nuclear Physics (Uzbekistan, 1995). The remaining 4.3 kg of fresh high enriched uranium and 900 gr of spent fuel were exported to outside the former Union of Soviet Socialist Republics in 1998 (United States of America and United Kingdom).

60. Another activity involving high enriched uranium at the Javakhishvili Tbilisi State University Andronikashvili Institute of Physics was the Russian-supplied subcritical assembly Breeder-1 with a plutonium-beryllium (Pu-Be) neutron source. Breeder-1 contained 660 g of UO₂ enriched to 36 per cent uranium-235 and a Pu-Be neutron source with 108 neutrons/second.

61. The Government of Georgia became a party to the Hague Nuclear Security Summit Communiqué, considering appropriate security and consolidation and reducing high enriched uranium, with the milestone of transferring high enriched uranium to the Russian Federation, as the manufacturer country, for final safe and secure disposal.

62. With the support of the Department of Energy of the United States, a high enriched uranium removal operation was conducted under the auspices of the tripartite United States-IAEA-Russian Federation initiative referred as to the Russian Research Reactor Fuel Return programme.

63. Based on the request of the Government of Georgia and several consultancy meetings with the parties, IAEA provided necessary assistance, and a fact-finding mission was conducted with the participation of IAEA Department of Safeguards specialists in order to identify the exact fuel composition, quantity and dismantling and transport techniques, as well as to survey the site condition and prepare a consolidated project implementation scenario. The actual repatriation procedures were implemented in 2015.

64. Georgia fulfilled the commitment provided for in the Hague Nuclear Security Summit Communiqué. Consequently, Georgia was awarded the Atoms for Peace prize during the Nuclear Security Summit, held in Washington, D.C.

65. The national regulatory framework is in principal compliance with the IAEA Nuclear Security Series publications, therefore, IAEA document INFCIRC/225/Rev.4 (Corrected) is implemented in the national legislation mentioned above. As for the review of policies and practices, in addition to the update on renewed international standards and/or approaches, the country basically depends on IAEA review missions. In particular, Georgia hosted an International Physical Protection Advisory Service mission in 2008. The country implements the Integrated Nuclear Security Support Plan and receives IAEA secretariat support in this regard as well. The updated Support Plan is awaiting adoption by the Government of Georgia in 2022, while the previous Plan covered the period 2015–2019. The Agency of Nuclear and Radiation Safety has already requested that the International Nuclear Security Advisory Service mission be held in 2022. Georgia is also planning to host the next Advisory Service mission in the following years.

66. Georgia expressed a political commitment to implementing the IAEA Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary guidance on the import and export of radioactive sources and the management of disused radioactive sources.

67. The basic principles are reflected in the existing regulatory framework, however, the Agency of Nuclear and Radiation Safety is developing a new comprehensive law of Georgia, which is in full compliance with the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary guidance.

68. As the regulatory body of Georgia, the Agency of Nuclear and Radiation Safety was established as a result of amendments to the existing Law of Georgia on Nuclear and Radiation Safety of 2015. The main purpose of such modifications was to strengthen the effective independence of the regulatory body, which performs regulatory activities independently under State supervision of the Ministry of Environmental Protection and Agriculture of Georgia. Corresponding to the Code of Conduct on the Safety and Security of Radioactive Sources, the regulatory activities of the Agency include the authorization, inspection, enforcement, establishment and maintenance of a register of radioactive sources, prescribed under the same Law.

69. The national regulations in which the provisions of the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary guidance are incorporated include regulations on the following: rules for transport of nuclear and radioactive substances; physical security (protection) of nuclear and radiation facilities, radioactive sources and waste and other sources of ionizing radiation; categorization of sources of ionizing radiation; creation and maintenance of a registry of authorization; and sources of ionization radiation and radioactive waste.

70. To prevent the illegal movement of any radioactive materials across Georgian borders, the Government of the country, in close collaboration with Department of Energy of the United States and IAEA, has taken necessary measures, including:

- Establishing radiation-checking portal monitors at the national border checkpoints
- Equipping Georgian border guards and customs officers with hand-held detectors and spectrometers to find, locate and identify radioactive sources
- Training border guards and customs officers to operate the radiation detection system
- Establishing a unique framework for providing quick responses to emergencies at the borders

71. Georgian border checkpoints were equipped with special dual-channel (gamma and neutron) portal monitors connected to central alarm stations.

72. The national regulatory framework includes two specific regulations in the field of illicit trafficking of nuclear material:

- Order of the Minister of Environmental Protection and Agriculture of Georgia on Responding to Illicit Trafficking of Nuclear and Radioactive Substances, 2014
- Decree of the Government of Georgia on Joint Operation Rules for Responding to Alarms upon Detecting Nuclear and Radioactive Substances at Border Checkpoints, Airports, Harbours and Maritime Zones, 2010

73. Georgia actively implements tasks and projects detailed in the joint document of the United States and Georgian delegations on the priority needs of Georgia to improve its capabilities to combat nuclear smuggling. Various projects related to the agreement were funded by the Department of Energy of the United States, the Department of Defense of the United States, the Department of State of the United States, the Defense

Threat Reduction Agency of the United States, the European Union and the United Kingdom. The milestones of those projects include:

- Strengthening Agency of Nuclear and Radiation Safety capacities
- Increasing patrols of green borders
- Supporting Georgian border police aviation
- Equipping mobile radiation detection patrols
- Sponsoring international cooperation in nuclear forensics
- Developing a joint maritime coordination centre
- Supporting naval patrols of the Coast Guard

74. Georgia collaborates with the Export Control and Related Border Security Program of the United States Department of State and receives assistance in human resources development and capacity-building in this sphere. The Program has initiated and funded a Joint Maritime Operations Centre in Supsa, western Georgia (Black Sea coast). The purpose of the Centre is to enable the exchange of intelligence information between the agencies to address maritime threats and challenges adequately.

75. The Agency of Nuclear and Radiation Safety and the Crime Forensics Department of the Ministry of Internal Affairs are jointly implementing projects to increase the capabilities of the Nuclear Forensics Laboratory in Georgia, which is under the leadership of the Science and Technology Center in Ukraine, with the support of the Department of Energy/National Nuclear Security Administration of the United States and the Joint Research Centre of the European Commission within Georgia, Ukraine, Azerbaijan and Moldova. The purposes of these projects is to improve the technical capabilities of the Nuclear Forensics Laboratory and to improve the qualifications of employees through theoretical training, practical exercises in the field and participation in international Nuclear Forensics International Technical Working Group training, as well as to create and maintain a nuclear forensics library at the national and regional levels and to develop standard operating procedures for law enforcement and frontline officers to operate at crime scenes contaminated with or containing nuclear materials or radioactive sources.

76. Georgia actively cooperates with the IAEA Incident and Trafficking Database office by exchanging relevant information. Cooperation with this international mechanism for global information flow helps Georgian authorities to analyse the trends in worldwide nuclear smuggling more effectively. The Agency of Nuclear and Radiation Safety, acting as a focal point for the IAEA Database, cooperates with the State law enforcement agencies in this regard. During the period 1999–2022, Georgia registered 95 incidents in the Database.

77. The establishment and maintenance of the registry of nuclear materials is one of the core statutory responsibilities of the Agency of Nuclear and Radiation Safety.

78. Based on the IAEA International Physical Protection Advisory Service mission (held in Georgia in 2008), an IAEA safeguards implementation visit (2015) and action plans for nuclear material registration, accountancy and reporting, the Agency of Nuclear and Radiation Safety uses two different databases – ARIS (Advanced Regulatory Information System) and NUCMAT. Both software applications were developed with the support of the Nuclear Regulatory Commission of the United States. In ARIS (Radiation Sources Database (RASOD) module), all nuclear materials are registered as radioactive sources, without any requested information on specific safeguards. NUCMAT is special user-friendly software that allows for the introduction and maintenance of inventories/databases of nuclear materials. It was developed to meet all relevant IAEA requirements based on the following legal

hierarchy: Safeguards Agreement and Code 10. The existing version of NUCMAT satisfies the needs of countries with locations outside facilities.

79. All existing nuclear materials in Georgia are recorded in the NUCMAT database, which is permanently used as a primary registry of nuclear material in the country. It is installed on a stand-alone computer; even though the programme can remotely access data, the computer is disconnected from the Internet, and no one, except the national responsible person, has access.

80. The Agency of Nuclear and Radiation Safety works closely with IAEA in the area of nuclear material accountancy and control. Direct contacts have been established with Department of Safeguards representatives based on mutual trust and assistance. For several years, the exchange of documentation, reports and letters has been implemented using the State declarations portal.

81. IAEA continues to support Georgia in resolving issues that arise during nuclear material accountancy, especially in cases of accidental gains of nuclear material, when the Agency of Nuclear and Radiation Safety cannot accurately determine some parameters of the found or seized nuclear material. Over the past two years, the technical team of the Department of Safeguards has assisted the Agency in determining the enrichment and content of recovered uranium samples and in determining the thorium content in samples seized from illicit trafficking. Based on these measurement results, it became possible to declare these materials corresponding to the Safeguards Agreement requirement correctly. It is crucial that, in these support missions, the knowledge and experience of Agency staff be permanently increased.

82. There is no nuclear energy programme in Georgia. Nuclear material is used as a reference sample by some research institutes and also in metrology. Depleted uranium is used as a shielding container for high-activity radiation sources in radiotherapy or in non-destructive analysis organizations. Some nuclear material is used in geophysical research (well logging). Used or seized nuclear material is safely and securely stored in a radioactive waste storage facility.

83. Ensuring nuclear security is one of the significant commitments of the country's security policy, given its urgency in the world.

84. The implementation of State policy issues in nuclear safety and security is within the competence of the Agency of Nuclear and Radiation Safety, and the response to threats is carried out by the relevant authorities.

85. The nuclear safety and security policy of Georgia is based on the Nuclear Non-Proliferation Treaty, Security Council resolution [1540 \(2004\)](#) and national legislation.

86. Georgia is a beneficiary of the IAEA technical cooperation programme, having signed its latest Country Programme Framework in November 2020. It identifies five priority areas:

- Ensuring nuclear and radiation safety and security
- Increasing early detection and treatment of oncological diseases and preventing risk factors associated with nutrition-related non-communicable diseases
- Ensuring food safety, improving food control systems and improving agricultural practices
- Improving water resources management and environmental radiation monitoring
- Assessing the national potential to use renewable energy

87. Some of those areas encompass applying nuclear technologies to achieve the milestones set.
88. There are no nuclear cooperation agreements in effect.
89. Georgia actively participates in IAEA events, including the General Conference and review meetings of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management. National reports are submitted in due course, as requested under the Convention.
90. In addition, Georgia, through the regulatory body, contributes to all the databases maintained under the auspices of IAEA, such as the Radiation Safety Information Management System, the Emergency Preparedness and Response Information Management System, the Nuclear Security Information Management System and the Incident and Trafficking Database. The experienced State representatives also make contributions in reviewing IAEA Safety Standards and/or Nuclear Security Series publications. One of the staff of the regulatory body is also a member of the Waste Safety Standards Committee.
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