National Report of the Republic of Latvia on the Implementation of the Requirements of Council Directive 2009/71/EURATOM of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations

Ministry of Environmental Protection and Regional Development

Radiation Safety Centre of the State Environmental Service

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Introduction

The Report of the Republic of Latvia has been drawn up in accordance with Article 9(1) of Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations.

The Report provides information on the introduction and implementation of the requirements of Directive 2009/71/Euratom by ensuring the necessary level of nuclear safety.

In accordance with the definition in Article 3(1)(a) of Directive 2009/71/Euratom, there is only one nuclear installation located in Latvia, which is the **Salaspils Nuclear Reactor**. The owner of the Salaspils Nuclear Reactor is the **Public Limited Liability Company "Latvian Environment, Geology and Meteorology Centre"** (hereinafter "LEGMC"). In 2011, LEGMC entered into an agreement with the University of Latvia regarding the maintenance of the Salaspils Nuclear Reactor, so the **University of Latvia** is the operator of the Nuclear Reactor and also the "licence holder" in accordance with the definition in Article 3(5) of the Directive. The University of Latvia has been issued a licence in accordance with the definition of "licence" in Article 3(4) of Directive 2009/71/Euratom.

The Salaspils Nuclear Reactor was built and its operation launched in 1961. The Salaspils Nuclear Reactor was a research water-water pool reactor with a nominal capacity ranging from 1,500 kW to 2,200 kW. In 1974, when reconstructing the reactor, its nominal capacity was increased from 2 MW to 5 MW. The Salaspils Nuclear Reactor was shut down in 1998, and at the moment it is being liquidated. With its Order No 958 of 30 November 2004 "On the Concept of Liquidation and Dismantling of the Salaspils Nuclear Reactor", the Cabinet of Ministers approved the concept of the liquidation and dismantling of the Salaspils Nuclear Reactor, which envisages partial liquidation of the Salaspils Nuclear Reactor by removing the radioactive waste from the reactor's territory and adjusting the reactor's systems and infrastructure for ensuring the operation of other ionising radiation technologies. The fresh (unspent) nuclear fuel was returned to the country of origin, i.e. the Russian Federation, in 2005, and the spent fuel was returned in 2008. At the moment, one of the most important issues to be solved is the liquidation of the Salaspils Nuclear Reactor.

At the moment Latvia does not have and is not planning a national nuclear programme.

Report on the Implementation of the Requirements of Council Directive 2009/71/EURATOM of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations

1. Legislative, regulatory and organisational framework (Article 4)

1.1. Adoption of national nuclear safety requirements (Article 4(1)(a))

In 2000, the Saeima adopted the Law on Radiation Safety and Nuclear Safety which establishes a regulatory framework in the field of radiation safety and nuclear safety. Pursuant to the Law, in 2001, a regulatory authority in the field of radiation safety and nuclear safety was established – Radiation Safety Centre (as of 1 July 2009, Radiation Safety Centre of the State Environmental Service (hereinafter "the Centre"), which performs State supervision and control in the field of radiation safety and nuclear safety in Latvia. On the basis of the Law, Cabinet regulations have been issued which establish a general legislative and institutional framework in the field of radiation safety and nuclear safety. Requirements concerning radiation safety and nuclear safety have also been included in other general regulatory enactments that govern the operation of public authorities, environmental protection and construction.

Latvia has ratified or joined a number of international treaties (including Vienna Convention on Civil Liability for Nuclear Damage, Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, Convention on the Physical Protection of Nuclear Material, Convention on Early Notification of a Nuclear Accident, Convention on Assistance in the Case of a Nuclear Accident or Radiation emergency, Convention on Nuclear Safety and Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management).

Upon joining the European Union (hereinafter "EU"), the EU's legislative requirements were transposed into the national regulatory enactments improving the already existing legal framework in the field of radiation safety and nuclear safety.

The Ministry of Environmental Protection and Regional Development (hereinafter "MoEPRD") is the competent authority for the implementation of regulatory enactments in the field of radiation safety and nuclear safety. The existing regulatory enactments in the field of radiation safety and nuclear safety have been developed in compliance with the EU requirements and international recommendations. Development of new regulatory enactments or of amendments to the existing regulatory enactments is mainly related to the adoption of new EU legislation or amendments thereto in compliance with the recommendations by the International Atomic Energy Agency. In the development of the regulatory enactments, the MoEPRD cooperates with the Centre, operators, societies and associations involved in the respective fields of activity, as well as with other involved institutions, such as the Ministry of Economics, Ministry of the Interior, Ministry of

Transport, Ministry of Health, Ministry of Agriculture, Food and Veterinary Service, State Fire and Rescue Service (hereinafter "SFRS") and State Border Guard. Together with the involved institutions, working groups are established which examine the draft regulatory enactments. The draft regulatory enactments are published on the MoEPRD's website where they are available to the public, who may send in their proposals.

1.2. Provision of a system of licensing (Article 4(1)(b))

A system of licencing in Latvia has been established taking into account the requirements of the EU legislation and the recommendations by the International Atomic Energy Agency. The Law on Radiation Safety and Nuclear Safety stipulates that any commercial activity with sources of ionising radiation must require a special permit (licence) (hereinafter "licence") to commence and perform such activities for a specified period of time, taking into account the restrictions of activities specified in the licence. The regulatory enactments of Latvia stipulate:

1) Criteria which must be met in order to request a licence for operations with sources of ionising radiation;

2) Procedure for issuance of licences.

Licences for activities with sources of ionising radiation are issued by the Centre. In the licence, the Centre defines which activities are permitted and the conditions for such activities. A State duty is paid for issuance of a licence, which is transferred to the basic budget of the State. The amount of the duty and the procedure for its payment are stipulated in Cabinet regulations.

The system of licencing of activities with sources of ionising radiation is established by Cabinet Regulation No 723 of 20 September 2011 "Procedures for Licensing Activities with Sources of Ionising Radiation" (hereinafter "Cabinet Regulation No 723"). Cabinet Regulation No 723 contains certain legal provisions from:

1) Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation;

2) Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel;

3) Council Directive 2003/122/Euratom of 22 December 2003 on the control of high-activity sealed radioactive sources and orphan sources;

4) Council Directive 91/43/Euratom of 30 June 1997 on health protection of individuals against the dangers of ionizing radiation in relation to medical exposure, and repealing Directive 84/466/Euratom;

5) Council Directive 2009/7/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations;

6) Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste.

Due to the fact that, on 5 December 2013, a new Council Directive 2013/59/Euratom which laid down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealed Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom was adopted, by 6 February 2018, Cabinet Regulation No 723 will be revised.

Procedures for licensing of ionising radiation objects of national significance

Pursuant to the Law on Radiation Safety and Nuclear Safety, nuclear installations are ionising radiation objects of national significance.

The Law on Environmental Impact Assessment stipulates which objects require an environmental impact assessment. The decisions on the approval of activities relating to the establishment or substantial transformation of ionising radiation objects of national significance are made on an individual basis by the Cabinet of Ministers, which bases its decision on an environmental impact assessment report, provided that the environmental impact assessment has been conducted, in accordance with the Law on Environmental Impact Assessment.

In order to begin the liquidation of the Salaspils Nuclear Reactor, on 26 October 1999, the Cabinet of Ministers approved the concept of the liquidation and dismantling of the Salaspils Nuclear Reactor, which was updated in 2004. For the liquidation of the Salaspils Nuclear Reactor, an environmental impact assessment was performed, which was approved by the Cabinet of Ministers with Order No 467 of 26 July 2007 "On Approval of Liquidation and Dismantling of the Salaspils Nuclear Reactor".

In order to receive a licence for the establishment or substantial transformation of an ionising radiation object of national significance, an applicant submits an application to the Centre. The Centre consults with the Radiation Safety Council regarding the usefulness of establishment of such objects, analyses the potential impact of the planned transformations on radiation safety and nuclear safety, and evaluates whether the positive result to be achieved by the operator will exceed the overall negative impact.

The Centre issues a licence for the establishment or substantial transformation of an ionising radiation object of national significance in accordance with the following procedure:

1. Issues a licence for planning the establishment or substantial transformation of an ionising radiation object of national significance. If an environmental impact assessment is required for the establishment or substantial transformation of an ionising radiation object of national significance, it is prepared before applying for the licence. In such an event the Centre requires from the local government, in the territory

of which the respective ionising radiation object of national significance is planned to be built, information concerning the compliance of the construction of the planned ionising radiation object of national significance with the programming documents of the territorial development of the local government;

2. Issues a licence for the construction or substantial transformation of a new ionising radiation object of national significance after the plan for the establishment or substantial transformation of the ionising radiation object of national significance has been evaluated;

3. Accepts a new or substantially transformed ionising radiation object of national significance and issues a licence for the verification of operational parameters before putting the object into operation;

4. Issues a licence for the operation of a new ionising radiation object of national significance or the re-commencement of operation of a substantially transformed object (operational licence).

The term for making a decision on the issuance of a licence may not exceed 60 days. The Centre's licence is valid for up to five years for planning an ionising radiation object of national significance or a nuclear object of national significance and for up to 10 years for the construction of an ionising radiation object of national significance or of a nuclear object of national significance.

Within 5 working days, the Centre informs the residents that a licence for the establishment or substantial transformation of an ionising radiation object of national significance has been requested by publishing information on the State Environmental Service's website with the applicant's name, name of the activity and address of its performance, as well as the place and time where the residents can become acquainted with the information contained in the application, including the submitted additional materials.

After submitting the application and all of the enclosed documents to the Centre, the applicant must publish a notification on the planned activity in at least one periodical issued by a local government or in another local periodical. The applicant also forwards the notification to the local government and persons which own or possess immovable property that borders the location of the planned or existing ionising radiation object of national significance or is located in an area directly affected by it. In the notification on the planned operation, the applicant indicates the applicant's name, name of the activity and address of its performance, the place of the existing or planned operations with sources of ionising radiation, as well as the territories exposed to potential impact, the place where the public can become acquainted with the licence application and the documents enclosed thereto and the date by which the public can submit written proposals to the Centre. Within 30 days after publication of the afore-mentioned notification, the public may submit their proposals to the Centre or their opinion on the issuance of the licence or on its conditions.

When requesting a licence for planning the establishment or substantial transformation of an ionising radiation object of national significance, the applicant organises public consultation and additionally indicates the place and time of the public consultation in the notification. The applicant prepares the necessary visual materials and copies of the relevant documents for the public consultation unless they contain classified information and information that is classified as a State Secret in accordance with regulatory enactments. At least 7 working days prior to the public consultation, copies of the materials and documents to be examined at the public consultation must be placed in the building of the local government, county town hall or town municipality, in the territory of which the respective ionising radiation object of national significance is to be built or where it is located. Moreover, the materials intended for the public consultation must be electronically sent to the local government to be published on the local government's website.

The Centre examines, and uses for the drawing up of the licence conditions, the proposals expressed during the public consultation and submitted in a written form on the issuance conditions of the licence. If the public proposes not to issue the licence, the Centre examines the issue and issues the licence or adopts a substantiated decision to refuse the issuance of the licence only after the applicant has been given an opportunity to provide his explanation in writing within at least 14 days.

Within 5 working days after making the decision on issuing or rejecting the licence, the Centre informs in writing the local government in the territory of which the establishment or substantial transformation of the ionising radiation object of national significance is planned and publishes the decision on the issuance of the licence in the respective local government's periodical or, if such a periodical does not exist, in another local periodical. The Centre also submits to the local government an electronic version of the information on the adopted decision and the local government places it on its website.

In order to receive a repeated licence for operation, an operator submits to the Centre an application at least three months before the end of validity of the current licence. The validity of a repeated licence is 10 years.

1.3. Provision of a system of nuclear safety supervision (Article 4(1)(c))

A system of nuclear safety supervision is stipulated in the regulatory enactments governing radiation safety and nuclear safety, i.e. the Law on Radiation Safety and Nuclear Safety, where the function of the Centre is defined to perform supervision and control of radiation safety and nuclear safety.

Nuclear safety is supervised by:

1) Issuing a licence for the establishment or substantial transformation of an ionising radiation object of national importance;

2) Performing inspections. Inspecting officers of the Centre perform checks at the Salaspils Nuclear Reactor four times a year and examine the nuclear reactor's

system (installation), maintenance and operation; processing and packaging of radioactive waste; procedure for maintenance of accounting, monitoring, management and control system;

3) Receiving the operator's reports. By 31 January of each year, the operator forwards information to the Centre on changes related to the sources of ionising radiation and operations therewith, changes related to the personnel and other changes which have had an effect on radiation safety and nuclear safety during the preceding calendar year.

The Centre has the power to receive immediate information about any emergency or accident which may affect radiation safety and nuclear safety, as well as to request and receive from governmental institutions, authorities and operators information on radiation safety and nuclear safety which the Centre requires in order to fulfil its functions.

Pursuant to Cabinet Regulation No 723 and other regulatory enactments in the field of radiation safety and nuclear safety, the Centre controls the implementation of the operator’s quality assurance programme and operations with sources of ionising radiation.

Latvia ensures the maintenance of a system of nuclear safety supervision at a national level and improves it on the basis of experience gained during its operation.

1.4. Suspension of operation and modification or revocation of a licence (Article 4(1)(d))

The Law on Radiation Safety and Nuclear Safety stipulates the powers of the Centre to ban operations with sources of ionising radiation if the legal provisions in the field of radiation safety and nuclear safety are violated. The Centre may revoke or suspend a licence if the requirements of the Law on Radiation Safety and Nuclear Safety and/or of other regulatory enactments that concern radiation safety and nuclear safety, and the requirements stipulated in the licence, are violated.

Having made the relevant decision, the Centre refuses to issue a licence to a person who has repeatedly violated the requirements of radiation safety and nuclear safety as defined in the regulatory enactments.

Liability for violations of the regulatory enactments governing radiation safety and nuclear safety is stipulated in the Latvian Administrative Violations Code in the form of fines, which for physical persons range from EUR 30 to EUR 700 and for legal entities, from EUR 70 to EUR 4 300. For more serious crimes in relation to activities with radioactive substances (violation of circulation safety, unauthorised storage, theft, robbery, misappropriation, unauthorised moving over the State border, violation of regulations for storage, utilisation, accounting and transportation of radioactive and dangerous substances), the Criminal Law of Latvia stipulates fines and deprivation of liberty for a term of up to 12 years.

If due to safety, technological or economic considerations, changes are necessary to the operations with ionising radiation objects of national significance, which result in a necessity to change the conditions of a licence, prior to the amendments to the licence, the **operator**:

1. Prepares an assessment of the way how the basic principles and regulatory enactments of radiation safety and nuclear safety will be respected;

2. At least three months prior to the implementation of the planned changes, submits to the Centre an application for amendments to be made to the conditions of the licence, and encloses to the application the following attachments:

2.1. a full safety assessment;

2.2. an updated plan, approved by the local government, on the preparedness for emergencies and an action plan for emergency situations that may occur due to the changes;

2.3. instructions on radiation safety and nuclear safety and the description of an employee training programme which ensures that the level of exposure is maintained at a reasonably low degree by choosing adequate measures of radiation safety and nuclear safety for the planned changes in operations with sources of ionising radiation;

2.4. a description of premises and buildings or a territorial plan where the operations with the source of ionising radiation will be conducted if the given changes affect them;

2.5. an updated quality assurance programme for radiation safety and nuclear safety;

2.6. an assessment of the potential changes regarding the emissions of radioactive substances into the environment as well as the updated scheme of ventilation and sewerage systems and a description of the monitoring system if the planned changes affect them;

2.7. a description of the expected changes in the operations with radioactive waste prior to its transfer to disposal;

2.8. an updated description of the physical protection system which has been approved by the Security Police.

2. Competent regulatory authority (Article 5)

2.1. Establishment and maintenance of a competent regulatory authority (Article 5(1))

In Latvia, State supervision and control in the field of radiation safety and nuclear safety is ensured by the Centre. The Law on Radiation Safety and Nuclear Safety stipulates the main functions and tasks of the Centre. The remaining tasks,

powers and obligations are defined by Cabinet regulations issued on the basis of this Law.

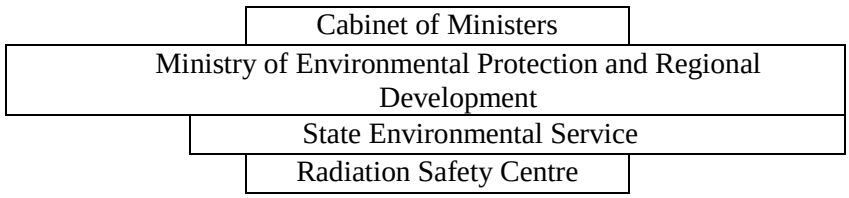
The Centre was established on 9 July 2001, and, until 1 July 2009, it was an independent public administration authority – the Radiation Safety Centre – which was subordinated to the MoEPRD. Pursuant to the amendments of 12 June 2009 to the Law on Radiation Safety and Nuclear Safety and the Cabinet of Ministers Order No 339 of 28 May 2009 "On Reorganisation of the Radiation Safety Centre", as of 1 July 2009, the Radiation Safety Centre has been included in the organisational structure of the State Environmental Service.

The Centre's budget consists of a grant from the State budget funds.

2.2. Ensuring of functional separation of the regulatory authority from any other body or organisation (Article 5(2))

Pursuant to Cabinet Regulation No 962 of 23 November 2004 "Regulations of the State Environmental Service", the State Environmental Service is a direct administration authority under the supervision of the MoEPRD. The Centre is the State Environmental Service's structural unit and, in terms of public administration and decision-making, it is a functionally separate authority.

The Centre's placement in the public administration structure:



2.3. Provision of legal powers and human and financial resources to the regulatory authority (Article 5(3))

The Centre's operation is based on the Law on Radiation Safety and Nuclear Safety and Cabinet regulations, as well as international treaties entered into by Latvia. The Centre ensures State supervision and control in the field of radiation safety and nuclear safety.

In order to control the implementation of regulatory enactments in the field of radiation safety and nuclear safety, the Law on Radiation Safety and Nuclear Safety stipulates powers for the inspecting officials of the Centre:

1) To inspect locations at which activities with sources of ionising radiation are pursued, as well as to extract samples in quantities that are necessary for supervisory functions;

2) To make decisions and provide opinions on the situation with radiation safety and nuclear safety;

3) To issue administrative acts to supervisors and operators who work with sources of ionising radiation so as to prevent or eliminate violations related to radiation safety and nuclear safety and to increase the level of radiation safety;

4) To draw up protocols (reports) on the results of inspections;

5) To review materials concerned with violations of regulatory enactments of radiation safety and nuclear safety and, if necessary, to bring the guilty parties to administrative justice or take other steps that are defined by the regulatory enactments.

The Centre's budget consists of a grant from the State budget funds.

Since the 2009 economic crisis in Latvia, the Centre's human resources are insufficient; however, taking into account that Latvia has only one nuclear installation which is to be liquidated, the Centre ensures supervision and control of radiation safety and nuclear safety in compliance with the regulatory enactments. At the moment, Latvia lacks nuclear safety experts, and taking into account that there are no operational nuclear installations here, it is therefore not possible to acquire full practical training in the field of nuclear safety in Latvia. It must be noted that the Centre is currently operating in a mode of restricted resources.

3. Licence holders (Article 6)

3.1. Responsibility of the licence holder (operator) (Article 6(1))

The operator is responsible for radiation safety and nuclear safety in the area controlled by the operator. The operator's responsibility for radiation safety and nuclear safety in the area controlled by the operator is stipulated in the Law on Radiation Safety and Nuclear Safety. Before commencing activities with sources of ionising radiation, the legal entity must appoint a works supervisor and authorise him to prepare and submit an application for a licence in accordance with procedures defined by the Law. After the licence is received, the applicant is declared to be an operator and is responsible for radiation safety and nuclear safety in the area controlled by the operator. Thus the operator is delegated the responsibility for safety.

If an operator has violated the requirements laid down in legislation, the operator must compensate any damages caused to human health or property or to the environment as the result of operations with sources of ionising radiation. The operator has the right of recourse against an individual who is liable for the losses that have been caused. If operations with sources of ionising radiation have caused contamination of the environment, structures, equipment or vehicles, the operator, at the operator's own expense, ensures the cleansing of the environment, structures, equipment and vehicles so as to ensure that the contamination no longer endangers the environment, the life, health or property of employees and residents, or the life and health of animals. The operator covers all costs related to the extraction and examination of samples for this purpose.

The operator of a nuclear installation is solely liable for any nuclear damages caused by the installation. The operator compensates all losses caused by an emergency. Pursuant to Annex 5.[1] "Minimum Amount of Civil Legal Liability Insurance" of Cabinet Regulation No 723, the minimum amount of civil legal liability of a nuclear reactor is EUR 327 260 520.

3.2. Obligation of a licence holder to regularly assess and verify, and continuously improve, the nuclear safety of nuclear installations (Article 6(2))

Pursuant to Cabinet Regulation No 723 and Cabinet Regulation No 149 of 9 April 2002 "Regulations on Protection against Ionising Radiation", in order to obtain a licence, an operator has to develop a quality assurance programme for radiation safety and nuclear safety.

In order to ensure the implementation of protection measures, an operator, by cooperating with the works supervisor and a radiation safety expert or a radiation safety and nuclear safety expert, develops a quality assurance programme for radiation safety and nuclear safety for testing, utilisation, storage and inspection of sources of ionising radiation (hereinafter "quality assurance programme"), which includes requirements and their follow-up in relation to:

1) Accounting and registration entries, identification, collection and indexation of entries, updating and correcting of information;

2) Control of orders and procurements, evaluation and selection of suppliers, regulatory requirements for procurements, requirements for documentation and quality assuring documentation of orders and procurements and procurement verifications;

3) Measurement instruments to be used in testing;

4) Testing facilities, their calibration, adjustment and repair;

5) Labelling of testing material and products;

6) Recording of inspections and testing;

7) Identification and documentation of non-compliance with requirements;

8) Labelling of incompliant elements, their removal from the system or repair, or replacement with other elements;

9) Training of employees, development of a training programme and verifications of employees' qualifications;

10) Monitoring of service providers;

11) Regular, operation-independent checks (by involving the respective institutions or experts from an independent institution);

12) Drawing up, approval, registration, accounting, storage and archiving of documents concerning the above requirements and their follow-up, and also amendments to such documents.

In order to comply with the requirements of the quality assurance programme, an operator envisages the necessary financial resources for the implementation of protection measures and regularly performs inventory and checks of material resources.

The operator makes sure that the Centre approves the quality assurance programme.

If an operator carries out operations with ionising radiation objects of national significance, a plan for preparedness for radiation emergencies and action in radiation emergency situations approved by the local government is necessary, as well as a physical protection measures plan and a physical protection draft approved by the Security Police.

In order to assess the effectiveness of the quality assurance programme and the expected exposure in the case of a radiation emergency, Cabinet Regulation No 149 stipulates that in the territory under the operator's supervision, which is part of the area controlled by the operator (territory outside the controlled area where the dose of ionising radiation may exceed the basic effective dose limit of 1 mSv/year), control must be carried out of radioactive contamination and ionising radiation.

3.3. Verification that measures are in place for prevention of accidents and mitigation of consequences of accidents (Article 6(3))

Pursuant to Paragraph 5 of Cabinet Regulation No 152 of 8 April 2003 "Preparedness for Radiation Emergency and Action in the Case of Such an Emergency", the operator draws up a plan for preparedness for radiation emergencies and action in case of a radiation emergency for any objects which may cause radiation emergency damages. The action plan must envisage protection measures in order to:

1. Reduce the risk of a radiation emergency and minimise the emergency consequences by envisaging protection measures for residents which may be affected by the radiation emergency;

2. To prevent or minimise, as much as possible, immediate damage caused by a radiation emergency;

3. To minimise the risk of delayed damages caused by a radiation emergency (the risk of damages is proportional to the received ionising radiation dose; the severity of damages does not depend on the volume of the received ionising radiation dose).

The operator makes sure that the Centre, local government and SFRS approve the action plan if the consequences of the emergency may also affect the residents and the environment outside of the area controlled by the operator.

Ionising radiation objects (sources) of national significance, including the Salaspils Nuclear Reactor, are inspected by the Centre's inspecting officers four times a year.

3.4. Obligation of a licence holder to establish and implement management systems which give due priority to nuclear safety (Article 6(4))

Pursuant to the Law on Radiation Safety and Nuclear Safety, operations with sources of ionising radiation are permitted if the principles of radiation safety and nuclear safety are observed:

1) People and the environment may only receive a dose of ionising radiation that does not exceed the dose limits specified;

2) The positive result achieved exceeds the negative impact or losses created by activities with sources of ionising radiation;

3) Taking into account the economic and social factors, as well as the options of technical resources, optimum radiation safety measures have been selected for the level of exposure to be reasonably low and not exceed the dose limits specified;

4) The operator has civil liability insurance against damages that may be caused to the life and health of third persons and the property thereof or to the environment due to the operator's action or inaction;

5) Activities with sources of ionising radiation are performed after obtaining a licence.

The implementation of the basic principles of radiation safety and nuclear safety takes place in accordance with Cabinet regulations regarding protection against ionising radiation and other regulatory enactments in the field of radiation safety and nuclear safety.

Other obligations of the operator to establish and implement systems which give due priority to nuclear safety are stipulated in Cabinet regulations arising from the Law.

3.5. Obligation of a licence holder to provide for and maintain adequate financial and human resources (Article 6(5))

Pursuant to Cabinet Regulation No 149, in order to implement the requirements laid down in the quality assurance programme, the operator provides for the necessary financial resources for taking protection measures and regularly performs inventory of the material resources, and ensures regular training of its employees.

These regulations stipulate that the operator establishes a radiation safety and nuclear safety structural unit within the area controlled by the operator with an ionising radiation object of national significance, which is responsible only for the operations with sources of ionising radiation. The radiation safety and nuclear safety structural unit has a works supervisor and a radiation safety and nuclear safety expert.

4. Expertise and skills in nuclear safety (Article 7)

Requirements regarding expertise and skills in nuclear safety are stipulated in the Law on Radiation Safety and Nuclear Safety and the Cabinet regulations arising from the Law.

Pursuant to the requirements of Cabinet Regulation No 723, in order to obtain a licence, the applicant ensures that the qualifications of its employees and works supervisor correspond to the duties to be fulfilled by such persons.

The implementation of the requirements with respect to training stipulated in the regulatory enactments is ensured by the Centre, the nuclear installation's operator and the works supervisor:

1) Pursuant to the Law on Radiation Safety and Nuclear Safety, the Centre organises and coordinates training of inspectors and work supervisors whose work is connected with radiation safety, and also promotes the training of the performers of such work, informs the persons that manage the operations with sources of ionising radiation about the regulatory enactments governing radiation safety and also informs them of recommendations for increasing the level of radiation safety. The Centre takes part in the training of radiation safety experts, radiation safety and nuclear safety experts and work supervisors.

2) The operator ensures radiation safety training of the works supervisor in the framework of an educational programme developed by an educational institution at

least once every five years in the cases defined in the regulations, as well as extraordinary training and the examination of knowledge in the event the work or position duties are changed, or new equipment or procedures are introduced for work with sources of ionising radiation.

The operator ensures that its employees receive instructions on radiation safety issues at least once per year, as well as radiation safety training in the framework of an educational programme developed by an educational institution at least once every five years, as well as extraordinary training and examination of knowledge in the event the work or position duties are changed, or new equipment or procedures are introduced for work with sources of ionising radiation.

3) Pursuant to the requirements of the Law on Radiation Safety and Nuclear Safety, operations with sources of ionising radiation are managed by a works supervisor who is authorised by the operator and who has the necessary knowledge to conduct physical, technical or radiochemical measurements, assess doses of ionising radiation and effectively protect employees and residents against ionising radiation through the proper use of protective equipment. The works supervisor ensures that persons who work with sources of ionising radiation are appropriately trained for taking protection measures, are familiar with circumstances and regulatory requirements, and are informed the potential risk associated with such operations.

Radiation safety and nuclear safety experts and specialists acquire basic education and additional training in one of the following three universities in Latvia: University of Latvia (physics, chemistry), Riga Technical University (medical physics) and Riga Stradiņš University (medicine).

The training of the Centre's employees is ensured by their participation in various technical cooperation projects of the International Atomic Energy Agency. In the framework of the technical cooperation projects, the participation of Latvia's representatives is ensured through training seminars and experience exchange projects related to radiation safety and nuclear safety.

5. Information to the public (Article 8)

The Law on Radiation Safety and Nuclear Safety stipulates requirements for the provision of information.

Pursuant to the Law on Radiation Safety and Nuclear Safety, the Centre informs the residents about the fact that a licence has been requested for the establishment or significant transformation of an ionising radiation object of national significance by placing the information on the State Environmental Service's website.

The operator and the works supervisor are responsible for ascertaining that the Centre, as well as employees of other public and local government institutions which are responsible for radiation safety and nuclear safety issues, receive information about the steps taken to ensure radiation safety and nuclear safety at the respective object. In order to ensure protection of employees, trainees and students against ionising radiation, and to prevent radiation emergencies, the operator ensures the provision of information to the employees, trainees and students about the potential damage to health which may be caused by working with sources of ionising radiation, and also provides additional information to female employees about the potential damage to their reproductive health and the effects of ionising radiation on pregnancy.

By 31 January of each year, the operator informs the local government in the territory of which the respective object is located about the changes introduced to the object in the preceding year in relation with radiation safety and nuclear safety, as well as about the results of monitoring and about the planned measures. The operator must also publish this information on its website.

Pursuant to Cabinet of Ministers Regulations No 149, the Centre must promote the education of residents in relation with radiation safety and nuclear safety issues and distribute information on the latest findings in the field of radiation safety and nuclear safety.

Pursuant to Cabinet of Ministers Regulations No 158 of 17 February 2009 "Regulations Regarding the Requirements with Respect to Environmental Monitoring and the Procedures for Performance Thereof, the Creation of the Register of Polluting Substances and Public Availability of Information", the public authority must prepare and place the annual report on the results of the performed monitoring on the authority's website.

Pursuant to Cabinet of Ministers Regulations No 152 of 8 April 2003 "Requirements for Preparedness for Radiation emergency and Actions in the Event of Such Emergency", once every three years the SFRS, in cooperation with the Centre, must inform residents who might be under the threat of a radiation emergency about health protection measures and actions in the event of a radiation emergency by using mass media. The following issues must be included in the information:

1. Ionising radiation and the effect thereof on residents and the environment;

2. Types of radiological emergencies and possible effects of the emergency aftermath on residents and the environment;

3. Protection measures and methods for the implementation thereof;

4. Actions of residents in the event of a radiation emergency (also iodine prophylactics), as well as possibilities for the receipt and purchase of iodine preparations;

5. Information regarding competent authorities and commercial companies which can provide information regarding radiation safety.

In the event of a radiation emergency, the SFRS notifies and warns the residents using mass media and the civil alert and notification system. Upon the Centre's recommendation, the SFRS immediately provides the following information to the residents affected by the radiation emergency: type, cause (if possible), scale and possible expansion of the radiation emergency that has taken place, protection measures recommended to residents (depending on the type of radiation emergency) and additional protective measures for specific resident groups (if required).

The Centre's Inspections Unit has an Emergency Warning Group which operates in an uninterrupted mode in order to ensure 24 hour preparedness for the notification of radiation emergencies and nuclear accidents. The group provides consultations at any hour of the day or night about radiation safety issues and, if necessary, organises the summoning of the Centre's emergency response unit.

For uninterrupted monitoring of the radiation situation in the country, 20 new automatic gamma radiation monitoring stations are operated in an online mode (in Baldone (2 stations), Balvi, Daugavpils (2 stations), Demene, Silene, Medumi, Jūrmala, Jelgava, Liepāja, Madona, Rēzekne, Rucava, Salacgrīva, Salaspils, Talsi, Valmiera, Riga and Ventspils), one online mode aerosol monitoring station (in Daugavpils), two water radiation monitoring stations (in Ķekava and Krāslava) and one autonomous or mobile radiation monitoring station.

These stations ensure the measurement of the gamma radiation dose capacity and spectre. The measurements are performed in 10 minute intervals. The measurement data are collected and analysed in the Oracle data base by determining the equivalent dose capacity (nSv/h (nanosievert per hour)). Data on the equivalent dose capacity are systematically and regularly forwarded to the ECURIE/EURDEP database where they are available to unauthorised EURDEP users together with the monitoring data of other European countries on the EURDEP's public website: http://eurdep.jrc.europa.eu, section Public EURDEP Map.

Pursuant to the Regulations of the State Environmental Service, the SES informs the public about the Service's operation and provides environmental information that is at the disposal of the Service to the public. Once a year the SES draws up a report on the fulfilment of the Service's functions and the utilisation of the State budget funds allocated to the Service, and places this report on the SES' website.

Summary

In accordance with the definition laid down in Directive 2009/71/Euratom, there is only one nuclear installation in Latvia, i.e. Salaspils Nuclear Reactor, which is currently under liquidation. The requirements of Directive 2009/71/Euratom have been transposed and implemented in the regulatory enactments of Latvia. Latvia maintains radiation safety and nuclear safety and ensures the continuous improvement of the respective regulatory framework. Steps are taken in order to ensure a higher level of radiation safety and nuclear safety thus protecting workers and the public from the threat of damaging exposure to ionising radiation of nuclear installations.

Currently Latvia's priority is to solve the issue of the liquidation of the Salaspils Nuclear Reactor, as well as to solve issues related to the involvement of qualified employees, increasing financial resources and capacity building of the Centre.