

29 November, 2016

Tbilisi

On Approval of the Procedure for Carrying out Activities Connected to Nuclear Non-proliferation Safeguards

Based on Article 13 of the Law of Georgia on Normative Acts and sub-paragraph "a" of para 5¹ Article 53 of the Law of Georgia on Nuclear and Radiation Safety, I **order**:

Article 1

To approve procedure for carrying out activities connected to nuclear non-proliferation safeguards.

Article 2

This Resolution shall enter into force upon promulgation.

Minister of Environment and Natural Resources Protection of Georgia

Gigla Agulashvili

Procedure for Carrying out Activities Connected to Nuclear Non-proliferation Safeguards

Article 1. General Provisions

1. The present procedure for carrying out activities connected to nuclear non-proliferation safeguards (hereinafter - the Procedure) have been developed in compliance with 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 (hereinafter - the Agreement) and its additional protocol requirements and sets the requirements in order to fulfill its obligations under the Agreement and its Additional Protocol.

2. Control over the fulfillment of the requirements set out in this Procedure shall be carried out by the Legal Entity of Public Law - Nuclear and Radiation Safety Agency (hereinafter referred to as the Regulatory Body) within the system of the Ministry of Environment and Natural Resources Protection.

Article 2. Scope of Regulation

This Procedure establishes the rule and periodicity by physical and legal entities to record nuclear material, inventory change and material balance area to be submitted to the Regulatory Body.

Article 3. Goal and Objectives

1. The purpose of this Procedure is to promote non-proliferation of nuclear materials and equipment containing nuclear materials and their use for peaceful purposes only.

2. The objective of this Procedure is to establish a national system of accounting and control of nuclear materials.

Article 4. Definition of Terms

1. Terms used in this Procedure have the following meanings:

a) **(Nuclear) Material Balance** – Result based on comparison between a number of recorded and actually existing nuclear material;

b) **Material Balance Area (MBA)** – An area defined by territorial or administrative principles by a physical or legal entity possessing nuclear material, where the quantity of nuclear material in each transfer into or out of each material balance area can be determined and physical inventory of nuclear material according to existing procedures and methods;

c) **Key Measurement Point (KMP)** – Place in material balance areas where key measurement of nuclear material takes place including the measurement during input and output to MBA;

d) **Nuclear Material Measurement System** - Combination of methodologies, measurements and administrative activities;

e) **Accounting of Nuclear Materials** - Determination of quantity and content of nuclear material, recording and keeping corresponding documentation;

- f) **Physical Inventory**– Determination of actual quantities of nuclear material on hand at a given time within a material balance area, obtained in accordance with specified measurement system
 - g) **Major Accounting Register /Log**– Logbook/register for recording nuclear materials defined under the Agreement reflecting initial outcomes of physical inventory and inventory changes;
 - h) **Inventory Change** –Change in a number of nuclear materials during input and output to MBA;
 - i) **Natural Uranium** – Uranium occurring in nature containing 99.28% of Uranium-238 and about 0.72% of Uranium-235;
 - j) **Depleted Uranium** - Uranium in which contents of Uranium-235 is less than 0.72%;
 - k) **Enriched Uranium** –Uranium in which contents of Uranium-235 is more than about 0.72%.
2. Other terms used in the Procedure have the same meaning as in the legislative and sub-legislative normative acts in the field of nuclear and radiation safety.

Article 5. National System of Accounting for and Control of Nuclear Material

1. The national system of accounting and control of nuclear materials is a combination of information registration and analysis of the number of nuclear materials, including their physical condition, chemical composition, measurement results and movement, as well as development of the corresponding documentation.
2. Registration and control of nuclear materials are carried out at all stages of handling the nuclear material (production, use, processing, storage, transportation and other stage of technological process).
3. The national system of accounting and control does not apply to:
 - a) Uranium and Thorium ores, as well as intermediate uranium products obtained during mining and metallurgical activities;
 - b) Nuclear materials owned by the Ministry of Defense of Georgia and their equipment containing them.
4. Nuclear material accounting and control system includes the following activities:
 - a) Registration, accounting and control;
 - b) Determination of MBA among owners of nuclear material - physical or legal entities;
 - c) Graded approach to accounting and control in MBA of physical or legal entities according to composition of nuclear material;
 - d) Presentation of reports to the relevant regulatory body with e relevant periodicity;
 - e) Determining the composition and amount of nuclear materials (measurements and calculations);
 - f) Physical inventory production with set periodicity and extent;
 - f) Determining the acceptable values of nuclear material balance and inventory errors.
5. Correcting errors in the records of nuclear material accounting system are allowed in a form of new entries, keeping the record containing error.
6. Nuclear materials recovered after utilization of military use items, shall be subject to registration, for the purpose of peaceful use or storage after their transfer to the respective MBAs.

Article 6. Regulation and control of fulfillment of the requirements of the Agreement

1. Regulation and control over fulfillment of the requirements of the Agreement and its Additional Protocol shall be carried out by the Regulatory Body.
2. The Regulatory Authority is authorized:
 - a) To establish the requirements of nuclear materials, their accounting and control;
 - b) To create and maintains an intra-agency registry of nuclear materials in electronic form;
 - c) To register MBA and KMP and assign the unique identification title;
 - d) To control the safety and protection of nuclear material;
 - e) To make decision on the accounting of nuclear materials;
 - f) To ensure training and retraining of the employees of the regulatory body and owners of nuclear material - physical and legal entities, in the field of accounting, control and reporting on nuclear material;
 - g) To coordinate the training and retraining of the employees of owner of nuclear material - legal entity and physical person - owner of nuclear material in the field of accounting, control and reporting on nuclear material.
3. For the purpose of implementing the requirements of the Agreement and its Additional Protocol, the Regulatory Body shall submit a nominated candidate as a National Responsible Person for the implementation of the Agreement to the Minister of Environment and Natural Resources Protection of Georgia for approval.
4. The National Responsible Person shall:
 - a) Prepare documents in compliance with the requirements of the Agreement to submit to the Department of Safeguards of the International Atomic Energy Agency (hereinafter "IAEA");
 - b) Perform inspection and control of a physical or legal person holding nuclear material, and attend the inspection carried out by the IAEA Department of Safeguards;
 - c) Maintain intra-agency registry of nuclear materials.

Article 7. Responsibilities and obligations of a physical or legal person holding nuclear materials

1. The physical or legal person holding nuclear material, based on the requirements of the legislation and organizational documents, in relation to nuclear materials, shall define:

- a) Organizational structure and staff schedule, personnel rights and obligations;
- b) Structure and boundaries of MBA and KMP;
- c) Nuclear materials measurement program;
- d) Physical protection systems;
- e) Procedure for physical inventory.
- f) Rule for transfer of nuclear materials from one responsible person to another;
- g) Confidentiality degree of activity.

2. Physical or legal person holding nuclear material on the basis of legislation requirements and organizational documentation shall ensure staff training and advanced training.

3. A natural person holding nuclear material or a head of a legal entity is obliged to:

- a) Support inspectors of IAEA and the Regulatory Body to collect necessary information in order to verify the declared activities and materials;
- b) Ensure uninterrupted access for inspectors of IAEA and the Regulatory Body for independent measurements, collection of samples and other surveys related to nuclear material, for the purpose of collection, verification and inspection of reporting complying with the Agreement;
- c) Apply to other physical or legal entities in the absence of the possibility of measuring characteristics of nuclear material. The results of measurement shall be submitted to the Regulatory Body as indicated by a measurement implementing person.
- d) Appoint a person responsible for accounting and control of nuclear materials and notify the Regulatory Body within 10 days after appointment;
- e) Provide information to the Regulatory Body in the form specified in Appendix 1 to this Resolution no later than 10 days after the amendments are made to the inventory changes of nuclear material in MBA (Appendix 1).

4. A person responsible for accounting and controlling nuclear material is obliged to:

- a) Maintain a major accounting register for nuclear material accounting;
- b) Maintain nuclear material accounting in accordance with the following characteristics:
 - b.a) Amount of nuclear material in a batch – 1 piece/item;
 - b.b) Supplier of nuclear material and MBA of final placement;
 - b.c) Nuclear material type (natural uranium, depleted uranium, enriched uranium, plutonium, thorium);
 - b.d) Physical condition and chemical form of nuclear material;
 - b.e) Nuclear material mass: for natural, depleted uranium and thorium - in kilograms, for enriched uranium and plutonium - in grams;
 - b.f) Type and mass of a container;
 - b.g) Identification of the key measurement point (KMP);
 - b.h) Nuclear material transaction type: reception from abroad, sending abroad, reception from local MBA, send to local MBA, detection;
 - b.i) Transaction date.
- c) Maintain accounting in the form of a major accounting register designed by IAEA. Records must be based on the results of the measurement of the characteristics of nuclear material at MBA as well as on information provided by the manufacturer or the calculation methods in a form given in Appendix of this Procedure (Appendix 2);
- d) Record nuclear material in the main accounting register no later than 10 days after its transfer from another MBA and follow the deadlines set out in paragraph 3 of this Article;
- e) Remove nuclear material from the main accounting register no later than 10 days after its transfer to another MBA and follow the deadlines set out in paragraph 3 of this Article.

Article 8. MBA and KMPs

1. The MBA shall be established in accordance with the following requirements:

- a) Ensure that the nuclear material characteristics (in accordance with Article 7) and passport documentation assessments are available during transaction of nuclear material to MBA;
- b) Determination of nuclear material characteristics shall be available at KMP in a defined MBA.

2. It is permissible to determine the structural subdivision of the organization in the form of an independent MBA, taking into consideration the characteristics of the nuclear materials and the manner in which they are handled.

3. In each MBA it should be defined:

- a) KMP, with a description of the methods and means of measurement used in it;
- b) Description of the recording and control procedures of nuclear materials in a specific KMP.

Article 9. Physical inventory

1. The physical inventory shall be carried out twice a year in order to establish control over nuclear material in MBA. Results of physical inventory should be delivered to the Regulatory Body no later than May 1 and December 1 of each year. Physical inventory should be performed a month before the results are presented to the Regulatory Body.
2. Objectives of physical inventory:
 - a) To determine the actual quantity of nuclear materials in MBA;
 - b) To determine conformity of the nuclear material characteristics with that information in the main accounting register of a natural or legal entity;
 - c) To develop nuclear material balance in MBA, detect gaps and determine their causes.
3. The balance of nuclear material in MBA shall be developed individually, for each type of nuclear material and shall contain the following information:
 - a) Initial amount of nuclear materials (according to the previous inventory results);
 - b) Increase or decrease of nuclear material during the material balance inventory period;
 - c) Actual quantity received as a result of physical inventory.
4. During the physical inventory, any movement of nuclear material to another MBA, transfer to MBA of another physical or legal person or receive new materials shall be prohibited.
5. Physical inventory shall be completed by compiling the relevant act, which shall reflect material balance of nuclear material in MBA, all inventory changes shall be described, inventory documents and a list of existing nuclear materials shall be developed .
6. According to the decision of a natural or legal entity, the results of physical inventory in case of inventory changes shall be provided to the Regulatory Body within 10 days after its completion.
7. In the absence of any violations during the nuclear material balance analysis, the list of documented nuclear materials and their quantitative characteristics shall be used as a starting point for further material balance inventory period.
8. In the event of discrepancy between actual and recorded quantities of nuclear material, the inventory act shall reflect the cause of such discrepancy.
9. Physical or legal person is obliged to immediately notify the Regulatory Body when detecting unregistered changes in the main accounting register during physical inventory.
10. In the circumstances described by paragraphs 9 and 10 of this Article, the Regulatory Body shall be entitled to verify the information provided.
11. In case of failure to identify reason for the discrepancy, the Regulatory Body shall be obliged to notify the organizations defined by the Agreement and authorized agencies established by the Georgian legislation.

Article 10. Import, export, receipt and transfer of nuclear material and their return to the manufacturer

1. Receipt and transfer of registered nuclear materials between their physical or legal owners shall be carried out in accordance with the rules established by the legislation of Georgia.
2. Where the characteristics of nuclear material to be transferred according to the data of a transmitting - physical or legal entity, do not differ from the characteristics of the nuclear material measured or evaluated at the recipient's KMP, within the limits of errors characteristic for KMP of the transmitting and recipient physical or legal entities, material shall be received at the balance of the recipient - physical or legal entity. If the discrepancy is observed, both parties are obliged to investigate the reason with the involvement of the Regulatory Body and the National Responsible Person.
3. Physical or legal entities that are receiving or transferring nuclear material, shall enter the relevant changes into the main accounting register develop the inventory change report (Appendix 2) and inform the Regulatory Body under Article 7 of the same Procedure.
4. For the import of nuclear material, except for the documents defined by the legislation of Georgia, the registration form of nuclear material as a source of ionizing radiation shall be submitted to the Regulatory Body.
5. Return of nuclear material to a foreign producer shall be carried out on the basis of export permit in accordance with applicable legislation.

Article 11. Transport and physical security of nuclear material

1. Transportation of nuclear material shall be carried out in accordance with the regulations established by the Georgian legislation.
2. Transportation shall be carried out by a natural or legal entity holding a relevant license for implementation of nuclear and

radiation activities.

3. The physical protection (security) of nuclear material shall be carried out in accordance with the procedure established by the Georgian legislation.

Article 12. Intra-agency register of nuclear material and obligations of parties involved in its production

1. Intra-agency register of nuclear materials represents the electronic database of data on nuclear material existing in the country.

2. The Regulatory Body shall:

- a) Establish and maintain the intra-agency registry of nuclear materials;
- b) Ensure security of the intra-agency register, documentation and backup archives;
- c) Protect confidentiality of information in accordance with the requirements of the Georgian legislation.

Article 13. Access to information and secure security

1. The information kept in intra-agency register is confidential.

2. Owner of nuclear material may review the information in the intra-agency register only about the nuclear materials that are in his/her possession.

3. Transfer of information kept in the intra-agency register may take place based on the rule established by the legislation of Georgia.

4. On the basis of the order of the Head of the Regulatory Body, the administrator, operator of the intra-agency register and their functions as well as the levels of access (read, modify and / or report) for employees of the Regulatory Body shall be determined.

5. The information kept in an electronic intra-agency register shall be protected in compliance with the security requirements set by the legislation.

6. Dissemination of information kept in intra-agency register is prohibited except for the cases provided for in paragraph 3 of this Article.