

**REGULATION**  
**for the conditions and procedure for establishing of special-statutory areas around nuclear facilities and facilities with sources of ionizing radiation**

*Decree of the Council of Ministers № 187, 28 July 2004, promulgated in State Gazette No. 69, 6 August 2004, amended SG No. 46, 12 June 2007, amended SG No. 53, 10 June 2008*

**Chapter One**  
**GENERAL PROVISIONS**

**Article 1**

This regulation shall provide for the conditions and procedure for defining the size, boundaries and the regime of special-statutory areas around nuclear facilities and sites with sources of ionizing radiation (SIR) and for compensations for damages sustained due to restrictions imposed over estate- private property.

**Article 2**

- (1) Special-statutory areas are established around nuclear facilities and facilities with SIR to limit public exposure to radiation in the event of design basis accidents and during normal operation of nuclear facilities as well as for radiation monitoring on the public and the environment.
- (2) Special-statutory areas are:
  1. Radiation protection area;
  2. Monitored area.

**Article 3**

- (1) A radiation protection area is a territory around facilities and sites as defined in Article 1, where during normal operation the annual dose limits for the public, as defined in the regulation under Article 26 Paragraph 3 of the Act on the Safe Use of Nuclear Energy (ASUNE), may be exceeded.
- (2) A monitored area is the territory beyond the boundaries of the radiation protection area, where radiation monitoring on the public and the environment is carried out for the purposes of radiation protection.
- (3) The boundaries of the radiation protection area and the monitored area are defined at design stage of nuclear facilities and facilities with SIR taking into account:
  1. the risk category;
  2. the design calculation and analyses for possible releases in the environment of radioactive substances during normal operation and in the event of accident;
  3. the specifics of the distribution of the gaseous-aerosol releases in the atmosphere and the migration of the radionuclides in the components of the environment;
  4. hydrologic, hydro geologic and climate data;
  5. the existing and the projected boundaries of urbanized areas (populated areas and towns/villages) or individual built-up estates outside these areas with specific function under Article 8, item 1 of the Act on Territorial Structure;
  6. the demographic and social specifics including the living conditions and public activities;
  7. The long-term plan for development of the region and other factors may be relevant in defining the special-statutory areas.
- (4) The methodology for defining the size of the special-statutory areas shall be approved by the Chairman of the Nuclear Regulatory Agency (NRA).

#### **Article 4**

- (1) The outermost boundary of the radiation protection area shall be defined in compliance with the following criteria:
  1. the annual individual effective dose the population during normal operation of the nuclear facility or the facility with SIR shall not exceed the dose limits prescribed in the regulation under Article 26 Paragraph 3 of ASUNE;
  2. the annual individual effective dose in event of design basis accident shall not exceed 5 mSv outside the boundaries of the radiation protection area.
- (2) The annual individual effective dose for the population during normal operation of the nuclear facility or the facility with SIR in the radiation protection area shall not exceed the dose limits prescribed in the regulation under Article 26 Paragraph 3 of ASUNE.
- (3) The external boundary of the radiation protection area shall be defined by mathematical modeling and is the line connecting the outermost from the nuclear facility or the facility with SIR points calculated by applying all criteria from Paragraph (1).
- (4) In case when one site is used for more than one nuclear facility or facility with SIR the criterion from Paragraph 1, item 1 shall be applied by taking into account the cumulative impact of all facilities on site.
- (5) When the radiation protection area encloses territory outside the site, such a territory shall not be considered as area for site expansion of the nuclear facility or the facility with SIR and as back-up territory for urban development as well.
- (6) The coincidence of the radiation protection area's boundary of a nuclear facility with the criteria and requirements of this Regulation shall be assessed by the Chairman of NRA in the process of approval of the technical design of the nuclear facility.

#### **Article 5**

- (1) The outermost boundary of the monitored area shall be defined on the basis of:
  1. the requirement for providing radiation monitoring of all necessary data for assessment of the impact of the nuclear facility or facility with SIR on the population, water-supply networks and facilities and the environment during normal operation;
  2. the requirement for providing radiation monitoring of all necessary data for assessment of the radiation situation and undertaking measures in event of accident;
  3. the requirement for informing the executive authorities, the population and other countries and international organizations for the real radiation situation around the nuclear facility or the facility with SIR;
  4. the radiation monitoring shall be able to provide the necessary objective information on above items 1 to 3;
  5. Application of cost-benefit analysis for the radiation monitoring purposes.
- (2) The coincidence of the monitored area's outermost boundary of a nuclear facility with the criteria and requirements of this Regulation shall be assessed by the Chairman of NRA in the process of approval of the technical design of the nuclear facility.

### **Chapter two**

## **ESTABLISHMENT OF SPECIAL-STATUTORY AREAS**

#### **Article 6**

- (1) Radiation protection areas around the nuclear facilities or the facilities with SIR are shall be territories of special territorial and structural protection under the Act on Territorial Structure. The size and boundaries of radiation protection areas and the regime of use of land properties that may fall within such boundaries shall be determined in compliance with a detailed structural plan pursuant to Article 111 of the Act on Territorial Structure.
- (2) The respective licensee or permit holder under the ASUNE shall assign the development of

such detailed structural plan to fully licensed designers. The special detailed structural plan shall be developed in compliance with the requirements set forth in Articles 3 and 4 herein and with due regard to the nuclear safety and radiation protection criteria, taken into account in the construction design of the nuclear facility or the site with SIR.

- (3) The respective licensee or permit holder under the ASUNE shall considerate such special detailed structural plan with the NRA Chairman with regard to the compliance of the radiation protection area with the requirements under paragraph 2. The plan shall also be considered with the Minister of Healthcare, the Minister of Environment and Waters and the Minister of Agriculture and Forestry in respect to the imposition of restrictions on the use of land, forest and water resources under Article 109, para 2 of the ASUNE.
- (4) The special detailed structural plan shall be approved with an order issued by the Minister of Regional Development and Public Works pursuant to Article 105, Paragraph 1, item 1 of the ASUNE, following its acceptance by the National Council of Experts on the issues of territorial structuring and regional development strategy
- (5) In cases when the radiation protection area encloses territories outside the country borders the special detailed structural plan shall be approved after bilateral or multilateral international treaty has entered into force.
- (6) Within fourteen days of issuing the order under paragraph 4, it shall be sent out for promulgation in the State Gazette and shall be made available to the respective municipality to inform the public through the mass media and through notices at appropriate places with public access in the municipality buildings or the city hall. In case that the radiation protection area covers more than one municipality, such order shall be made available to all concerned municipalities.
- (7) All concerned parties shall be entitled to appeal against the order under paragraph 4 before the Supreme Administrative Court within fourteen days following its promulgation in the State Gazette.
- (8) The concerned parties entitled to appeal under paragraph 7 here above shall be property owners and holders of limited real rights as recorded in the property records, whose property or parts thereof fall within the boundaries of a radiation protection area.
- (9) A radiation protection area shall be considered established when an order pursuant to paragraph 4 granting approval on a special detailed structural plan has entered into force. Such order shall enter into force following the expiration of the appeal term, provided such order is not appealed, or, after a court decision confirming its validity has entered into force.
- (10) Where a radiation protection area is confined to the site, building or premises of the facility where SIR are placed or used, the NRA Chairman shall establish such special-statutory area under the license referred to in Article 58, para 1, items 1-3 of the ASUNE.

#### **Article 7**

- (1) A monitored area around nuclear facility or site with SIR shall be established with an order of the Chairman of NRA taking into account the factors for nuclear safety and radiation protection in the technical design and the requirements in Article 3 and 5.
- (2) Where a monitored area is confined to the site, building or premises of the site where SIR are placed or used, the NRA Chairman shall establish such special-statutory area under the license referred to in Article 58, Para 1, items 1-3 of the ASUNE.

#### **Article 8**

- (1) Within ten days after orders under Article 6, Para 4 and Article 7, Para 1 the Chairman of NRA shall make them available to:
  1. the respective licensee or permit holder under the ASUNE fulfill permanent control over the radiation parameters of the working premises and the environment within the radiation protection and monitored areas;

2. (Amended, SG No. 46/2007 and SG No. 53/2008)the mayors of the respective municipalities, the Minister of Agriculture and Forestry, the Minister of Healthcare, the Minister of the Environment and Waters, the Minister of the Interior, the Ministry of Emergency Situations, the respective cadastre services to the Cadastre Agency and the respective municipal services on agriculture and forestry.
- (2) Within one month of receipt of the order under paragraph 1, item 2, the boundaries of the radiation protection area shall be recorded into the current detailed structural plans, cadastre maps and register, cadastre plans and the plans, maps and records of agricultural lands, forests and forest lands subject to proceedings for restoration of property rights.

### **Article 9**

The Minister of Regional Development and Public Works, the Minister of Agriculture and Forestry, the Minister of Healthcare and the Minister of Environment and Waters in accordance with their competencies shall fulfill control to ensure compliance with the regime of radiation protection areas.

### **Article 10**

- (1) Changes to the boundaries of radiation protection areas shall be permitted in case of changes in the technical design, approved following the procedure provided for in Article 33, paragraph 4 of the ASUNE and in compliance with Articles 3 and 4 and under the procedure provided for in Articles 6 and 8.
- (2) In the event that during the technical design approval proceedings for a given nuclear facility, it is established that the requirements of Articles 3 and 4 are complied with, and there is no immediate necessity to establish a radiation protection area outside the nuclear facility site, such fact shall be explicitly noted in the order under Article 33, paragraph 4 of the ASUNE. In this case Articles 6 and 8 shall not be applied.

## **Chapter Three**

### **REQUIREMENTS FOR SPECIAL-STATUTORY AREAS**

#### **Section I**

### **Article 11**

- (1) When a radiation protection area is established by an act issued by the Minister of Regional Development and Public Works, or by the power of an international treaty, the mayors of municipalities where such areas are located, shall ensure that information boards are placed at appropriate public places informing the public of the exact location of the boundaries of the radiation protection area as well as the restrictions imposed within it.
- (2) The licensee or the permit holder under the ASUNE, in co-operation with the mayors of the respective municipalities under paragraph 1, shall ensure that the appropriate warning signs indicating the boundaries of the radiation protection areas are in place.
- (3) The expenses under paragraphs 1 and 2 shall be on the account of the licensee or the permit holder.

### **Article 12**

- (1) The construction of residential and public buildings, child-care and health care centers, restaurants, industrial, social and cultural facilities or any other facilities, not directly related to the operation of a nuclear facility or a facility with SIR shall be strictly forbidden.
- (2) Construction related to the use of agricultural land and the management, growing, use and protection of forests shall be permitted within the radiation protection areas provided the approval of such construction does not require prior changes in the approved purpose of land utilization.

- (3) Restrictions on the use of land, forests and water sources within radiation protection areas may be imposed by the Minister of Healthcare, the Minister of Agriculture and Forestry and the Minister of the Environment and Waters, in accordance with their competencies.

## **Section II**

### **Radiation Monitoring**

#### **Article 13**

- (1) The licensee and the permit holder shall perform radiation monitoring in the special-statutory areas on the environment and agricultural production and shall assess the public radiation exposure.
- (2) The radiation monitoring in the special-statutory areas shall be performed in a way ensuring information about the radiation levels that allows decision making for radiation protection of the population during normal operation and in the event of accidents.

#### **Article 14**

- (1) The radiation protection shall include as a minimum:
  1. Gamma dose rate;
  2. General and specific activity of the liquid and gas-aerosol releases to the environment;
  3. Specific activity of the gases and aerosols in the near ground air;
  4. Specific activity of the atmospheric precipitation, the surface soil layer and the vegetation;
  5. Specific activity of surface and underground waters;
  6. Contamination of water supplying networks and facilities;
  7. Contamination with radionuclides of transport means;
  8. Specific activity of vegetable and animal products and raw material;
  9. Meteorological data.
- (2) The scope and the volume of the radiation monitoring shall be defined depending on the nature of the activities and the factors of the nuclear safety and the radiation protection for the nuclear facility or the site with SIR in the corresponding technical design and shall be coordinated with the competent state authorities.

#### **Article 15**

- (1) Where special-statutory areas around nuclear facilities and facilities with sources of ionizing radiation include territories beyond the site limits, the licensee or the permit holder shall install automated radiation monitoring systems, providing information to the national network for radiological monitoring as provided for in the Environmental Protection Act.
- (2) In the special-statutory areas under Para 1 a stationary devices displaying the dose rate shall be installed at appropriate public places.
- (3) The results from the radiation monitoring in the special-statutory areas shall be registered, analysed and stored under the procedure provided for in the respective license or permit granted under the ASUNE and shall be made available upon request.

#### **Article 16**

- (1) Executive power authorities in accordance with their legal powers shall control in the special-statutory areas the environmental radiation parameters and the radiation exposure of the population.
- (2) The agricultural production from lands within the radiation protection areas boundaries shall be subject of obligatory radiation control exercised by the State control authorities under the Health Act and the Veterinary Activities Act.

- (3) The control under Para 2 shall not be applied for agricultural production grown for private use neither for samples shown on fairs and exhibitions.

## **Chapter Four**

### **COMPENSATIONS FOR SUSTAINED DMAGES**

#### **Article 17**

- (1) In the event the prohibitions under Article 12, paragraph 1 or the restrictions imposed pursuant to Article 12, paragraph 3, considerably hinder the use of private real estate property, located within a radiation protection area, the respective property owner shall notify in writing the licensee or the permit holder under the ASUNE.
- (2) In the cases under paragraph 1, the licensee or the permit holder under ASUNE shall send a written offer to the owner stating their proposal to acquire from the owner the ownership title, respectively, the right of use or the right to construct on the property, and shall describe all conditions thereof.
- (3) Upon failure to reach an agreement to have the title of ownership or the right of use or the right to construct transferred from the owner to the licensee or permit holder under the ASUNE, property alienation and owner compensation shall be carried out under the procedure provided for in the Act on State Property or in the Act on Municipal Property.
- (4) All expenses arising under paragraph 1 though 3 shall be no the account of the licensee or the permit holder under ASUNE.

#### **Article 18**

- (1) In the event the prohibitions under Article 12, paragraph 1 or the restrictions imposed under Article 12, paragraph 3 constitute insignificant hindrance to the use of a private real estate property, located within a radiation protection area, the respective licensee or permit holder under the ASUNE, shall be obliged to pay to the owner a one-time monetary compensation for damages sustained as a result of imposed restrictions.
- (2) In the event the parties fail to reach agreement as to the amount of the compensation under paragraph 1 above, the property owner and the licensee or permit holder under the ASUNE shall assign to an independent licensed appraiser the evaluation of the damages, sustained due to the impositions of such restrictions.
- (3) In the event the parties disagree on the designation of a licensed appraiser within 30 days of receipt of notification sent by the opposite party, the property owner and/or the licensee/permit holder under the ASUNE shall be entitled to request from the mayor of the respective municipality to nominate an independent appraiser. The designation of such appraiser shall be obligatory to both parties.
- (4) The appraisers under paragraphs 2 and 3 above shall determine the compensation amounts taking into consideration the following criteria:
  1. the size of land property to which a restriction applies;
  2. the types of restrictions to its use;
  3. the period for which the restriction applies;
  4. the fair market value of the land property or the portion thereof, that falls within the imposed restriction;
- (5) The remuneration due to the appraiser and all expenses relating to the appraisal of such compensation shall be on the account of the licensee or the permit holder under the ASUNE.
- (6) Regardless of the compensation under paragraph 1 above, licensees or permit holders shall take the appropriate measures to repair all sustained damages or shall reimburse the owner accordingly.

## **Article 19**

- (1) All restrictions to the use of real estate properties within radiation protection areas shall be recorded into the cadastral plans and shall be entered under the procedure provided for in the Cadastre and Property Records Act.
- (2) Transfer of ownership title or the establishment of right of use over a given property under paragraph 1 above shall not suspend the restrictions over the use of the real estate property.
- (3) The restrictions under paragraph 1 shall apply from the date of entry into force of the structural plan, defining the location of the respective radiation protection area and of payment of the one-time monetary compensation to the owner of the property where such restriction is imposed.

## **Article 20**

The owners or holders of limited rights of use over real estate properties within the boundaries of radiation protection areas around nuclear facilities or sites with SIR shall comply with the prohibitions and restrictions enforced in the territory where the real estate property is located.

## **Additional Provisions**

### **§ 1.**

- (1) The boundaries of radiation protection and monitored areas around existing nuclear facilities or sites with SIR shall be set taking into account:
  1. the individual annual effective dose for the population during normal operation of the nuclear facility or the facility with SIR that shall not exceed the dose limits set in the Regulation under Article 26, Para 3 of the ASUNE;
  2. the actual data for the releases of radioactive substances in the environment;
  3. the actual radiological situation around the facility or the site;
  4. the circumstances under Article 3, Para 3.
- (2) Changes of the boundaries of the radiation protection area shall be permitted in case of changes in the design of the nuclear facility or the site with SIR and shall be in compliance with the requirements under Para 1 above and the procedures provider for in this Regulation.

## **FINAL PROVISIONS**

### **§ 2.**

The licensee or permit holder under the ASUNE for operating nuclear facilities or facilities with sources of ionizing radiation under § 1 as well as the executive authorities shall upgrade the special-statutory areas to comply with the requirements of this Regulation within two years after the regulation has entered into force.

### **§ 3.**

- (1) The NRA Chairman, the Minister of Healthcare, the Minister of Agriculture and Forestry and the Minister of Environment and Waters, according to their competencies, shall issue instructions for the application of this Regulation.
- (2) The NRA Chairman shall approve guidelines, methodologies and other documents on the application of this Regulation, subject to publication in the official NRA Internet site.

### **§ 4.**

This Regulation shall be adopted on the basis of Article 111 of the Act on the Safe Use of Nuclear Energy.