# TECHNICAL REGULATIONS - PREPAREDNESS AND RESPONSE PLAN FOR NUCLEAR AND RADIATION EMERGENCY CHAPER I

# **GENERAL PROVISIONS**

#### Article 1. SCOPE OF REGULATION

- 1. Preparedness and Response Plan for Nuclear and Radiation Emergency (hereinafter the "Plan") has been developed in accordance with the international obligations of Georgia and the Law of Georgia on Nuclear and Radiation Safety.
- 2. The Plan applies to all those natural and legal entities the activities of which are associated with sources of ionizing radiation, as well as to executive authorities, autonomous republics, municipalities and the state attornies in the event of readiness and response to nuclear or radiological emergency situations.
- 3. The Plan applies to a possible nuclear emergency in a foreign country in case of possible or existing transboundary consequences for Georgia.

### Article 2. GOAL AND OBJECTIVES

- 1. The goals of the Plan are to provide radiation protection and radiation safety for human, property and environment at:
- a) Readiness for nuclear or radiological emergencies of local or national importance during the peaceful period;
- b) Operational, controlled, coordinated, effective response to nuclear or radiological emergencies.
- 2. The objective of the Plan is to develop a legal basis:
- a) For the purpose of clear definition and delegation of functions and responsibilities of the executive authorities as well as natural and legal entities implementing nuclear and radiation activities in relation with prediction, preparedness, response to nuclear or radiological emergencies and post-emergency recovery operations in, or outside the country;
- b) For the purpose of prevention, mitigation of consequences, response and recovery operations following the nuclear or radiological emergency;
- c) For the purpose of determination the national resources for response and containment activities.

### Article 3. DEFINITION OF TERMS

- 1. The following terms have the following meanings for the purposes of this Plan:
- a) Early protective actions- A protective action in the event of a nuclear or radiological emergency that can be implemented within days to weeks and still be effective. The most common early protective actions are relocation and longer term restriction of the consumption of food potentially affected by contamination.
- **b) Emergency planning zone** The precautionary action zone (PAZ) and the urgent protective action planning zone (UPZ):
- **b.a) Precautionary action zone (PAZ)** = An area around a facility for which emergency arrangements have been made to take urgent protective actions in the event of a nuclear or radiological emergency to avoid or to minimize severe deterministic effects off the site. Protective actions within this area are to be taken before or shortly after a release of radioactive material or an exposure, on the basis of prevailing conditions at the facility.
- **b.b) Urgent protective action planning zone (UPZ)** An area around a facility for which arrangements have been made to take urgent protective actions in the event of a nuclear or radiological emergency to avert doses off the site in accordance with international safety standards. Protective actions within this area are to be taken on the basis of environmental monitoring or, as appropriate, prevailing conditions at the facility.
- **c) Emergency preparedness** The capability to take actions that will effectively mitigate the consequences of an emergency for human life, health, property and the environment.
- **d)** Emergency response The performance of actions to mitigate the consequences of an emergency for human life, health, property and the environment. The emergency response also provides a basis for the resumption of normal social and economic activity.

- **e) Emergency -** A non-routine situation or event that necessitates prompt action, primarily to mitigate a hazard or adverse consequences for human life, health, property or the environment.
- **f) Non-radiological consequences** Adverse psychological, societal or economic consequences of a nuclear or radiological emergency or of an emergency response affecting human life, health, property or the environment.
- g) Nuclear accident any accident associated with nuclear or radiation equipment or activities that have resulted or may result in the release of radionuclides that could have a potential transboundary influence on another state in terms of radiation safety.
- h) Nuclear or radiological emergency- An emergency in which there is, or is perceived to be a hazard due to The energy resulting from a nuclear chain reaction or from the decay of the products of a chain reaction; or radiation exposure or risks drom such exposure and which may endanger the life and / or health of the worker or the population, may cause or lead to victims, human injuries and / or significant material damage and / or environmental contamination. For the purposes of this Plan, nuclear or radiological emergency includes incident, contingency and nuclear accident.
- i) Nuclear or radiological emergency planning distance The extended planning distance (EPD) and the ingestion and commodities planning distance (ICPD):
- **i.a)** Extended planning distance (EPD) Area around a facility for which emergency arrangements are made to conduct monitoring following the declaration of a general emergency and to identify areas warranting emergency response actions to be taken off the site within a period following a significant radioactive release that would allow the risk of stochastic effects among members of the public to be effectively reduced.
- **i.b)** Ingestion and commodities planning distance (ICPD) Area around a facility for which emergency arrangements are made to take effective emergency response actions following the declaration of a general emergency in order to reduce the risk of stochastic effects among members of the public and to mitigate non-radiological consequences as a result of the distribution, sale and consumption of food, milk and drinking water and the use of commodities other than food that may have contamination from a significant radioactive release.
- j) Liquidation of nuclear or radiological emergencies implementation of immediate actions to eliminate threats in the nuclear or radiological emergency zone.
- **k)** Mitigate the effects of nuclear or radiological emergencies (hereinafter "mitigation") reduction, mitigation or restriction of negative impact from nuclear or radiological emergencies.
- **l)** Nuclear and radioactive equipment (hereinafter the "equipment") a device that is used for implementation of nuclear and radiation activity.
- **m) Urgent protective action** A protective action in the event of a nuclear or radiological emergency which must be taken promptly (usually within hours to a day) in order to be effective, and the effectiveness of which will be markedly reduced if it is delayed. Urgent protective actions include iodine thyroid blocking (in accordance with the doses set out by the Annex 1), evacuation, short term sheltering, actions to reduce inadvertent ingestion, decontamination of individuals and prevention of ingestion of food, milk or drinking water possibly with contamination.
- **n)** A precautionary urgent protective action an urgent protective action taken before or shortly after a release of radioactive material, or an exposure, on the basis of the prevailing conditions to avoid or to minimize severe deterministic effects.
- **o) Protection** Restriction of the occurance of deterministic effect for individuals through maintenance of doses below the predetermined doses and implementation of all necessary activities to reduce the stochastic effect both in the present and in the future.

- **p) Protective action** An action for the purposes of avoiding or reducing doses that might otherwise be received in an emergency exposure situation or an existing exposure situation.
- **q)** Inner cordoned off area An area established by first responders in an emergency around a potential radiation hazard, within which protective actions and other emergency response actions are taken to protect first responders and members of the public from possible exposure and contamination.
- **r) Graded approach** means a process or method by which the stringency of control to be applied to a product or process is commensurate with the risk associated with a loss of control
- s) Deterministic effect A radiation induced health effect for which generally a threshold level of dose exists above which the severity of the effect is greater for a higher dose.
- t) Evacuation The rapid, temporary removal of people from an area to avoid or reduce short term radiation exposure in an emergency.
- **u) Personal protective equipment (PPE)** Remedies to protect worker from external exposure, penetration of radioactive substances, and radioactive contamination of the skin.
- **v) Accident -** Any unintended event, including operating errors, equipment failures or other mishaps, the consequences or potential consequences of which are not negligible from the point of view of protection or safety.
- **w) Public exposure** Exposure incurred by members of the public due to ionizing exposure, excluding any occupational exposure, medical exposure or background exposure.
- x) Severe deterministic effect- fatal or life threatening or results in a permanent injury that reduces quality of life.
- y) Operational criteria Values of measurable quantities or observable conditions (i.e. observables) to be used in the response to a nuclear or radiological emergency in order to determine the need for appropriate protective actions and other response actions.
- **z) First responders** The first members of an emergency service to respond at the site of an emergency in accordance with current legislation.
- **z 1) Radiation protection** Implementation of mitigatory actions against radiological effects in case of nuclear or radiological emergency situations.
- **z 2) Radiation safety** Portection of human and environment against harmful exposure to radiological threats and radioactive sources by creating and maintaining effective means of protection.
- **z** 3) Other response activities any other response activity, except for the protective actions.
- **z 4) Threat assessment** The process of analysing systematically the hazards associated with facilities, activities or sources within or beyond the borders of a State in order to identify:
- z.a) Those events and the associated areas for which protective actions and emergency countermeasures may be required within the State; and
- z.b) The actions that would be effective in mitigating the consequences of such events.
- **z 5) Stochastic effect** For stochastic effect, the probability of occurrence of which (risk) is greater for a higher radiation dose and the severity of biological effect is independent of dose.
- **Z<sup>6</sup>) Transnational emergency** A nuclear or radiological emergency of actual, potential or perceived radiological significance for more than one State. This may include:

- (1) A significant transboundary release of radioactive material (however, a transnational emergency does not necessarily imply a significant transboundary release of radioactive material);
- (2) A general emergency at a facility or other event that could result in a significant transboundary release (atmospheric or aquatic) of radioactive material;
- (3) Discovery of the loss or illicit removal of a dangerous source that has been transported across, or is suspected of having been transported across, a national border;
- (4) An emergency resulting in significant disruption to international trade or travel;
- (5) An emergency warranting the taking of protective actions for foreign nationals or embassies in the State in which it occurs;
- (6) An emergency resulting in or potentially resulting in severe deterministic effects and involving a fault and/or problem (such as in equipment or software) that could have serious implications for safety internationally;
- (7) An emergency resulting in or potentially resulting in great concern among the population of more than one State owing to the actual or perceived radiological hazard.
- **Z7)** Significant transboundary release = A release of radioactive material to the environment that may result in doses or levels of contamination beyond national borders from the release which exceed generic criteria for protective actions and other response actions, including food restrictions and restrictions on trade.
- **Z**<sup>8</sup>) Basic criterion the levels of predicted or received doses during which the protection or other response actions should be taken.
- 2. Other terms used in this Plan have the same meaning as in the current Georgian legislation.

# Chapter II

# TYPES OF NUCLEAR AND RADIOLOGICAL EMERGENCIES, PLANNING OF RESPONSE TO SUCH SITUATIONS AND CATEGORIES OF EMERGENCY PREPAREDNESS

# Article 4. TYPES OF NUCLEAR AND RADIOLOGICAL EMERGENCIES

Below are the types of nuclear and radiological emergencies:

- a) Emergency occurred while using nuclear and radioactive materials;
- b) Emergency occurred while transporting nuclear and radioactive materials and mobile radioactive sources;
- c) Uncontrolled (orphan) radioactive sources left without supervision, lost and / or stolen radioactive sources;
- d) Radiation contamination of population and environment;
- e) Detection of medical and non-medical symptoms of radiation exposure;
- f) Terrorist threat;
- g) Illegal traffic of nuclear and radioactive substances and/or violation of the rule of their handling;
- h) Damaged radioactive source;
- i) Radioactive source in a fire;
- j) Founding uncontrollable (orphan) radioactive source;
- k) Radionuclide contamination of water, food or consumer products;
- 1) Increase of natural radiation background;
- m) Transboundary emergency outside the country resulting from the emergency occurring on site, or at the nuclear and radioactive facility;
- n) Re-entry of the satellite to the atmosphere equipped with nuclear equipment into the country and / or territorial waters.

# Article 5. NUCLEAR OR RADIOLOGICAL EMERGENCY RESPONSE PLANNING AND CATEGORIES OF EMERGENCY PREPAREDNESS

- 1. For the purpose of planning and response to nuclear and radiological emergencies, it is necessary to analyze the existing nuclear and radiation related situation in the country and identify potential threats in terms of nuclear and radiation activity, equipment and facilities.
- 2. For planning or response to nuclear or radiological emergencies, a graded approach should be applied to perform potential risk assessment.
- 3. According to international standards, the categories of emergency preparedness are given in the Annex 2.

#### Article 6. TYPES OF POTENTIAL THREATS EXISTING IN GEORGIA AND CATEGORIES OF EMERGENCY PREPAREDNESS

- 1. Georgia has no appropriate facilities compatible with categories I and II of emergency preparedness. Considering geographical location of Georgia, ionizing radiation sources and nuclear and radiation activities located outside the territory of the country or beyond its borders, III, IV and V categories of emergency preparedness are relevant to Georgia.
- 2. Category III of emergency preparedness includes:
- a) Gamma equipment and ionizing radiation generators used in oncology;
- b) Gamma equipment used to calibrate dosimetric devices;
- c) Enterprises whose activities are related to the collection and storage of ionizing radiation sources and radioactive waste;
- d) Ionizing radiation sources used in scientific-research institutions.
- 3. Category IV of emergency preparedness includes:
- a) Nuclear and radiation activities relating to the use of radioisotope equipment;
- b) Nuclear and radiation activity related to ionizing radiation sources;
- c) Nuclear and radiation activity that is related to transportation of radioactive materials;
- d) Medical activities related to X-ray diagnostic and therapeutical studies;
- e) Illegal traffic of ionizing radiation sources;
- f) Terrorist threat;
- g) Re-entry of the satellite to the atmosphere equipped with nuclear equipment.
- 4. Category V of emergency preparedness includes:
- a) Import of products contaminated with radionuclides into the country;
- b) Radioactive contamination caused by a transboundary emergency.\*

#### Article 7. AREAS AND ZONES

- 1. For most emergency types, response takes place over two distinct areas:
- a) This is the area surrounding the facility within the security perimeter, fence or other designated property marker. It can also be the controlled area around a radiography source, radioactive waste or contaminated area. It is the area under the immediate control of the licensee. For emergencies involving uncontrolled sources or nuclear and readiological emergency,
- such area may not be re-defined. In such cases, such territory shall be determined by the first responder or licensee, adhering to the radiation safety regulations.
- b) This is the area beyond the control of the licensee. For facilities with the potential for emergencies resulting in major off-site releases or exposures (threat categories I and II). The off-site area is divided into two following zones: precautionary action zone (PAZ) and urgent protective action planning zone (UPZ).
- 2. In case of threat category V for planning the distance for food products and consumer goods, protective measures, if required, shall impose certain restrictions on food and consumer products and imply population resettlement, as well as establishment of radiation monitoring and control.

# Article 8. RADIATION PROTECTION OF EMERGENCY WORKERS

1. Prior to response to nuclear or radiological emergencies, emergency workers should take instruction on radiation exposure risks, protection measures, radiation warning signs and placards.

<sup>\*</sup> The nearest source of the potential threat to Georgia is the Atomic Station (400MW power reactor) of the Metsamor (Republic of Armenia), with a minimum distance of 300 km from the Georgian state border (Annex 5). Considering that the radius restricted to food products and household goods partially covers the territory of Georgia, for V category of emergency preparedness the protection actions should be taken into account.

- 2. Emergency worker must be informed about mandatory use of PPE and individual dosimeters.
- 3. Dosimetric control and decontamination, if needed, of emergency workers should be performed at the site of exit from nuclear or radiological emergency zone.
- 4. Dosimetric control of emergency workers should be performed at the site of exit from nuclear or radiological emergency zone and their peronal doses shall be recorded.

#### **CHAPTER III**

# AGENCIES RESPONSIBLE FOR RESPONSE TO NUCLEAR OR RADIOLOGICAL EMERGENCY

#### **Article 9. RESPONSIBLE ENTITIES**

- 1. Nuclear or radiological emergency response system includes state agencies, legal entities of public law and sub-agencies, bodies of autonomous republics and municipalities and State Attornies, local self-government entities, as well as physical and legal persons performing nuclear and radiation activities.
- 2. Entities referred to in paragraph 1 of this Article are obliged to develop a nuclear or radiological emergency response plan according to the applicable legislation.

# Article 10. Functions of the Ministry of Environmental Protection and Agriculture of Georgia

- 1. The Ministry of of Environmental Protection and Agriculture of Georgia (hereinafter referred to as "the Ministry") is the main agency providing nuclear and radiation safety.
- 2. In case of nuclear or radiation emergencies of national importance, the Ministry shall establish Emergency Command Unit at the Ministry of Environment and Natural Resources Protection of Georgia, which is responsible for determining response activities of structural units, sub-agencies and legal entities of public law of the Ministry and arrange their implementation.
- 3. In case of nuclear and radiation emergencies of national importance, the authorized person of the Ministry shall participate in the activities of the Interagency Operational Command Center, created either by the Ministry of Internal Affairs of Georgia or by the Prime-Minister, which organizes and coordinates the expected or existing emergency situation at the operational level.
- 4. The Emergency Command Unit of the Ministry, with the Governments of the Autonomous Republics of Adjara and Abkhazia, through coordination with the Administration of the State Attorney-Governor and the municipalities, perfoms management for safety assurance in the nuclear and radiological emergency of local importance.
- 5. The Ministry shall submit the proposals and reports for incident prevention and mitigation to the Emergency Management Service of Ministry of Internal Affairs.
- 6. The Ministry carries out other responsibilities provided for by the legislation.

# Article 11. FUNCTIONS OF THE LEPL - NUCLEAR AND RADIATION SAFETY AGENCY

- 1. LEPL Nuclear and Radiation Safety Agency, as the body implementing state regulatory and control measures for nuclear and radiation safety (hereinafter the "Regulatory Body") shall:
- a) Develop the safety norms and requirements in the field regulated by the present Technical Regulations;
- b) Perform periodic control over compliance of on-site emergency response plans (nuclear or radiological emergency response plans) by the licensed natural and legal entities implementing nuclear and radiation activities with the Georgian legislation, considering the graded approach;
- c) Implement activities to raise the awareness of the personnel and patients of licence holder natural and legal entities implementing nuclear and radiation activities;
- d) Response to illicit traffic of nuclear and radioactive substances, provide radiation monitoring at the criminal scene and primary radiological examination of material evidence;
- e) Response to the cases of radiation alarms at border-crossing points, customs and transport terminals and coordinate activities of the agencies involved in the first response within their competence;
- f) Process radiation monitoring and environmental monitoring data collected from the site in emergency preparedness format and prepare recommendations for relevant persons;

- g) Perform radiological assessment of emergency site, coordinate actions of agencies engaged in the response activities and prepares relevant recommendations within their competence;
- h) Ensure unimpeded receipt of notifications related to nuclear or radiological emergency during 24/7;
- i) Provide operational mobilization of human and technical resources within its competence;
- j) Assess the radiation situation on site of nuclear or radiological emergency and, if necessary, take the decision on determining and changing the boundaries of precautionary action zone (PAZ) and urgent protective action planning zone (UPZ);
- k) Coordinate actions of the agencies involved in the response activities and prepare the relevant recommendations within its competence;
- l) Develop radiation safety measures for transporting radioactive waste or radioactive sources generated by nuclear or radiological emergency and perform transportation;
- m) Within the scope of their competence, decontaminate contaminated territories, items and population;
- n) Ensure safe storage of radioactive waste or radioactive sources resulting from nuclear or radiological emergency;
- o) Participate, within their competence, in assessing damage to humans and environment resulting from nuclear or radiological emergencies;
- p) Arrange investigation of nuclear or radiological emergency, evaluation and analysis of the investigation results, to prevent reoccurrence of nuclear or radiological emergencies;
- q) Based on meteorological data provided by the LEPL National Environment Agency predict possible radiation contamination areas of the environment;
- r) Perform functions of the National Responsible Person of the International Atomic Energy Agency Incident and Emergency Center (hereinafter the "IAEA Center").
- s) Serve as a competent body for the purpose of the Convention on "Assistance in the Case of a Nuclear Accident or Radiological Emergency" and notify the IAEA Center on the international assistance, if such necessity exists;
- t) Submit proposals and reports on prevention and mitigation of nuclear or radiological emergency to the Ministry;
- u) Implement periodic revision and renewal of plans or instructions for the nuclear or radiological emergency preparedness by organizing trainigs and drills;
- v) Keep agency register for incident response.
- 2. The Command Center for Nuclear or Radiological Emergency Response (hereinafter the "Command Center") shall be set up at the Regulatory Body to function in the operational mode.
- 3. Composition and functions of the Command Center are approved by the Minister of Environmental Protection and Agriculture of Georgia.

# Article 12. FUNCTIONS OF THE LEPL - NATIONAL ENVIRONMENTAL AGENCY

LEPL - National Environmental Agency within the system of the Ministry shall:

- a) Perform regular monitoring of natural radiation background across the country through radiation monitoring automation stations (Appendix 6);
- b) Provide information to the Interagency Operational Command Center on natural radiation background across the country during nuclear or radiological emergency of national importance;
- c) Deliver meteorological data to the Regulatory Body to predict potential areas of environmental radiation contamination.

# Article 13. FUNCTIONS OF THE MINISTRY OF INTERNAL AFFAIRS OF GEORGIA

- 1. In case of nuclear or radiological emergency, the Ministry of Internal Affairs of Georgia, alongside with other competencies provided for by the existing legislation:
- a) undertakes civil security measures;
- b) ensures and controls preparedness for nuclear or radiological emergencies of national or transnation importance, liquidation of consequences and physical protection of nuclear and radiation objects (excluding objects containing ionizing radiation generators).
- 2. In case of nuclear or radiological emergency, the Central Criminal Department of the Ministry of Internal Affairs, in case of criminal origin for nuclear or radiological emergency, perform collection of information at the international level and fight

against it, and for this purpose have close cooperation with the Georgian law enforcement agencies, respective services of other States and the General Secretariat of the Interpol.

- 3. In case of nuclear or radiological emergency, the Patrol Police Department shall:
- a) Ensure the security of civilians;
- b) Ensure public order and protection of property from infringement;
- c) Provide emergency assistance within their competence and take appropriate measures to safeguard unsupervised property;
- d) Receive and process notification about nuclear, or radiological emergency, and provide information to relevant agencies;
- e) Carry out prevention, detection and deterrence of illicit traffic of radioactive substances at the border-crossing points within the scope of their competence;
- f) Ensure protection of perimeter for nuclear or radiological emergency according the radiation safety norms;
- g) Ensure public order among the population residing in the surrounding areas of nuclear or radiological emergency;
- h) Provide information on the nuclear or radiological emergency occurring during transportation of nuclear and radioactive material and substances to the relevant agencies;
- 4. Functions of the Border Police of Georgia:
- a) Prevention, detection and deterrence of illicit traffic of nuclear and radioactive substances at the border of Georgia, along its border line, border zone and its maritime space;
- b) Participation in consequences elimination and rescue operations related to nuclear and radiological emergencies in the boundary line and zones, and in special cases across the Georgian territory;
- 5. The Forensic Department shall implement forensic and special investigations of material evidence in case of detection of facts of illegal traffic of nuclear and radioactive substances.
- 6. The Special Tasks Department of the Minirty of Internal Affairs:
- a) Carry out the finding operations of radiological or nuclear weapon, its localization and notifying the response forces about that case within its competence;
- b) Protection of the place where the nuclear or radioactive substances or the facilities have been found and carry out the coordinated measures together with the bodies of the Ministry of Internal Affairs or other authorities in order to avoid descructive factors within its competence;
- c) Gather, process and analyze the data about nuclear or radioactive materials or facilities within its competence;
- d) Perform other functions prescribed under the legislation.

# Article 14. FUNCTIONS OF THE STATE SUB-AGENCY - EMERGENCY MANAGEMENT AGENCY SUBORDINATE TO THE MINISTRY OF INTERNAL AFFAIRS

In case of nuclear or radiological emergencies, alongside with the responsibilities provided for by the legislation, the functions of Emergency Management Agency are the following:

- a) coordinate and monitor execution of State Policy developed towards preparedness and response for nuclear or radiological emergencies;
- b) organize, develop and ensure constant readiness of fire brigades in order to take immediate responsive measures during nuclear or radiological emergency;
- c) coordinate management of nuclear or radiological emergency of local or state importance within its competence;
- d) organize management of response forces and take measures for civil security;
- e) provide the Prime-Minister or duly authorized person with organizational and technical stuff;
- f) identify, analyze and assess the risks on the constant basis in order to reduce risks associated with nuclear or radiological emergencies, plan preventive measures and projects and execute them in cooperation with state bodies, autonomous republics, municipalities, and legal entities of public or private law;
- g) organize creation and development of early notification system for possible or actual nuclear or radiological emergencies, gather and process the necessary data within the mentioned system;
- h) ensure publicity, transparency, free accessibility and proliferation of information related to nuclear or radiological emergencies, except for the restrictions provided for by the legislation;
- i) organize voluntary involvement of citizens of Georgia or other states being on the territory of Georgia in responding measures;

- k) manage State material reserves, monitor and analyze existing situation regarding products of strategic use;
- l) draw up and carry put the educational programs, communication plans and other measures for the purpose of awareness raising among the members of the public regarding nuclear or radiological emergency;
- m) decontaminate the radioactive waste or radioactive sources generated as a result of nuclear or radiological emergencies, within its competence;
- n) decontaminate the contaminated population and response forces within its competence.

### Article 15. FUNCTIONS OF LEPL - "112"

In case of nuclear or radiological emergencies, LEPL - "112" shall:

- a) Receive, process and transfer information regarding nuclear or radiological emergency to the competent authorities of the sake of response;
- b) Ensure coordinated operations between the authorized entities for identification of and notification on the nuclear and radiological emergency and need for urgent assistance;
- c) Register, analyze and maintain the statistics about notification on the nuclear and radiological emergency and need for urgent assistance;
- d) Provide appropriate consultation to citizens within the scope of their competence and provide them with essential primary information prior to arrival of the competent subjects, responsible for nuclear or radiological emergency and urgent assistance;
- e) Raise the awareness among the members of the public regarding rules of notifying "112" about nuclear or radiological emergency and urgent assistance and taking appropriate measures;
- f) Ensure the transport of vehicles, inter alia, by evacuators.

# Article 16. FUNCTIONS OF THE STATE SECURITY SERVICE

- 1. The State Security Service shall ensure state security in case of nuclear or radiological emergency.
- 2. Special Operations Department shall:.
- a) Perform special tasks for the prevention of illegal traffic of radioactive substances and related crimes;
- b) Perform full-scale investigation regarding the crimes related to illicit turnover of nuclear and radioactive substances falling under its investigative competence.
- c) Take investigative measures in the cases of illicit turnover of radioactive substances.
- 3. The Counterterrorist Center (Department) shall analyze the criminal-terrorist aspects of nuclear or radiological emergency and take appropriate measures to prevent a terrorist act.

# Article 17. FUNCTIONS OF LEPL OPERATIVE-TECHNICAL AGENCY OF THE STATE SECURITY SERVICE:

In case of nuclear or radiological emergency, the LEPL Operative-Technical Agency shall establish appropriate technical and program-based systems for nuclear and radiation safety on the border crossing points, ensure their functioning, service and monitoring.

# Article 18. FUNCTIONS OF LEGAL ENTITIES OF PUBLIC LAW UNDER THE MINISTRY OF ECONOMY AND SUSTAINABLE DEVELOPMENT OF GEORGIA

Legal Entities of Public Law within the Ministry of Economy and Sustainable Development of Georgia: Land Transport Agency, Maritime Transport Agency and Civil Aviation Agency shall coordinate transport related activities in case of nuclear or radiological emergency.

# Article 19. FUNCTIONS OF THE MINISTRY OF INTERNALLY DISPLACED PERSONS FROM THE OCCUPIED TERRITORIES, LABOR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

The Ministry of Internally Displaced Persons from The Occupied Territories, Labor, Health and Social Affairs of Georgia shall:

- a) Ensure implementation of integrated state policy for the preparedness and response to nuclear or radiological emergencies;
- b) Perform creation of medical ensurance measures and medical ensurance coorination, for responding;
- c) Manage helath system in case of nuclear or radiological emergencies;

- d) Mobilize the relevant forces and facilities of the Ministry of Internally Displaced Persons from The Occupied Territories, Labor, Health and Social Affairs;
- e) Coordinate the activities of medical institutions during the nuclear or radiological emergency;
- f) Provide the victims with medical and psychological care;
- g) Participate in liquidation of consequences resulting from nuclear or radiological emergency;
- h) Plan and arrange inter-agency teaching in responses to nuclear or radiological emergency within its competence;
- i) Plan and allocate medical reserves necessary for medical support of the affected population;
- j) Coordinate the preparation of medical personnel in terms or preparedness for nuclear or radiological emergencies;
- k) Provide material-technical support to the treatment and rehabilitation of victims.

# Article 20. FUNCTIONS OF LEPL - EMERGENCY SITUATIONS COORDINATION AND URGENT ASSISTANCE CENTER OF THE MINISTRY OF INTERNALLY DISPLACED PERSONS FROM THE OCCUPIED TERRITORIES, LABOR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

In case of nuclear or radiological emergency, LEPL Emergency situations coordination and urgent assistance center shall:

- a) Provide urgent medical assistance during the nuclear or radiological emergency, transfer the affected population to medical institutions and treat them;
- b) Participate in the emergency management center of the Ministry of Internally Displaced Persons from The Occupied Territories, Labor, Health and Social Affairs;
- c) Ensure coordination of every state and private emergency teams;
- d) Ensure transportation and urgent treatment of the affected population to the medical facilities;
- e) Provide registration of the exposed people;
- f) Ensure the preparation of medical personnel in terms or preparedness for nuclear or radiological emergencies;
- g) Coordinate distribution of humanitarian freight for the Ministry in accordance with the applicable legislation, during the nuclear or radiological emergency.

# Article 21. FUNCTIONS OF LEPL – L.SAKVARELIDZE NATIONAL CENTER FOR DISEASE CONTROL AND PUBLIC HEALTH OF THE MINISTRY OF INTERNALLY DISPLACED PERSONS FROM THE OCCUPIED TERRITORIES, LABOR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

National Center for Disease Control and Public Health shall:

- a) Receive the notification from the responsible authorities in case of nuclear or radiological emergencies, in its capacity of national coordinator of International Health Regulations (IHR) and notify the IHR contact point of World Health Organization within 24 hours in accordance with the decision instrument set forth in Annex 2 of IHR;
- b) Ensure preparation of the materials for awareness raising;
- c) Participation in the liquidation activities within its competence.

# Article 22. FUNCTIONS OF THE MINISTRY OF DEFENSE OF GEORGIA

Ministry of Defense of Georgia shall:

- a) Ensure safety and physical protection (security) of nuclear and radiation facilities -subordinates to the Ministry of Defense;
- b) Assist agencies participating in the elimination of the nuclear or radiological emergency by the relevant resources;
- c) Participate in in the elimination of nuclear or radiological emergency within their competence.

# Article 23. FUNCTIONS OF THE MINISTRY OF FOREIGN AFFAIRS OF GEORGIA

Ministry of Foreign Affairs of Georgia shall:

- a) Control over the fulfillment of obligations undertaken by international treaties in the scope regulated by the present Technical Regulation;
- b) Coordinate relations with international organizations during nuclear or radiological emergency;
- c) If necessary, undertake necessary measures to request and receive assistance from international organizations and overseas countries.

#### Article 24. FUNCTIONS OF THE MINISTRY OF FINANCE OF GEORGIA

The Ministry of Finance of Georgia shall provide simplified customs procedures for the purpose of rapid response to nuclear or radiological emergency and implementation of customs operations, as well as support funding of civil security activities.

#### Article 25. FUNCTIONS OF THE AUTONOMOUS REPUBLIC AND OF THE LOCAL SELF-GOVERNMENT BODY

- 1. The autonomous republic and the municipality body carry out the rules related to register and process of incidents, possible or existing nuclear or radiological emergency and their consequences;
- 2. The autonomous republic and the municipality body carry out recovery measures on the nuclear or radiological emergency site in accordance with the legislation within its competence.

#### Article 26. FUNCTIONS OF THE NUCLEAR AND RADIATION FACILITY OPERATOR

Operator of the nuclear and radiation facility shall:

- a) Develop and periodically update the nuclear or radiological emergency response plan based on assessment of risks and threats;
- b) Carry out preventive measures for nuclear or radiological emergency at the facility level;
- c) Immediately inform the Regulatory Body on the disruptions in the technological processes, physical conditions and / or failures in terms of accident preparedness that are important for nuclear and radiation safety;
- d) In case of nuclear or radiological emergencies, response and promptly inform the Regulatory Body;
- e) Determine the reasons for the nuclear or radiological emergency, in order to prevent their reoccurrence in future.

### Article 27. FUNCTIONS OF THE JOINT MARITIME OPERATION CENTER

The Joint Maritime Operation Center shall provide the relevant authorities the information about the turnover of the existing or possible nuclear and radiation cargo and substances in the maritime zone.

### CHAPTER IV. NUCLEAR OR RADIOLOGICAL EMERGENCY PREPAREDNESS

#### Article 28. EMERGENCY PREPAREDNESS

Goals of the emergency preparedness are as follows:

- a) To ensure proper functioning of technical equipment and the existence of protective means.
- b) To conduct national, inter-agency, local and facility trainings and drills.
- c) To develop response plans for all responders.
- d) To prepare standard procedures for different types of responses.
- e) To ensure periodic review and update of response plans and standard procedures.

#### Article 29. ENSURING PROPER FUNCTIONING OF TECHNICAL EQUIPMENT.

Proper functioning of technical equipment and existence of protective means applied for nuclear or radiological emergency shall be ensured by the subject, which holds this equipment and PPE in inventory.

# Article 30. NATIONAL, INTER-AGENCY, LOCAL AND PUBLIC FACILITY TRAININGS AND DRILLS

- 1. The frequency of the training of subjects involved in response to nuclear or radiological emergency is defined by the rule established by the legislation of Georgia and by the present Plan.
- 2. Interagency training of agencies engaged in nuclear or radiological emergency shall be conducted at least twice a year.
- 3. Facility training shall be conducted at least once a year based on the rule established by the facility management. Facility management is obliged to submit a full report on the training to the Regulatory Body.

#### Article 31. PREPARING RESPONSE PLANS AND STANDARD PROCEDURES, PERIODIC REVIEW AND UPDATING

- 1. In order to assess the efficiency of the response plans and standard procedures, the responsible subject shall review and update the plan and standard procedures developed by them.
- 2. This Plan shall be reviewed at least once in five years or in case of need.

#### CHAPTER V. NUCLEAR OR RADIOLOGICAL EMERGENCY RESPONSE AND EMERGENCY MANAGEMENT SYSTEM

# Article 32. GOALS OF EMERGENCY RESPONSE TO NUCLEAR AND RADIOLOGICAL EMERGENCY

Goals of emergency response are:

- a) To regain control of the situation and mitigate consequences at the scene;
- b) To save human lives;
- c) To prevent, or minimize the occurrence of severe deterministic effects;
- d) To render first aid and intensive therapy and treat radiation injuries;
- e) To reduce risk of the occurrence of stochastic health effects;
- f) To provide permanent information to the population and gain public trust;
- g) To prevent, to the extent practicable, the occurrence of adverse non-radiological effects;
- h) To protect, to the extent practicable, the environment and property;
- i) To prepare, to the extent practicable, for the resumption of normal social and economic activity.

# Article 33. NUCLEAR OR RADIOLOGICAL EMERGENCY NOTIFICATION, REQUEST FOR NATIONAL AND INTERNATIONAL ASSISTANCE

- 1. The receipt and analysis of notification on nuclear or radiological emergencies from the state authorities and local self-government bodies, organizations and the population shall be transferred immediately to the appropriate agencies for timely implementation of appropriate response activities.
- 2. In case of receipt of notification of the expected or occurred nuclear or radiological emergency, the subjects involved in response activities shall prepare their staff and material-technical means according to their emergency plans. Participation in the response activities of these subjects shall depend on the development of nuclear or radiological emergency.
- 3. In case of lack of personal protective equipment, medicines, tools and other material resources during nuclear or radiological emergency, the Government of Georgia shall decide to request international assistance from foreign countries, International Atomic Energy Agency and other international organizations.
- 4. Aspects of international assistance from the International Atomic Energy Agency for response to nuclear or radiological emergencies shall be regulated by the Convention on " Assistance in the Case of a Nuclear Accident or Radiological Emergency " and the legislation of Georgia.
- 5. The Ministry of Foreign Affairs of Georgia shall send additional requests for international assistance through diplomatic channels.

# Article 34. ACTIVATION OF RESOURCES

- 1. The owner or operator of a facility implementing nuclear and radiation activities at the facility level, within the scope of their competence, shall start to respond in compliance with the response plan, notify the regulatory authority and relevant bodies on nuclear or radiological emergencies.
- 2. In case of nuclear or radiological emergency of local importance forces and resources shall be activated by the heads of relevant administrations, who also shall inform the competent authorities about nuclear or radiological emergency.
- 3. The extent of activation of the resources during nuclear or radiological emergency of national importance is determined by the Ministy of Internal Affairs of Georgia in accordance with the recommendations provided by the Regulatory body and other competent authorities and in compliance with the existing legislation.

#### Article 35. RESPONSE TO NUCLEAR OR RADIOLOGICAL EMERGENCY

- 1. Each of the participant of an emergency response shall pre-determine the person, who acts and participates in the foci of nuclear or radiological emergency, within their competence and in compliance with the emergency response plan, or participate beyond its limits in the activities of the Nuclear or Radiological Emergency Management Group.
- 2. Each subject participating in an emergency response shall pre-determine the type and amount of resources that may be activated.

# Article 36. NUCLEAR OR RADIOLOGICAL EMERGENCY RESPONSE MANAGEMENT SYSTEM

Management of emergency response shall be performed in accordance with the procedure established by law and shall depend on:

- a) importance of nuclear or radiological emergency;
- b) Type and extent of nuclear or radiological emergency;
- c) Category of emergency preparedness.

#### Article 37. TERMINATING RESPONSE ACTIVITIES

- 1. Response activities shall be terminated when there is no danger of expansion of the nuclear or radiological emergency area as well as harmful impact of ionizing radiation on human beings and environment.
- 2. Termination of the response activities is inadmissible unless all necessary urgent and early protective actions are undertaken.
- 3. Prior to termination of the response activities, radiological situation shall be determined to assess the received dosages (including the most vulnerable groups, such as pregnant women and children) and identify ways of exposure. When determining the radiological situation, the impact of protection measures taken within the response activities shall be taken into consideration and, if necessary, the future use of land and water surfaces (for example, setting restrictions or identifying alternate ways of application).
- 4. Radiological situation shall be evaluated based on the reference levels, basic and operational criteria and dose limits to ensure that all prerequisites for transition from emergency exposure to the stage of existing or planned exposure are met.
- 5. Assessment of the threats of nuclear or radiological emergencies shall be carried out prior to termination of the response activities, which will become the basis to update the response plan.
- 6. Based on the threats assessment, identification of the areas in need of protective and other response actions, and mitigative activities as well as the existing actions shall be reviewed.
- 7. Prior to termination of the response activities, requirements for occupational exposure may be applied to all workers engaged in the recovery operations.
- 8. Prior to termination of the response activities, non-radiological consequences (psychological and economic) and other factors (access to resources and various social services, technologies, land use alternatives, public adherence) shall be identified and evaluated for the purpose of termination.
- 9. The registry of persons in need of medical supervision shall be created prior to termination of the response activities.
- 10. Prior to termination of the response activities, the aspect of radioactive waste management resulting from nuclear or radiological emergency shall be taken into consideration.
- 11. The authority competent to make a decision on terminating nuclear or radiological emergency is determined under the existing legislation.

#### Article 38. HANDLING OF RADIOACTIVE WASTE GENERATED FROM NUCLEAR OR RADIOLOGICAL EMERGENCY

- 1. In case of nuclear or radiological emergency, and also within the response activities, items, territories and human decontamination, mitigation and recovery and other actions, radioactive waste will be generated, which should be identified in a short time, classified and safely stored.
- 2. For safe and effective handling of radioactive waste, it is required to:
- a) Determine characteristics of radioactive waste;
- b) Define criteria and categorization of radioactive waste;
- c) Minimize amount of radioactive waste as far as possible;
- d) Identify the method of radioactive waste handling taking into consideration compatibility of all stages of their life cycle;
- e) Determine the appropriate storage location;
- f) Record non-radioactive waste.
- 3. During formation of radioactive waste due to nuclear or radiological emergencies, special handling shall be considered for human and animal wastes, parts of which may be contaminated.

#### Article 39. IMPLEMENTATION OF RECOVERY OPERATIONS AFTER NUCLEAR OR RADIOLOGICAL EMERGENCY

The rules, system and competence on conducting recovery operations after nuclear or radiological emergency are determined under the existing legislation.

# Article 40. FINANCIAL AND MATERIAL SAFEGUARDS AND COMPENSATION

- 1. Expenses of the subjects involved in the emergency response are covered by their own basic and budgetary funds except where the preliminary agreement exists between the facility leadership and the subject participating in the response activities.
- 2. Financial and material safeguards and implementation mechanism for recovery operations after the nuclear or radiological emergency of local importance shall be determined by the facility leadership and / or local self-government body within their competence and in compliance with the applicable legislation.
- 3. Financial and material safeguards and implementation mechanism for recovery operations after the nuclear or radiological emergency of national national shall be determined in accordance with the applicable legislation.

#### Article 41. NUCLEAR OR RADIOLOGICAL EMERGENCY AND RESPONSE ANALYSIS

- 1. Causes of development of nuclear or radiological emergencys should be studied at different levels of response activities to avoid reoccurrence of such emergency.
- 2. Analysis of the implemented response activities shall be implemented by different subjects, as well as joint discussion and review of response plans, if required.

# Article 42. QUALITY MANAGEMENT OF EMERGENCY PREPAREDNESS AND RESPONSE

Establishment of integrated management system for nuclear and radiological emergency response, development of nuclear or radiological emergency response plans and procedures, equipment, medicines, measuring devices, personal protective equipment, hardware, communication systems as well as readiness and integration of other necessary facilities shall set conditions for effective response against nuclear and radiological emergency and minimize its consequences.

# CHAPTER VI. PUBLIC COMMUNICATION IN NUCLEAR OR RADIOLOGICAL EMERGENCY AND FINAL PROVISIONS Article 43. STAGES OF PUBLIC COMMUNICATION IN NUCLEAR OR RADIOLOGICAL EMERGENCY

Public communication regarding nuclear or radiological emergency situations shall be implemented:

- a) At the stage of preparedness for nuclear or radiological emergency;
- b) At the stage of threat of occurrence of nuclear or radiological emergency;
- c) At the stage of response to nuclear or radiological emergency;
- d) At the stage of mitigation actions against consequences of nuclear or radiological emergency;
- e) Prior to termination of response activities against nuclear or radiological emergency.

# Article 44. STANDARDS FOR PUBLIC COMMUNICATION IN NUCLEAR OR RADIOLOGICAL EMERGENCY

- 1. At any stage, information provided to the population shall be useful, timely, relevant, clear, compatible with the truth and lead to the public trust.
- 2. Public shall be informed in the language they understand.
- 3. Responsible subjects shall periodically update information provided to the population, for its effectiveness.
- 4. Informing the population, taking into account its effectiveness, shall be provided through mass media, publications, special literature, advertising products, thematic exhibitions, demonstrations, conferences and other forms of informing the population.
- 5. Responsible subjects shall ensure availability of alternative means of communication with the population, in the event of failure of the above-mentioned means or their unavailability for any reason.
- 6. Information provided to public by a responsible subject shall be coordinated with all the participants involved in the response activities.
- 7. In the process of regular and alternative means of communication, the protection of information belonging to state secrets shall be taken into consideration.

- 8. Monitoring of information disseminated among population on nuclear or radiological emergency and protective actions shall be implemented. In case of identification of incorrect information, the population should be provided additional information.
- 9. Information related to nuclear or radiological emergency shall be constantly available for the population.
- 10. Subjects responsible for response to nuclear or radiological emergency, may request information from public in certain circumstances, if necessary.
- 11. The State Security and Crisis Management Council and the Cabinet of Ministers are authorized to public communication, if required.
- 12. International Nuclear Event Scale (INES) shall be used for the purpose of timely public communication, using their familiar terms to identify importance of safety for nuclear and radiological events. This scale should not be used for planning the emergency response. According to the INES scale, the classification of events is defined by Appendix 1.
- 13. Responsible subjects shall cooperate with relevant non-governmental organizations regarding the matters covered by this Chapter.
- 14. In case of nuclear and radiological emergency, the system of public notification is provided in Annex 3 of these Technical Regulations.

# Article 45. CONTENTS OF MESSAGE PROVIDED TO PUBLIC AT THE STAGE OF PREPAREDNESS FOR NUCLEAR OR RADIOLOGICAL EMERGENCY

- 1. At the stage of preparedness for nuclear or radiological emergency, message provided to the public shall contain the following information:
- a) Basic information about ionizing radiation and their impact on humans and environment;
- b) Types of nuclear or radiological emergencies and their impact on general population and environment;
- c) Information on actions to be used to warn, protect and assist the population in the event of nuclear or radiological emergency;
- d) Relevant information on the actions that the population should perform in case of nuclear or radiological emergency.
- 2. Information provided to the population at the stage of preparedness for nuclear or radiological emergency shall be periodically reviewed by responsible subjects in terms of its effectiveness.

# Article 46. CONTENTS OF MESSAGE PROVIDED TO PUBLIC AT THE STAGE OF THREAT OF OCCURRENCE OF NUCLEAR OR RADIOLOGICAL EMERGENCY

- 1. At the stage of threat of occurrence of nuclear or radiological emergency, prior to announcement of alarm, the relevant subjects should encourage the population to follow specific channels of communication and receive information;
- 2. At the stage of threat of occurrence of nuclear or radiological emergency, public shall receive the following information:
- a) Information on the type of nuclear or radiological emergency and its characteristics (origin, extent and approximate development), as appropriate;
- (b) Information on protective actions that may include the following, depending on types of nuclear or radiological emergency:
- b.a) Restrict consumption of certain categories of food and household products due to their potential contamination;
- b.b) Basic rules of hygiene and decontamination;
- b.c) Recommendations to stay indoors and refrain from leaving out;
- b.d) Distribution and use of personal protective equipment;
- b.e) Actions required for evacuation;
- c) Information on responsible subjects;
- d) Information on symptoms of radiation disease caused by nuclear or radiological emergencies;
- e) Information on the hospitals that public may refer to in case of onset of symptoms;
- f) Any change in protective actions or any development of nuclear or radiological emergency;
- 3. Special warning for certain groups of population shall be provided, as required.
- 4. Responsible agencies may call on the population to cooperate with them and follow their recommendations.

# Article 47. CONTENTS OF MESSAGE PROVIDED TO PUBLIC AT THE STAGE OF MITIGATION ACTIONS AGAINST CONSEQUENCES OF NUCLEAR OR RADIOLOGICAL EMERGENCY

At the stage of mitigation actions against nuclear or radiological emergency, the following information shall be delivered to public:

- a) Information on health-related risks;
- b) Clear instructions on the implemented actions.

# Article 48. CONTENTS OF MESSAGE PROVIDED TO PUBLIC PRIOR TO DECISION TO TERMINATE RESPONSE ACTIVITIES AGAINST NUCLEAR OR RADIOLOGICAL EMERGENCY

Prior to making decision on termination of response activities against nuclear or radiological emergencies, the following information shall be delivered to public:

- a) Information on the basis for termination of nuclear or radiological emergency response (how safe is the termination of nuclear or radiological emergency response and what measures have been undertaken);
- b) Information on need of adaptation to the predetermined restrictions, extention of individual protective actions or need for implementation of new protective measures;
- c) Information on need to change the daily life style in case of such necessity;
- d) Information about alleged alternatives of self-assistance;
- e) Information on need to continue environmental and individual monitoring after termination of a nuclear or radiological emergency response, if required;
- f) Information on the need for continuation of operations for recovery of services and workplace, if any;
- g) Information on health related radiological hazards in relation with the new situation of exposure (existing exposure situation or situation of the planned exposure).